AGENDA JAMES CITY COUNTY PLANNING COMMISSION April 1, 2015 – 7:00 p.m.

1. ROLL CALL

2. PUBLIC COMMENT

3. CONSENT AGENDA

- A. Minutes from the March 4, 2015 Regular Meeting
- B. Development Review Committee
 - 1. Fords Colony Maintenance Facility, Storage Bay Conversion (DRC Recommendation: Approval 3-0)

4. REPORTS OF THE COMMISSION

- A. Policy Committee
- B. Regional Issues Committee
- C. Other Commission Reports

5. PUBLIC HEARINGS

- A. Case No. Z-0009-2014, Stonehouse Planned Unit Development Traffic Proffer Amendment.
- B. Case No. AFD-06-86-2-2014, Cranston's Pond AFD Addition 3125 Chickahominy Rd.
- C. Case No AFD-01-02-1-2015, Carter's Grove AFD Withdrawal Colonial Williamsburg Foundation Withdrawal.
- D. Case Nos. Z-0008-2014/MP-0004-2014, The Village at Candle Station Rezoning and Master Plan Amendment.
- E. Case No. Z-0001-2015, Toano Trace Proffer Amendment.
- F. *Toward 2035: Leading the Way*, the 2035 James City County Comprehensive Plan and James City County Land Use Map Changes.

6. PLANNING COMMISSION CONSIDERATIONS

- A. Initiation of Consideration of Amendments to the Zoning Ordinance, Division 3. Floodplain Area Regulations.
- B. Initiation of a Consideration of Amendments to the Zoning Ordinance to Incorporate State Code Changes (Consistency with A-1)- Division 10, General Business, B-1; Division 11, Limited Business/Industrial, M-1
- C. Initiation of a Consideration of Amendments to the Zoning Ordinance to Incorporate State Code Changes-Division 2. General Agricultural District, A-1.

- D. Initiation of a Consideration of Amendments to the Zoning Ordinance, Article 1, In General, Administrative Fees, Certificate of Occupancy, Amendments and Variation of Conditions and Submittal Requirements.
- 7. PLANNING DIRECTOR'S REPORT
- 8. COMMISSION DISCUSSION AND REQUESTS
- 9. ADJOURNMENT

A REGULAR MEETING OF THE PLANNING COMMISSION OF THE COUNTY OF JAMES CITY, VIRGINIA, WAS HELD ON THE SEVENTH DAY OF JANUARY, TWO-THOUSAND AND FIFTEEN, AT 7:00 P.M. IN THE COUNTY GOVERNMENT CENTER BOARD ROOM, 101-F MOUNTS BAY ROAD, JAMES CITY COUNTY, VIRGINIA.

1. ROLL CALL

Planning Commissioners Staff Present:

<u>Present:</u> Paul Holt, Planning Director

Rich Krapf Savannah Pietrowski, Senior Planner I

Tim O'Connor Ellen Cook, Senior Planner II

Chris Basic Maxwell Hlavin, Assistant County Attorney

Robin Bledsoe George Drummond John Wright, III Heath Richardson

Mr. Rich Krapf called the meeting to order at 7:00 p.m.

2. PUBLIC COMMENT

Mr. Krapf opened the public comment.

As no one wished to speak, Mr. Krapf closed the public comment.

3. <u>CONSENT AGENDA</u>

A. Minutes from the January 7, 2015, Regular Meeting and January 27, 2015 Joint Work Session with the Board of Supervisors.

Ms. Krapf stated that the Joint Work Session minutes had been completed earlier that afternoon and noted that they could be considered at a later date if the Commission wished to have more time to review them.

Mr. Heath Richardson stated that he would like for the minutes to be considered at a later date.

Mr. Krapf stated that the consent agenda now consists of the January 7 minutes only.

Ms. Robin Bledsoe moved to approve the consent agenda.

In a unanimous voice vote, the Commission approved the January 7, 2015 minutes, 7-0.

Mr. Krapf stated that the Joint Work Session minutes will be considered at the March 16 Special Meeting.

4. <u>REPORTS TO THE COMMISSION</u>

A. <u>Development Review Committee</u>

Mr. Chris Basic stated that the Development Review Committee (DRC) did not meet in January or February.

B. Policy Committee

Mr. Tim O'Connor stated that the Policy Committee met on January 19, 2015. Mr. O'Connor stated that the Hampton Roads Planning District Commission (HRPDC) is working to develop a regional strategic plan and the Policy Committee prepared feedback for the HRPDC regarding their vision for the area by 2035. Mr. O'Connor stated that the Policy Committee also met on February 12 and March 4 to discuss the Capital Improvements Program applications. Mr. O'Connor noted that the March 12 Policy Committee meeting has been cancelled.

C. Regional Issues Committee

Ms. Robin Bledsoe stated that the Regional Issues Committee has not met and there are no future meetings currently scheduled.

5. PUBLIC HEARING CASES

A. Case No. SUP-0001-2015, Sprint John Tyler Highway Tower

Ms. Savannah Pietrowski, Planner I, provided the Commission with a presentation on the proposed special use permit which would bring the existing tower into conformance with the Zoning Ordinance and allow the addition of three additional panel antennas.

- Mr. Krapf opened the floor to questions for staff.
- Ms. Bledsoe inquired if staff had heard from any adjacent property owners.
- Ms. Pietrowski replied that she had not.
- Mr. Richardson inquired if the antennas will be the same color as the existing tower.
- Ms. Pietrowski confirmed.
- Mr. Richardson inquired regarding the definition of slicksticks, as referenced in the Wireless Communications Facilities Policy.

Mr. Paul Holt stated that slicksticks are towers in which the antennas are housed inside of the pole. Mr. Holt noted that there are two slicksticks currently on the County Government Center property.

Mr. Krapf called for disclosures from the Commissioners.

There were no disclosures made by the Commissioners

Mr. Krapf opened the public hearing and noted that the applicant was not in attendance.

As no one wished to speak, Mr. Krapf closed the public hearing.

Mr. Basic moved to recommend approval.

On a roll call vote, the Planning Commission recommend approval of SUP-0001-2015, subject to the conditions listed in the staff report, by a vote of 7-0.

B. Case No. Z-0009-2014, Stonehouse Planned Unit Development Traffic Proffer Amendment

Mr. Krapf stated that the applicant has requested a deferral and inquired if staff is in agreement with that request.

Ms. Cook confirmed the applicant request and replied that staff is in agreement.

Mr. Krapf opened the public hearing.

As no one wished to speak, Mr. Krapf stated that the public hearing will remain open until the April 1 Planning Commission meeting.

C. Z-0005-2014, Peninsula Pentecostals, Kirby Tract

Ms. Ellen Cook, Senior Planner, provided the Commission with a presentation on the proposed rezoning from M-2, General Industrial to MU, Mixed Use for three parcels located on Pocahontas Trail in the GreenMount Industrial Park to allow a 130,000 square foot place of public assembly, a day care center for up to 150 children, and up to 30,000 square feet of commercial uses.

Mr. Krapf opened the floor for questions from the Commissioners.

Mr. Basic inquired whether Newport News Waterworks had seen and responded to the revised proffers related to fuel dispensing.

Ms. Cook responded that Newport News Waterworks had provided some very preliminary comments on the revised proffers and still had reservations about allowing fuel dispensing on the property due to the proximity to the reservoir.

Mr. Basic requested clarification on the discrepancies between the proffered traffic management plan and the plan that staff would prefer.

Ms. Cook stated that the proffers indicate that submission of traffic circulation plan to address circulation and queuing of vehicles to limit the impact along Pocahontas Trail and implementation of the recommendations will be triggered when the certificate of occupancy for

Phase 1 is issued. Ms. Cook stated that staff would like to see language included that addresses a means of tracking the measures and ensuring that they are effective in the field over time as additional phases are constructed and as additional vehicle trips are generated and additional parking areas and internal connections are constructed.

Mr. Basic inquired if staff had concerns about the potential for ingress queues to block Pocahontas Trail if conflicting traffic movements on-site slow vehicle entry.

Ms. Cook confirmed.

Ms. Bledsoe inquired about the amount of revenue currently generated by the parcel.

Ms. Cook responded that the information was not immediately available but would be provided.

Mr. Wright inquired about the length of time the property has been actively marketed.

Ms. Cook responded that the property is currently in crop production; however, she is not familiar with the marketing history.

Mr. Krapf suggested that the applicant could speak to that during his presentation.

Mr. O'Connor inquired whether spill prevention had been addresses in the proffers.

Ms. Cook responded that Newport News Waterworks would prefer not to see fuel dispensing on the property; however, if it did go forward, a spill prevention plan would be a high priority.

Ms. Bledsoe inquired if staff's main concern about the traffic circulation plan was to have a way to review the existing conditions as development progresses to ensure that the improvements are adequately addressing issues.

Ms. Cook responded that staff would want to be able to consider traffic flow at each development phase.

Mr. Wright inquired whether staff would be ensuring that development on the parcel is in compliance with the Zoning Ordinance.

Ms. Cook stated that staff would review any proposal against the Zoning Ordinance and any other State or Federal requirements. Ms. Cook further stated that with proffers, staff looks to ensure that any situations not covered by another regulation will be addressed.

Mr. O'Connor inquired whether a fueling station would require an SUP.

Ms. Cook responded that fueling stations are a permitted use in the Mixed Use district.

Mr. O'Connor requested that staff indicate where the proposed Skiffes Creek Connector alignment would fall in relation to the proposed development.

Mr. Krapf inquired about the difference in cost between the two options for the Skiffes Creek Connector.

Mr. Holt responded that Alternate A has a cost estimate of \$72.8 million and Alternate A-1 has a cost estimate of \$53.8 million. Mr. Holt stated that the estimates are for a four-lane cross section; however, staff is working with VDOT to determine if a two-lane cross section would be feasible and less costly. Mr. Holt noted that those figures have not been provided by VDOT.

Ms. Bledsoe inquired if the Skiffe's Creek Connector is in the VDOT Six Year Plan.

Mr. Holt confirmed that the project is included for the study phase; however, VDOT will not proceed past that phase until construction funding is identified.

Mr. Krapf called for disclosure from the Commissioners regarding meetings or discussion with the applicant.

Mr. Wright, Mr. Drummond, Ms. Bledsoe and Mr. Basic each stated that they had spoken with Mr. Trant.

Mr. Krapf opened the public hearing.

Mr. Timothy O. Trant, Kaufman and Canoles, PC, stated that he represents the applicant, Peninsula Pentecostals. Mr. Trant stated that Pastor Jared Arango, the Church Administrator John McSharry, Steve Romeo with VHB and, Mr. Chris Lawrence, with A. E. Comp. are also available to answer any questions.

In response to the question about the length of time the property has been on the market, Mr. Trant stated the property has been marketed for industrial development for approximately 25 years. In response to the question about spill prevention, Mr. Trant stated that those are part of the regulatory requirements for the permitting of a fueling station; however, the applicant is agreeable to providing greater assurance of compliance through any method suitable to the County. Mr. Trant further stated that the applicant intends for the traffic management plan to be a living document which would provide for periodic review.

Mr. Trant provided a history of the applicant's interest in the subject properties and efforts to establish a campus in James City County. Mr. Trant further provided an overview of the proposal and its benefits to the Grove community.

Mr. Krapf inquired if there were any questions for the applicant.

Mr. Richardson inquired about the difference between the design phase and the location study phase for the Skiffes Creek Connector.

Mr. Holt responded that the design phase is to develop a set of engineered plans. Mr. Holt further stated that currently VDOT is doing environmental analysis for the site.

Mr. Richardson inquired if the applicant is aware that the more cost effective alignment for the Skiffes Creek Connector impacts the proposed location of the house of worship.

Mr. Trant responded that while the applicant is aware of the potential alignment, they believe that the alignment shown on their master plan is the only viable option based the existing alignments and connections to existing businesses.

Mr. Steve Romeo stated that Alternate A-1, despite the cost savings, presents too many physical barriers to the smooth movement of vehicular traffic.

Mr. O'Connor inquired why the applicant chose to apply for the Mixed Use zoning district when many of the proposed uses such as places of public assembly and fueling stations are by-right under the M-1 zoning district.

Mr. Trant responded that the applicant chose Mixed Use because it was consistent with the Comprehensive Plan designation for the property.

Mr. Krapf noted that the application covers three parcels and that there is substantial detail provided for parcel 1 where the house of worship will be located regarding the location of the structures, parking, etc.; however there is far less detail provided for the other two parcels than is customarily provided with rezoning applications and inquired about the reason for the lack of detail. Mr. Krapf further inquired whether the applicant would consider proffering a right-of-way for the Skiffes Creek Connector on the easternmost parcel that would allow VDOT to implement that alignment if necessary.

Mr. Trant responded that the absence of detail for the commercial parcels is to allow the future uses on those parcels to reflect what the County and other stakeholders deem best for the area. Mr. Trant noted that the proposed mix of uses is based on recommendations from the Office of Economic Development as well as adjacent businesses and residents of the Grove community. Mr. Trant noted that the lack of detail also related to the uncertainty over the Skiffes Creek Connector and how it will ultimately affect the development on the parcel. Mr. Trant stated that the proffers provide for submittal of a detailed concept plan and stormwater plan once those impacts are known.

Mr. Trant requested clarification on what is meant by "proffer a right-of-way."

Mr. Krapf stated that he believed it would be ensuring that VDOT would have the right to construct the roadway on the parcel.

Mr. Trant stated that this has already been done through the notation on the master plan. Mr. Trant further stated that it is customary that a right-of-way established on a master plan provides statutory assurances and that the intent of the applicant is to ensure that the right-of-way is preserved for construction of the roadway.

Mr. O'Connor inquired whether the proposal is considered a high traffic generator.

Mr. Trant responded that the peak hour traffic for this proposal would be on Sunday morning and mid-day. Mr. Trant stated that the traffic study is fairly accurate in analyzing the potential impact on the corridor at peak times. Mr. Trant noted that the impact of the proposal on the corridor between build and no build conditions is 19 seconds.

Mr. Chris Lawrence further explained that the peak hour for the church traffic corresponds with a time when there is little other traffic on Pocahontas Trail which accounts for the minimal impact. Mr. Lawrence further stated that the weekday impacts will be barely noticeable.

Mr. O'Connor inquired whether traffic generation was calculated for the future phases.

Mr. Lawrence stated that traffic generation was considered for both the church and the daycare at both weekday peak hours and the four hours on Sunday covering the church service.

Mr. Richardson inquired about how far out the traffic projections went.

Mr. Lawrence responded that the projections went out 10 years.

Mr. Richardson inquired if staff had LOS projections for Route 60 for 10 to 20 years out.

Ms. Cook responded that the Comprehensive Plan projection for the Pocahontas Trail Corridor was 21,186 average annual daily trips for 2035 and the corridor is listed in the Watch category and is anticipated to need improvement. Ms. Cook further stated that the Regional Traffic Study projects a peak hour LOS of F in 2034. Ms. Cook noted that staff anticipates a more traditional weekday traffic generation from the proposed commercial uses on the property and that, while currently unquantified by the study submitted for the application, a use such as the fueling station could potentially be considered as a high traffic generator. Ms. Cook further noted that a traffic study would be submitted for the future uses.

Mr. Basic asked what assurances are in place to prevent development of the property that varies greatly from what is currently being discussed if there is no binding master plan.

Mr. Trant stated that nothing can happen on the site that is not a permitted use under the zoning district. Mr. Trant further stated the proffered requirement for approval of a concept plan prior to site plan development would provide further assurances.

Mr. Basic inquired about what would happen if the property were subdivided.

Mr. Trant stated that before any development can occur, even on a portion of the property, a master plan would be required and be reviewed and approved by staff for consistency with current ordinances; there would not be piecemeal development that would be in conflict with that master plan.

Ms. Bledsoe inquired about the number of church services each week.

Pastor Jarred Arango stated that the services would be on Sunday morning at 10:00 a.m. for Sunday School with the main worship service at 11:15 a.m. and an additional service Sunday evening at 6:30 p.m.

Ms. Bledsoe asked for a show of hands how many of the members live in James City County.

Based on the response, Ms. Bledsoe noted that it appeared that the majority of members might live in other jurisdictions.

Ms. Bledsoe asked Mr. Drummond, as Roberts District representative, to comment on the availability of restaurants and shops in the Grove community.

Mr. Drummond noted that there are some limited shops and few restaurants. Those that exist are primarily fast food.

Ms. Bledsoe inquired if they were places where people might choose to stop and eat.

Mr. Drummond responded that the choices are limited.

Ms. Bledsoe noted that she would like to see more traffic in the Grove area to generate additional business in the community.

Mr. O'Connor inquired if there was any condition to limit residential development.

Mr. Trant stated that the proffers limit residential development to a single accessory apartment for pastoral care or temporary uses.

Mr. Krapf opened the floor for comments from the public.

Ms. Marjorie Daniel, Ball Corporation, 8935 Pocahontas Trail, Williamsburg, spoke in support of the application. Ms. Daniel stated that the proposed development of the property would be a benefit to the residents of Grove as well as employees of the businesses along that portion of the corridor. Ms. Daniel further stated that the Ball Corporation is interested in partnering with the Church on community outreach efforts.

Mr. David Green, 206 Carters Neck Road, Williamsburg, requested that the Commission recommend approval of the application so that the Church would be able to make a difference in the community for those who are seeking spiritual fulfillment.

Rev. Jared Arango, 901 Waystone Court, Newport News, addressed the Commission on the history of the Church and its mission to make a positive impact on individuals, families and the community. Rev. Arango noted that healthy people make a healthy community. Rev. Arango requested that the Commission recommend approval of the application.

Mr. Douglas Beck, 9915 Swallow Ridge, Toano, stated that the development proposal for the property was designed to provide benefits to the County's tax base as well as services to the community. Mr. Beck requested that the Commission recommend approval of the application.

Mr. John McSharry, 818 Enos Court, Newport News, stated that the proposal for the property would be a fitting bridge between the existing residential neighborhood and the GreenMount Industrial Park. Mr. McSharry stated that the Church desires to develop the parcel in keeping with the County's recommendations and be a benefit to the community. Mr. McSharry requested that the Commission recommend approval of the application.

Mr. Dedric Sanford, 4917 Court House Street, Williamsburg, stated that he has recently opened a business in James City County. Mr. Sanford noted that while the four employees he is hiring is a drop in the bucket, the proposed development would bring new businesses to Grove and that if those businesses each hired four employees there would be a tremendous impact on the economy. Mr. Sanford addressed the Commission on the positive impact that the Church has on its members and stated that the Church hopes to improve the lives of individuals throughout Hampton Roads.

Ms. Sherry Horton, 8209 Bridlington Way, Williamsburg, addressed the Commission on the importance and benefit of membership in the Peninsula Pentecostal Church.

Ms. Diana Peters, 9 Saybrooke Court, Newport News, addressed the Commission on the impact of Christian education in the lives of children.

Ms. Michelle Rocheleau, 103 Indian Circle, Williamsburg, addressed the Commission on the impact of membership in the Peninsula Pentecostal Church on her family and the community. Ms. Rocheleau stated that the Church would provide the revitalization needed in the Grove community.

A speaker who did not provide her name addressed the Commission on the blessings of contributing to the building fund for the new building.

Mr. B.J. Anderson, 1002 80th Street, Newport News, stated his family centers their life around the Church and that he would be moving back to James City County when the Church opens its new building.

Mr. Ben Farmer, 8386 Mohawk Lane, Gloucester, addressed the Commission on the unique character of the Church and the impact of the Church on the lives of its youth. Mr. Farmer requested that the Commission recommend approval of the application so that the Church could be a beneficial influence on the children in the community.

As no one wished to speak, Mr. Krapf closed the public hearing.

Mr. Krapf opened the floor for Commission discussion.

Mr. Drummond stated that he represents and lives in Grove. Mr. Drummond stated that he believes the proposed development would be well suited to the site and the community. Mr.

Drummond commented on the disparity between some of the uses that would be allowed byright on the site such as a gun shop, and those that would require a special use permit. Mr. Drummond stated that he would prefer to see a church on the property. Mr. Drummond further stated that the traffic generated by a church would have less impact than the commercial truck traffic currently using the corridor. Mr. Drummond stated that there is nothing about the proposal that would deter him from voting in favor of the application.

Mr. Richardson stated that the Grove area is one of the major industrial areas in the County and is well suited for industrial operations. Mr. Richardson further stated that even though the property has been on the market for a significant amount of time, he believes an economic turnaround will occur and that any proposal to remove land from industrial use should be weighed carefully. Mr. Richardson stated that he believes the master plan does not have sufficient detail to move forward. Mr. Richardson further stated that the traffic impacts could be significant and should be considered in conjunction with the future traffic demands along Route 60. Mr. Richardson stated that, for those reasons, he would not be inclined to support the application.

Mr. Basic stated that the issue being reviewed by the Commission is a land use issue and that the decision of the Commission should not be viewed as a reflection on the Church and its mission. Mr. Basic further stated that he supports the development of a church on Parcel 1, but does not feel that the plans for Parcels 2 and 3 are up to standard and are inconsistent with sound community planning and land use practices. Mr. Basic stated that approving what is essentially a blank master plan could set a somewhat dangerous precedent in that the details of the master plan will be reviewed and approved administratively. Mr. Basic stated that he believed that application was heading in the right direction; however, it needed additional work to reach a point where it could be approved.

Mr. Wright stated that considering the surrounding land uses and environmental features of the property, the proposal would have equal or less impact than a purely industrial use. Mr. Wright further noted that a viable proposal for the property has not been brought forward in 25 years and no other proposal appears to be forthcoming. Mr. Wright noted that the only other use for a portion of the property would be the Skiffes Creek Connector which did not appear to be imminent due to funding issues. Mr. Wright stated that the land owner and applicant have been delayed long enough and the Church should be allowed to proceed with its primary mission in the community. Mr. Wright stated that he would support the application.

Ms. Bledsoe stated that while she has some concerns about the application, she also has full confidence in Planning staff and the established processes. Ms. Bledsoe stated that she concurred that the construction of the Skiffes Creek Connector would not occur in the foreseeable future. Ms. Bledsoe stated that despite the talk about reserving the property for industrial use which is believed to be the higher and better use, there is no one seeking to establish industrial uses on the property. Ms. Bledsoe stated that she believes the applicant's proposal will bring something very unique to the community. Ms. Bledsoe stated that she believes that both the applicant and staff have met the needs that were required to be met with this application and that staff would continue with an excellent job of follow through. Ms. Bledsoe stated that she supports the application.

Mr. Basic stated that he has been outspoken about the removal of industrial designated land when its removal would allow the property to become retail, commercial or resort property that is still surrounded by industrial zoned land. Mr. Basic stated that such use would be inconsistent. Mr. Basic further stated that he could potentially support the application in the future because a church campus is the perfect neighbor for the two adjacent residential neighborhoods.

Mr. O'Connor stated that he believes that M-1 would be a better designation for the parcels in keeping with the surrounding zoning and the proposed uses. Mr. O'Connor noted that he does have reservations about allowing a fueling station because of the proximity to the reservoir. Mr. O'Connor further stated that he does not feel that the application is sufficiently complete to be approved as it is. Mr. O'Connor stated that he could support the proposed development of the church on the one parcel but he would prefer to see M-1 as the underlying zoning because the permitted uses would be better suited to the environmental features of the area. Mr. O'Connor stated he also believed that the application was heading in the right direction; however, it needed additional work.

Mr. Krapf stated that as a Planning Commissioner, he has to review land use cases from the standpoint of whether the proposal is consistent with the Comprehensive Plan and an appropriate use for the property based on anticipated growth. Mr. Krapf stated that he believes that the application is not consistent with the Comprehensive Plan. Mr. Krapf stated that the Comprehensive Plan language for the Mixed Use portion of this tract states that the predominant use should be industrial which is not found in the application. Mr. Krapf stated that he also has concerns about the potential impact of locating a church on the property on the existing industrial tenants in the GreenMount Industrial Park should they plan to expand. Mr. Krapf further stated that he is concerned about taking a substantial amount of M-2 zoned property which is part of the Enterprise Zone off the books. Mr. Krapf stated that he would not support the application.

Mr. Drummond stated that when he considers a land use issue, he takes into account the support from the neighborhood. Mr. Drummond stated that there is substantial support for the project. Mr. Drummond stated that he believes the project is compatible with the surrounding uses and that it would be an asset to the Grove community and to the County. Mr. Drummond further stated that he felt it was his duty as a resident and representative of Grove to support the application.

Ms. Bledsoe moved to recommend approval of the application.

Mr. Basic stated that it appeared that the project could have significant support if certain issues were addressed with respect to the proposed commercial uses. Mr. Basic inquired whether the applicant is clear on where the application stands and where it might be headed.

The applicant confirmed.

On a roll call vote the motion to approve failed by a vote of 3-4.

Mr. Holt noted that the application would still move forward for review by the Board of Supervisors. Mr. Holt noted that the Board would consider the Planning Commission recommendation; however, it would hold its own public hearing and take its own vote.

6. PLANNING COMMISSION CONSIDERATION

A. Proposed Amendments to the Planning Commission Bylaws

Mr. Paul Holt, Planning Director, provided an overview of the proposed changes to the Planning Commission Bylaws which include an adjustment to the Capital Improvement Program (CIP) timeline; changing the annual organizational meeting to a special meeting the third week of March; and referencing the ability of a commissioner to attend meetings electronically and updating references to the 11th edition of Robert's Rules of Order. Mr. Holt noted that the appropriate notice for consideration of these changes had been made and that staff recommends adoption of the amendments.

Mr. Wright inquired about the method of electronic participation.

Mr. Krapf stated that it would be by telephone. Mr. Krapf noted that it still required a quorum to be physically present in the meeting room.

Mr. Wright stated that he wanted to ensure that the technical capabilities are available.

Mr. Holt noted that it is required that the details of electronic meeting participation be set forth in an adopted Planning Commission policy. Mr. Holt noted that developing the policy would be part of the Planning Division Work Plan. Mr. Holt clarified that by incorporating this reference in the Bylaws, it would set the framework for development of the policy on electronic participation.

Ms. Bledsoe inquired whether it was necessary to state that the Commission was in the process of developing the policy.

Mr. Holt noted that at a previous meeting the Policy Committee set developing the policy as a priority Work Plan item and the minutes reflected that direction.

Mr. Basic moved to approve the amendments to the Planning Commission Bylaws.

On a roll call vote the Planning Commission voted to approve the amendments to the Bylaws by a vote of 7-0.

B. 2014 Planning Commission Annual Report

Mr. Krapf stated that the Report is very effective in providing a snapshot of the Commission's accomplishments over the past year.

Mr. Krapf opened the floor for questions or discussion.

Mr. Richardson inquired whether all the requested corrections have been made.

Mr. Holt stated that staff will ensure all corrections are made before it moves forward.

Mr. O'Connor commented that the Longhill Corridor Study was an excellent collaborative effort between, staff, citizens, the consultant and VDOT. Mr. O'Connor stated that he would like to have seen more detail in the report on that effort to give more weight to the work.

Mr. Krapf inquired if the Commission would be comfortable approving the report with the stipulation that this issue would be addressed and revisions would be circulated for review and approval.

The Commission confirmed.

Mr. Richardson moved to approve the Report subject to staff providing additional language for the Longhill Road Corridor Study section.

On a roll call vote the Planning Commission voted to accept the 2014 Annual Report by a vote of 7-0.

7. PLANNING DIRECTOR'S REPORT

Mr. Holt stated that he would like to highlight two items.

Mr. Holt stated that the next public meeting for the Mooretown Road Corridor Study would be held on March 12 at 7:00 PM at the Toano Middle School. Mr. Holt stated that the consultant team will present a potential alignment and will gather public input on the proposed alignment.

Mr. Holt stated that the Historical Commission is accepting nominations of individuals, groups or organizations that have made a significant contribution to preserving historic resources in James City County for the 2015 Historic Preservation Award.

8. <u>COMMISSION DISCUSSION AND REQUESTS</u>

Mr. Krapf stated that the scheduled Board of Supervisors coverage ended with the month of February. Mr. Krapf offered to cover Board meeting for March until the new Chair can establish coverage among the Commission members.

Mr. Krapf noted that there would be a special meeting of the Planning Commission on March 16 at 6:00 PM.

Mr. Krapf stated that the Annual Organizational Meeting would be first on the agenda. Mr. Krapf noted that at the meeting a Chair and Vice Chair would be established but would not take their seats until the April meeting.

Mr. O'Connor inquired who would comprise the DRC for March.

Mr. Krapf stated that the DRC membership would be the same for March.

Mr. Krapf noted that the second agenda item would be review of the CIP recommendations.

Mr. Basic stated that the work of the Policy Committee on the CIP projects has been excellent.

9. <u>ADJOURNMENT</u>

Ms. Bledsoe and Mr. Wright moved to adjourn to the Special Meeting on March 16.

The meeting was adjourned at approximately 9:29 p.m.

| Richard Krapf, Chairman | Paul D. Holt, III, Secretary |
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REZONING-0009-2014: Stonehouse Traffic Proffer Amendment

Staff Report for the April 1, 2015 Planning Commission Public Hearing

This staff report was prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

PUBLIC HEARINGSBuilding F Board Room; County Government Complex Planning Commission:

March 4, 2015, 7:00 p.m. (deferred by applicant)

April 1, 2015, 7:00 p.m.

Board of Supervisors: May 12, 2015, 6:30 p.m. (tentative)

SUMMARY FACTS

Applicant: Mr. Vernon M. Geddy, III

Land Owner: GS Stonehouse Green Land Sub LLC, GS Stonehouse Green Land Sub 2 LLC

and GS Stonehouse Green Land Sub 3 LLC

Proposal: Amend the proffers to change the phasing of the traffic improvements and to

revise language related to the improvement of Mt. Laurel Road

Location: The portion of the Stonehouse Planned Unit Development currently owned or

successors in ownership to GS Stonehouse Green Land Sub

Parcel No.: See attached list

Parcel Size: Approximately 4,639 acres

Existing Zoning: PUD, Planned Unit Development, with proffers

Proposed Zoning: PUD, Planned Unit Development, with amended proffers

Comprehensive Plan: Mixed Use, Low Density Residential, Conservation Area

Primary Service Area: Inside

STAFF RECOMMENDATION

Staff finds that the request maintains adequate levels of service on the affected roadways and is consistent with the Comprehensive Plan. Staff recommends the James City County Planning Commission recommend approval of this application to the Board of Supervisors.

Staff Contact: Ellen Cook Phone: 253-6693

Proffers: Proffers are signed and submitted in accordance with the James City County Proffer Policy.

PROJECT DESCRIPTION

The Stonehouse Planned Unit Development was originally approved in November 1991 as a mixed residential/commercial community with a proposed reservoir. Since the original approval, a number of changes have been made, including a number of minor proffer amendments between 1991 and 1994, the removal of language pertaining to the Ware Creek Reservoir after permitting did not succeed in 1995, and a rezoning in 1999 that incorporated a 75 acre tract into the development. The existing development in Stonehouse, including the golf course and neighborhoods on Mill Pond Run and the Stonehouse Glen neighborhood on Fieldstone Parkway were developed over the years by several corporations, including Stonehouse Development Corporation and Stonehouse at Williamsburg. In 2006, the majority of the undeveloped land was sold to GS Stonehouse

Greenland Sub, LLC ("GS Stonehouse"). In 2007, GS Stonehouse received approval for comprehensive changes for this remaining land, thoroughly revising both the master plan and proffers. The 2007 case was the last major legislative case to be approved. The area that was not owned by GS Stonehouse in 2007 has continued forward under the 1999 proffers, while the land owned by GS Stonehouse has continued forward under the 2007 master plan and proffers.

The current proffer amendment request submitted by GS Stonehouse proposes to amend two proffers, the Transportation Improvements proffer and the Economic Development proffer. The request does not ask to change the existing master plan, or any of the other proffers such as those dealing with density, the community association, public use sites, or any others.

Transportation Improvement proffer

With regard to the Transportation Improvements proffer, the request is to revise the phasing of the transportation improvements. In explaining this request, the applicant indicated that ongoing real estate market conditions have resulted in the need to reevaluate the development phasing plan that was envisioned at the time the proffers were adopted in 2007. Specifically, the applicant wishes to focus on developing the remaining Land Bays/Tracts along Fieldstone Parkway and Mill Pond Run (proposed Phase 1), and on the Six Mount Zion and Mount Laurel Road corridor (proposed Phase 2), and hold off on developing the eastern and northern portions of the property (proposed Phases 3 and 4). In 2007, there was an expectation that the Phase 3 and Phase 4 areas would have been developed earlier in the overall development process, and this portion of the development was planned to be served by a major new internal road (the "Bridge Road") which would cross over I-64 on the way to a new intersection with Route 30. In concert with revising development phasing, the applicant wishes to re-sequence the transportation improvements, to initially focus on the improvements needed to adequately serve Phases 1 and 2, while holding off on improvements (including the Bridge Road) that will be needed to adequately serve traffic generated by development in Phases 3 and 4. Staff would note that the proposed Phases 1 and 2 do include the proffered school site (along Six Mount Zion Road), as well as the major commercial/industrial Tracts along Mount Laurel Road. The applicant submitted a traffic study to demonstrate that adequate levels of service could be maintained with the traffic from Phases 1 and 2, with the proposed re-sequence. (Please note that the portion of the attached study dated March 16, 2015 is supplemental analysis that corrected an issue with distribution of the trips from Tracts 11A and 11B.) More detail about the 2007 proffer language and the proposed proffer language is as follows:

2007 Traffic Improvement Proffers. The 2007 proffers listed the traffic improvements as a set of three levels (Initial, Level 1, Level 2) that would be triggered at certain traffic count volumes at the Stonehouse entrances (or for some specific turn lane improvement, counts of that movement). The improvements would be built when these traffic count thresholds were met. The traffic counts are updated annually and the proffers make provisions for beginning design plans and construction in advance of reaching the actual trigger thresholds. As noted above, the applicant proposed to build the new Bridge Road (and associated items) in the first set of transportation improvements; the next transportation level was projected to arrive at approximately half-way through development, and the third set at approximately 65% of development. (To date, the traffic count thresholds that would spur the "Initial" level set of transportation improvements has not been reached.) Finally, the 2007 proffer set includes provisions for a required updated traffic study at a specified time of development.

<u>Proposed 2015 Traffic Improvement Proffers</u>. The proposed proffers re-sequence the existing improvements in their original form, with the exception that one improvement is added (a second right turn lane on LaGrange Parkway). The traffic study submitted by the applicant indicates that, with the improvements listed for Phase I and II below, all external intersections and movements are anticipated to operate at a LOS C or better. The applicant desires to determine the triggers for the remaining improvements needed for Phases 3 and 4 by providing an updated traffic study to the County that specifies this information prior to any development occurring in Phases 3 and 4. Based on the currently adopted Master Plan, the overall maximum number of permitted dwelling units is 3,646 and each individual tract is designated with a minimum-maximum range of units; with this proffer, there would be 900 (minimum) – 3,646 (maximum) units that the applicant could not build until the traffic study put in place the triggers for the other improvements.

| Second westbound left turn lane on Fieldstone at Rt. 30 Signal at Rt. 30 and Fieldstone Signal at Rt. 30 and I-64 westbound off-ramp Second southbound left turn lane on Rt. 30 at LaGrange Second northbound right turn lane on LaGrange Parkway at Rt. 30 Signal at Rt. 30 and LaGrange Second westbound left on LaGrange Phase 1* LOS D / 300 vehicles per hour completing the movement, after signal is installed Phase 1* LOS D / 500 vehicles per hour completing the movement, after signal is installed Phase 1* LOS D / 500 vehicles per hour completing the movement, after signal is installed Signal at Rt. 30 and LaGrange Phase 1* When VDOT warrants are met/VDOT approves Phase 1* LOS D / 500 vehicles per hour completing the movement, after signal is installed Phase 1* When VDOT warrants are met/VDOT approves Second westbound left on LaGrange Parkway at Rt. 30 Phase 2** LOS D / 300 vehicles per hour completing the movement, after signal is installed | Transportation Improvements – External Roads | Proposed | Trigger |
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| Bridge Road and Rt. 30/Croaker intersection and 4 traffic study proffered in 3.4(b) | | | |
| | | | |
| | · | | Exact trigger would be determined following the |
| turn lanes and a channelized right to eastbound and 4 traffic study proffered in 3.4(b) | | and 4 | traffic study proffered in 3.4(b) |
| approach to Croaker | | DI 2 | |
| | | | Exact trigger would be determined following the |
| | | | |
| 7 | | | Exact trigger would be determined following the |
| an exclusive right turn lane on the southbound and 4 traffic study proffered in 3.4(b) Croaker approach to Richmond Road | | and 4 | traffic study proffered in 5.4(b) |
| | ** | Dhasas 3 | Exact trigger would be determined following the |
| lane to the northbound Croaker approach to Rt. and 4 traffic study proffered in 3.4(b) | 1 | | |
| 30/755 | | and 4 | traine study proficied in 3.4(b) |
| | | Phases 3 | Exact trigger would be determined following the |
| Westbound Rt. 755 approach to Croaker and 4 traffic study proffered in 3.4(b) | | | |
| | | | Exact trigger would be determined following the |
| Eastbound I-64 at Croaker interchange from and 4 traffic study proffered in 3.4(b) | | | |
| northbound Croaker | | | |
| | | Phases 3 | Exact trigger would be determined following the |
| Bridge Road and 4 traffic study proffered in 3.4(b) | 1 | | |

^{*} Per the proffers, once the trigger is met, the County would not be obligated to grant development approvals for any additional development on the property until the requirement is satisfied

<u>Internal Road and Intersection Improvements</u>. In addition to the road improvements listed above, the applicant continues to provide proffers for improvements for the roads internal to the development, including Six Mount Zion/LaGrange Parkway and Mount Laurel Road. Compared with the 2007 proffers, there is a difference in that the proffered widening of LaGrange would be only one additional lane (southbound) versus two additional lanes; note that the updated traffic study in the future would verify the adequacy of this road with three lanes. In addition, there is a difference in that the proffers now provide specific timeframes for improving phases of

^{**} Per the proffers, once the trigger is met, the County would not be obligated to grant development approvals for any development on the property located in Phase 2 unless the requirements are satisfied

LaGrange/Six Mount Zion - the most important element of this proffer for the County is the consideration that the road will be improved at the time the school(s) would be built on the proffered school site. Finally, there is also a difference in that the proffers allow for a Roundabout to be substituted for the improvements at the Fieldstone Parkway/LaGrange intersection, if approved by VDOT. With the improvements listed below, all intersections and movements are anticipated to operate at LOS C or better.

| Transportation Improvements – Internal Roads | Trigger |
|---|--|
| A right on Fieldstone at LaGrange, and a left on LaGrange at | When VDOT turn lane warrants are met, as shown |
| Fieldstone (OR a Roundabout) | in the Annual Counts |
| Signal at LaGrange/Fieldstone (OR a Roundabout) | When VDOT warrants are met |
| A second left on LaGrange at Fieldstone (OR a Roundabout) | LOS D / 300 vehicles per hour completing the |
| | movement, after signal is installed |
| A left and a right on LaGrange at Mt. Laurel, and a right and | When VDOT turn lane warrants are met, as shown |
| left on Mt. Laurel at LaGrange | in the Annual Counts |
| Signal at LaGrange/Mt. Laurel | When VDOT warrants are met |
| A second left on Mt. Laurel at LaGrange. Concurrently, | LOS D / 300 vehicles per hour completing the |
| widen LaGrange from 2 to 3 lanes (one additional southbound | movement, after signal is installed |
| lane) from Mt. Laurel south to the existing 4-lane section | |
| Improve LaGrange in three phases to meet VOT standards | For the first phase up to the expected school site |
| | entrance the trigger is related to conveyance of the |
| | land to the County and school site plan approval. |
| | For the second and third phases, the triggers are |
| | related to specified number of building permits in |
| | Tracts 2 and 3. |
| An left on Fieldstone at LaGrange, and a right on LaGrange at | Exact trigger would be determined following the |
| Fieldstone | traffic study proffered in 3.4(b) |
| Extend the four lane section of the Bridge Road from Rt.30 to | Exact trigger would be determined following the |
| Ware Creek Road | traffic study proffered in 3.4(b) |

<u>Other Transportation Provisions</u>. Another element of the proffer language that is important to note is the commitment in proffer 3.10 to disconnect Ware Creek Road west of its intersection with Mt. Laurel Road (this is internal to the land owned by Stonehouse) or otherwise discourage the use of Ware Creek Road. This commitment is designed to minimize traffic from the Stonehouse development using Ware Creek Road to the east of the property in the interim before the Bridge Road is constructed. Ware Creek Road is a rural road that is not adequate for an increase in traffic volumes. In addition to addressing this issue, the proposed proffers carry over various other transportation-related provisions that cover building the improvements to VDOT standards (including inclusion of signal coordination equipment for the traffic signals) and submission of documentation and coordination with the Federal Highway Administration for the modifications to the I-64 interchanges.

<u>Traffic Counts and Projected Traffic Volume</u>. Information from the James City County/Williamsburg/York County Comprehensive Transportation Study (2012) and the 2009 Comprehensive Plan is presented below:

| Facility | From | То | Most Recent Weekday Volume | 2034 Weekday Volume | 2010 PM Peak Hour LOS | 2034 PM Peak Hour LOS | 2009 Comp Plan |
|-----------------------------|--------------------------|--------------------------|----------------------------------|------------------------|-----------------------------|--------------------------------|----------------------|
| Barhamsville Rd (Rt. 30) | I-64 | Rt. 60 | 9,423 | 29,000 | A-C | A-C | Listed as "OK" |
| Old Stage Rd (Rt. 30) | New Kent CL | Barnes Rd (Rt. 601 S) | 9,512 | 12,000 | D | Е | Listed as "OK" |
| Old Stage Rd (Rt. 30) | Barnes Rd (Rt. 601 S) | I-64 | 9,512 | 26,000 | A-C | A-C | Listed as "OK" |

<u>Planning Staff and VDOT Comments</u>. Planning staff is comfortable with the traffic study and proffer language as proposed since the roadways and intersections are anticipated to operate at LOS C or better with the proposed

improvements. In a letter dated March 10, 2015, VDOT staff stated that, in general, they found the traffic study compliant with their regulations, and concurred with the projected trip generation. However, they did ask that additional analysis be conducted with a revised trip distribution pattern from Tracts 11A and 11B (distributing the majority of the trips onto Mount Laurel Road versus directly onto Six Mount Zion Road). The applicant followed up with the requested submittal, which yielded the results shown above in the section on Internal Road and Intersection Improvements.

Economic Development proffer

With regard to the Economic Development proffer, the revisions are to subsection (a) which lays out commitments for improvement of Mount Laurel Road to serve Tracts 11A and 11B, which are the major commercial tracts in the development. The 2007 proffers included a commitment to submit design plans for the improvement of Mount Laurel Road to meet VDOT subdivision street standards within 12 months of approval of the rezoning, and the commitment to construct the improvements within 18 months of approval of the design plans. While the applicant had submitted plans within 12 months of the rezoning, the plans have not yet been pursued to completion. The applicant has indicated that they would prefer to have the trigger linked to an imminent use of Tract 11A and 11B. The applicant has proposed proffer language that specifies improvement of the road in three phases: (i) from its intersection with LaGrange to the Tract 11A entrance, (ii) from Tract 11A entrance to Tract 11B entrance, and (iii) from the Tract 11B entrance to the future intersection with the Bridge Road. The triggers for constructing phases (i) and (ii) are related to site plan approval and commencement of construction for any commercial development on Tracts 11A and 11B, respectively.

Staff Comments.

Staff is comfortable with the language as proposed which should help ensure that the road infrastructure is ready for the initial industrial/commercial uses on the Tracts, as well as the uses that follow.

COMPREHENSIVE PLAN

The Stonehouse Planned Unit Development area is designated Low Density Residential, Conservation Area, and as a portion of the Stonehouse Mixed Use area on the 2009 Comprehensive Plan. Maintaining acceptable levels of service on area roadways is an important factor noted in both the residential development standards and the Stonehouse Mixed Use area description language. Based on the analysis submitted, staff finds that this would be achieved with the proffered improvements.

RECOMMENDATION

Staff finds that the request maintains adequate levels of service on the affected roadways and is consistent with the Comprehensive Plan. Staff recommends the James City County Planning Commission recommend approval of this application to the Board of Supervisors.

Fllen Cook

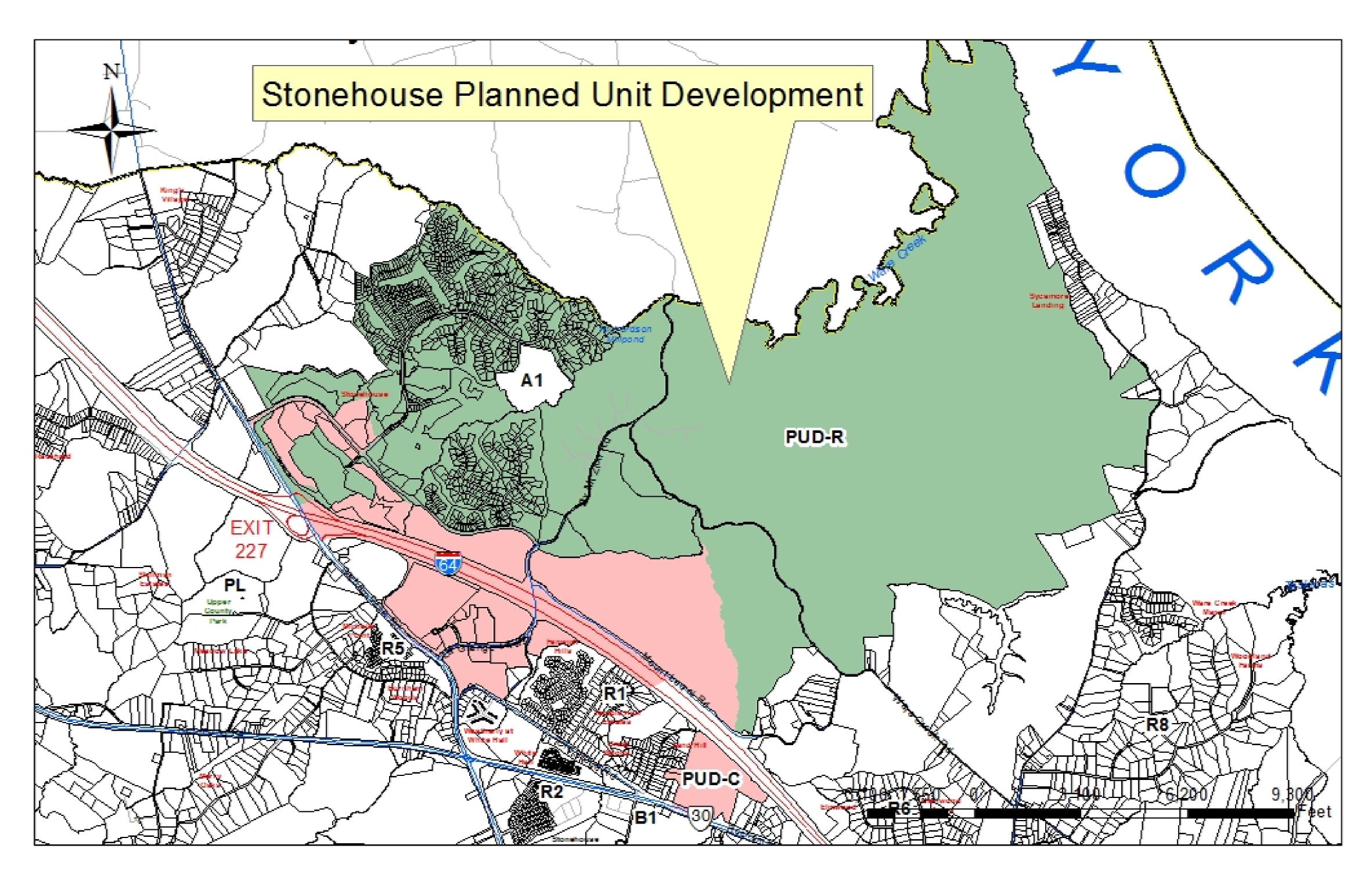
Ellen Cook

Attachments:

- 1. Location map
- 2. Parcel Numbers
- 3. Proposed Proffers
- 4. Transportation Impact Study and Supplemental Document (posted electronically on the agenda website)
- 5. Phasing Exhibit (referenced in the proposed proffers)
- 6. Mt. Laurel Road Exhibit (referenced in the proposed proffers)
- 7. Preliminary Master Plan for Tracts 2 and 3 (referenced in the proposed proffers)

JCC-Z-0009-2014 Stonehouse Traffic Proffer Amend.





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|-------------|-------------------------------|--------------------------------------|--------------------------------|-------------------|-----|----------------------|
| 0530800020 | LocAddr 9307 ASHWOOD COURT | Owner1 ALLEN, CAMILLE | MailAddr 9307 ASHWOOD COURT | MailCity TOANO | | MailZip 231689456 |
| | | ASSOCIATION AT STONEHOUSE INC | | | | |
| 0440100027 | 9300 FIELDSTONE PARKWAY | | 525 S INDEPENDENCE BLVD STE 2 | | | 234521189 |
| 0440100026 | | ASSOCIATION AT STONEHOUSE INC (THE) | 525 S INDEPENDENCE BLVD STE 2 | | | 234521189 |
| 1210100048 | 9020 WESTMONT DRIVE | AVID REALTY LLC | 9000 WESTMONT DRIVE | TOANO | | 231689351 |
| 0530800028 | | BAGNALL, RICHARD DAVID & SHARON RAPP | | TOANO | | 231689456 |
| 0540700050 | 3204 LYTHAM COURT | BETANCOURT, LUIS TOMAS | 3204 LYTHAM COURT | TOANO | | 231689384 |
| 0530800024 | | BIBBEE, JONATHAN E & LINDA A | 9323 ASHWOOD COURT | TOANO | | 231689456 |
| 0530900017 | | BLAESS, JENNIFER E & SEAN D | 9308 BRIARHILL WAY | TOANO | | 231689457 |
| 0530800032 | | BRAND, DANIEL & DESIREE | 3216 MOSSWOOD CIRCLE | TOANO | | 231689386 |
| 0530900001 | 9301 BRIARHILL WAY | BROWN, MICHAEL L & VETA L | 9301 BRIARHILL WAY | TOANO | | 231689457 |
| 0540600055 | 9316 STONEHOUSE GLEN | BUCHAN, CRAIG M & WENDY | 9316 STONEHOUSE GLEN DR | TOANO | | 23168 |
| 0530900014 | 9320 BRIARHILL WAY | CLEMONS, ANGEL A & TAYO M | 9320 BRIARHILL WAY | TOANO | | 231689457 |
| 0530800021 | 9311 ASHWOOD COURT | COOPER, ANTHONY R & JEVONAL RENEE | 9311 ASHWOOD COURT | TOANO | | 231689456 |
| 0540600054 | 9312 STONEHOUSE GLEN | COPELAND, PAUL B & CYNTHIA | 9312 STONEHOUSE GLEN | TOANO | VA | 231689367 |
| 0530900010 | 9339 BRIARHILL WAY | DAVIS, SHELTON & ADANNA B | 9339 BRIARHILL WAY | TOANO | VA | 231689457 |
| 0540700046 | 3220 LYTHAM COURT | DENTON, RONALD A & BRENDA J | 3220 LYTHAM COURT | TOANO | VA | 231689384 |
| 0530900016 | 9312 BRIARHILL WAY | DOVI, ANDREW J & AMY C | 9312 BRIARHILL WAY | TOANO | VA | 23168 |
| 0540700044 | 3228 LYTHAM COURT | DRISCOLL, MICHAEL T & ALECIA T | 3228 LYTHAM COURT | TOANO | VA | 231689384 |
| 0530900005 | 9319 BRIARHILL WAY | EDELEN, TESS Y & JOSEPH A | 9319 BRIARHILL WAY | TOANO | VA | 231689457 |
| 0530800033 | 3212 MOSSWOOD CIRCLE | ESPOSITO, MICHAEL & KARISSA | 3212 MOSSWOOD CIRCLE | TOANO | VA | 231689386 |
| 0540700040 | 3205 LYTHAM COURT | EVANS, GAIL A | 3205 LYTHAM COURT | TOANO | VA | 231689384 |
| 0530800031 | 9316 ASHWOOD COURT | GERICKE, JAMES & CLAUDIA | 9316 ASHWOOD CT | TOANO | VA | 231689456 |
| 0530900011 | 9336 BRIARHILL WAY | GORTER, KEVIN D & SHANNON R | 9336 BRIARHILL WAY | TOANO | | 231689457 |
| 0540700047 | 3216 LYTHAM COURT | GRACE, ANTONIO & TRUDYANN | 3216 LYTHAM COURT | TOANO | | 231689384 |
| 0540700049 | 3208 LYTHAM COURT | GREEN, WAYNE & TIAN | 3208 LYTHAM COURT | TOANO | VA | 231689384 |
| 0440100028 | | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100010 | 9760 MILL POND RUN | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100020 | | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100020 | | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100023 | | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100024 | | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | _ | 068804203 |
| 0640100023 | 9770 SIX MT ZION RD | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | _ | 068804203 |
| 1310100001 | 3820 ROCHAMBEAU DR | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| | | | | | | |
| 1310100019 | 170 SAND HILL ROAD | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 1210100047 | 0101 CIV MT ZION DD | GS STONEHOUSE GREEN LAND LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 0540100002 | 9101 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 0540100011 | 9250 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0540100012 | 9150 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 0540100015 | 9351 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0540100016 | 9100 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0630100005 | 9800 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0630100006 | 9550 SIX MT ZION RD | GS STONEHOUSE GREEN LAND SUB 2 LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530900012 | 9328 BRIARHILL WAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0440100025 | 9354 FIELDSTONE PARKWAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0440100029 | 9235 FIELDSTONE PARKWAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0440100030 | 9360 FIELDSTONE PARKWAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530100009 | 9370 FIELDSTONE PARKWAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0540600001A | 9475 FIELDSTONE PARKWAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530800001A | 9312 ASHWOOD COURT | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530800001B | | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530800001C | | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530900002A | BRIARHILL WAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | CT | 068804203 |
| 0530900007A | BRIARHILL WAY | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 0540700001A | | GS STONEHOUSE GREEN LAND SUB LLC | 2 POST ROAD WEST | WESTPORT | | 068804203 |
| 0530900004 | | HARDESTY, TRAVER P & NICOLE P | 9315 BRIARHILL WAY | TOANO | | 231689457 |
| 0530900002 | | INGRAM, CHARLES T & AIMEE M | 9305 BRIARHILL WAY | TOANO | | 231689457 |
| 0530800036 | | IRWIN, CRAIG L & CYNTHIA E | 3200 MOSSWOOD CIRCLE | TOANO | | 231689386 |
| 0530900015 | | IVERY, LONNIE JR & APRIL A | 9316 BRIARHILL WAY | TOANO | | 231689457 |
| 0440100025A | | JAMES CITY SERVICE | 119 TEWNING ROAD | WILLIAMSBURG | | 231882639 |
| 0530100014 | 9400 FIELDSTONE PARKWAY | | 119 TEWNING ROAD | WILLIAMSBURG | | 231882639 |
| 0540700042 | 3229 LYTHAM COURT | JEFFERSON, RENEE G & COTMAN, RAY DAV | 3229 LYTHAM COURT | TOANO | | 231682039 |
| 0530800038 | 9300 ASHWOOD COURT | JIMENEZ, FERNANDO & KENIA | 9300 ASHWOOD COURT | TOANO | | 231689364 |
| 0530800038 | • | LAUTENSLAGER, PHILIP E & SALLY W | 9309 BRIARHILL WAY | TOANO | | 23168 |
| 0530900003 | | MITCHELL, MILLIE | 9327 ASHWOOD COURT | TOANO | | 231689456 |
| | | | | | | 231689456 |
| 0540700051 | | MORGAN, HARRY L III | 3200 LYTHAM COURT | TOANO | | |
| 0530900006 | | PARKER, KEVIN J & DENELL E | 9323 BRIARHILL WAY | TOANO | | 231689457 |
| 0530900009 | 9335 BRIARHILL WAY | PAYNE, STEPHENS S & STALLWORTH-PAYNE | DKIAKHILL WAY | TOANO | VΑ | 231689457 |

| 0540700048 | 3212 LYTHAM COURT | PERMENTER-KEENE, KEISHA AMIEE & MELF | 3212 LYTHAM COURT | TOANO | VA | 231689384 |
|-------------|----------------------|--------------------------------------|--------------------------|--------------|----|-----------|
| 0530800019 | 9303 ASHWOOD COURT | PFISTER, LEWIS M JR & ALLEN, JOYCE L | 9303 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0540700039 | 3201 LYTHAM COURT | POTO, VINCENT J & JOANN | 3201 LYTHAM COURT | TOANO | VA | 231689384 |
| 0540600052 | 9308 STONEHOUSE GLEN | POWELL, WILLIAM D & PENNY | 16 HANNAN SHORE ROAD | PALERMO | ME | 043546852 |
| 0530800029 | 9324 ASHWOOD COURT | SHARTZER, STUART & KAREN | 9324 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0530800023 | 9319 ASHWOOD COURT | SHNOWSKE, ERIN E & WILLIAM J | 9319 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0530800026 | 9331 ASHWOOD COURT | SMITH, LARRY W & SANG H | 9331 ASHWOOD CT | TOANO | VA | 231689456 |
| 0540400001C | 9304 STONEHOUSE GLEN | STONEHOUSE GLEN LLC | 8214 WESTCHESTER STE 635 | DALLAS | TX | 752256124 |
| 0540100017 | 9205 SIX MT ZION RD | STONEHOUSE OWNERS FOUNDATION | 603 PILOT HOUSE DRIVE | NEWPORT NEWS | VA | 236061904 |
| 0540600053 | 9310 STONEHOUSE GLEN | STOVALL, ANTONIO & COOPER LORRAINE A | 9310 STONEHOUSE GLEN | TOANO | VA | 231689367 |
| 0530900018 | 9300 BRIARHILL WAY | TESHARA, REGINA T & JOSEPH A JR | 9300 BRIARHILL WAY | TOANO | VA | 231689457 |
| 0530800022 | 9315 ASHWOOD COURT | THRASH, NEHEMIAH JR & NIKI N | 9315 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0530800037 | 9304 ASHWOOD COURT | TIEFEL, BRAD S & LANGLOIS, NICOLE E | 9304 ASHWOOD CT | TOANO | VA | 231689456 |
| 0540700045 | 3224 LYTHAM COURT | WALSH, DARROLL & JILL | 3224 LYTHAM COURT | TOANO | VA | 231689384 |
| 0530800030 | 9320 ASHWOOD COURT | WALSH, MICHAEL | 9320 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0530900007 | 9327 BRIARHILL WAY | WARE, ELLA L & STANLEY K | 9327 BRIAHILL WAY | TOANO | VA | 231689457 |
| 0530900008 | 9331 BRIARHILL WAY | WASHINGTON, KIP O & WANDA O | 9331 BRIARHILL WAY | TOANO | VA | 231689457 |
| 0530800035 | 3204 MOSSWOOD CIRCLE | WATTS, GABRIEL & GEETA | 3204 MOSSWOOD CIRCLE | TOANO | VA | 231689386 |
| 0540700041 | 3225 LYTHAM COURT | WHITTENTON, JAMES | 3225 LYTHAM COURT | TOANO | VA | 231689384 |
| 0530800034 | 3208 MOSSWOOD CIRCLE | WILLIAMS, PATRICK A & VERNA | 3208 MOSSWOOD CIRCLE | TOANO | VA | 231689386 |
| 0530900013 | 9324 BRIARHILL WAY | WILLIS, CHAD AREK TRUSTEE & CHRISTIN | 9324 BRIARHILL WAY | TOANO | VA | 231689457 |
| 0530800027 | 9332 ASHWOOD COURT | WISWESSER, SEAN M & DIANA | 9332 ASHWOOD COURT | TOANO | VA | 231689456 |
| 0540700043 | 3232 LYTHAM COURT | YATES, DONNIE & JULIE | 3232 LYTHAM CT | TOANO | VA | 231689384 |
| 0540600056 | 9318 STONEHOUSE GLEN | ZIMMERMAN, JOHN | 9318 STONEHOUSE GLEN | TOANO | VA | 231689367 |
| 0530100001A | | | | | | |

Prepared by: Geddy, Harris, Franck & Hickman, LLP Tax Parcels: See Exhibit A

1177 Jamestown Road

Williamsburg, Virginia 23185

Return to: James City County Attorney's Office

101-C Mounts Bay Road Williamsburg, Virginia 23185

SECOND AMENDMENT TO AMENDED AND RESTATED STONEHOUSE PROFFERS

RECITALS

A. Owner is the owner of certain real property in James City County, Virginia within the Stonehouse planned community now zoned PUD-R and PUD-C, and subject to Amended and Restated Stonehouse Proffers dated November 27, 2007, which Proffers are recorded in the Clerk's Office of the Circuit Court for the City of Williamsburg and County of James City as Instrument No. 080007838, as amended by First Amendment to Amended and Restated Stonehouse Proffers dated May 31, 2012 and recorded in the aforesaid Clerk's Office as Instrument No. 120013165 (the "Existing Proffers").

B. Owner desires to amend and restate Conditions 3 and 4 of the Existing Proffers to modify the phasing (but not the scope) of traffic improvements proffered therein as set forth below.

AMENDMENTS TO CONDITIONS

- 1. Except for the language of Sections 3.2, 3.3, 3.4 and 3.11 of the Existing Proffers, which is hereby incorporated by reference in section 3.4(b) of these amended and restated conditions, Conditions 3 and 4 of the Existing Proffers are hereby deleted and replaced in their entirety with the following;
- 3. <u>Transportation Improvements</u>. This proffer sets forth external and internal road and intersection improvements recommended in the Traffic Study and the phasing of their construction.
- 3.1 Periodic Traffic Counts. Owner shall have traffic volume counts conducted annually beginning not less than one year from the date of final approval of the requested rezoning by the Board of Supervisors and on or about each anniversary of the initial count thereafter ("Annual Counts"). With the approval of VDOT and the Director of Planning, the Annual Counts shall be conducted at a time of year such that no adjustment factor will need to be applied to the raw count data to estimate annual average daily traffic. The Annual Counts shall be conducted at (i) Fieldstone Parkway at its intersection with State Route 30, (ii) La Grange Parkway at its intersection with State Route 30, (iii) Ware Creek Road at its intersection with Mount Laurel Road, (iv) Fieldstone Parkway at its intersection with Six Mount Zion Road, (v) Mount Laurel Road at its intersection with Six Mount Zion Road, and (vi) Bridge Road at its intersection with Rochambeau Drive after such time as Bridge Road is constructed (collectively, the "Entrances"). The results of the Annual Counts shall be submitted to the Director of Planning and VDOT. The Annual Counts shall include collection of right and left turn movements and a

level of service analysis at each intersection for which there is a vehicle per hour or level of service threshold in these Proffers for triggering additional left turn lane improvements.

- 3.2 <u>Phase 1 Transportation Improvements</u>. The following improvements shall have be completed or commenced (as used herein with respect to construction or installation of improvements, "commenced" shall mean all necessary plan approvals and permits have been obtained and actual physical construction activity, e.g. land disturbing, has begun) and guarantees in accordance with §15.2-2299 of the Code of Virginia, as amended, and the applicable provisions of the County Code in form and amount reasonably satisfactory to the County Attorney ("Guarantees") for their completion have been posted with the County at the times required below:
- (a) Modify the pavement markings on southbound Fieldstone Parkway to add a second left turn lane to the southbound Fieldstone Parkway approach to State Route 30 after installation of the traffic signal proffered in paragraph (b) of this Section and upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at Level of Service ("LOS") D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour; and
- (b) Install a traffic signal at the intersection of State Route 30 and Fieldstone Parkway the earlier of when VDOT signal warrants ("Warrants") are met or such signal is otherwise approved for installation by VDOT: and
- (c) Install a traffic signal at the intersection of State Route 30 and the westbound Interstate 64 Exit 227 exit ramps when Warrants are met; and

- (d) Install a second southbound left turn lane on Route 30 at the intersection with La Grange Parkway after installation of the traffic signal proffered in paragraph (f) of this Section and upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour: and
- (e) Install a second northbound right turn lane on La Grange Parkway at the intersection with Route 30 upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 500 vehicles per hour: and
- (f) Install a traffic signal at the intersection of State Route 30 and La Grange Parkway the earlier of when Warrants are met or such signal is otherwise approved for installation by VDOT.

If Owner fails to meet and comply with the requirements set forth in this Section 3.2, the County shall not be obligated to grant final subdivision or site plan approval for any additional development on the Property until such requirements are satisfied.

- 3.3. <u>Phase 2 Transportation Improvements</u>. The following additional improvements shall be completed or commenced and Guarantees for their completion have been posted with the County at the times required below:
- (a) Modify the pavement markings to add a second left turn lane to the westbound La Grange Parkway approach to State Route 30 after installation of the traffic signal proffered in Section 3.2 (f) and upon the earlier of the Annual Counts showing (i) operational

conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour; and

- (b) Add a second left turn lane to the northbound State Route 30 approach to the westbound I-64 on-ramp at Exit 227 and widen the westbound I-64 on-ramp to two lanes after installation of the traffic signal proffered in Section 3.2 (c) and upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour; and
- (c) Add a second westbound left turn lane on the I-64 westbound off-ramp at Route 30 after installation of the traffic signal proffered in Section 3.2 (c) and upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour.

If Owner fails to meet and comply with the requirements set forth in Sections 3.2 and 3.3 hereof, the County shall not be obligated to grant final subdivision or site plan approval for any development on the Property located in Phase 2 of the project as depicted on the Phasing Plan until and unless the requirements set forth in Sections 3,2 and 3.3 hereof have been satisfied.

3.4. <u>Updated Traffic Study</u>. (a) Owner may have the Traffic Study updated, amended, or supplemented from time to time by an independent traffic consultant and shall submit any such updated, amended, or supplemented Traffic Study to the County and VDOT for approval. The schedule of road and intersection improvements and the phasing thereof set forth

above may be amended by the Owner based on such updated, amended, or supplemented Traffic Study with the approval of the Board of Supervisors. Owner shall convey, without charge, to VDOT or the County, as appropriate, all right of way owned by it that is necessary for such improvements and, when completed, shall dedicate all such improvements to VDOT or the County, as appropriate.

(b) The County shall not be obligated to grant final subdivision or site plan approval for any additional development on the Property located in Phase 3 or 4 of the project as depicted on the Phasing Plan until the Owner, at its expense, has submitted to VDOT and the Director of Planning for their review and approval an updated traffic study of the Stonehouse development performed by a qualified traffic consultant. The consultant shall submit the proposed methodology for the study to VDOT for approval before initiation of the study; however, the methodology shall include forecasted background traffic volumes (including traffic volumes from approved developments other than Stonehouse) as identified in the current traffic study. The updated study shall set forth a proposed schedule of road and intersection improvements, including the improvements listed in Sections 3.2, 3.3, 3.4 and 3.11 of the Existing Proffers, not otherwise listed above, and any other improvements needed to maintain adequate levels of service, if any, as determined by the updated study and the phasing thereof to serve development of Phase 3 and 4 of the project. Upon approval by VDOT and the Director of Planning of the updated study, schedule of road and intersection improvements and phasing plan, further development of the Property shall be in accordance with the approved, updated improvement schedule and phasing plan.

- 3.5 Traffic Signal Warrant Analyses. Anything to the contrary herein notwithstanding, Owner shall not be obligated to install or post Guarantees for any traffic signal until such time as VDOT determines Warrants for that signal have been met. The Annual Counts shall include turning movement counts at the intersections listed in Sections 3.2 and 3.3 for potential signalization. If, based on the Annual Counts, VDOT determines that any intersection at which a traffic signal is proffered is approaching meeting Warrants for installation of the traffic signal, then at the request of VDOT, Owner shall have a Warrant analysis of that intersection conducted and submitted to the County and VDOT.
- 3.6 <u>VDOT Standards</u>. All improvements proffered in this Section 3 shall be designed and constructed in accordance with applicable VDOT standards and guidelines. All traffic signals proffered hereby shall be designed and installed to accommodate future proffered traffic improvements. Traffic signal timing equipment will be modified and signal timing plans updated as\required by VDOT concurrently with capacity improvements at the intersection in question. All traffic signals proffered hereby shall include signal coordination equipment if required by VDOT.
- 3.7 <u>FHWA Approvals</u>. The proffered modifications to Interstate 64 interchanges will require the approval of the Federal Highway Administration ("FHWA"). If FHWA approval of a modification is not granted after submission through and with the approval of VDOT of all appropriate and required interchange modification applications and supporting documentation, Owner shall propose to the County and VDOT substitute improvements and provide VDOT and the County with a traffic study showing the impact of the proposed substitute improvements, commensurate in traffic benefit and costs with the proffered interchange modifications for the

review and approval of the County and VDOT. If such substitute improvements are approved by the County and VDOT, the completion or posting of Guarantees for their completion with the County shall satisfy the obligation of Owner with respect to the proffered interchange modification for which FHWA approval was not granted.

- 3.8 <u>Internal Road and Intersection Improvements</u>. To ensure adequate service at major internal intersections and along roadway segments within the Property, Owner shall install the following improvements at the time of roadway and intersection construction in the area of the specified intersection unless another trigger is specified herein:
- (a) Install eastbound right turn lane on the Fieldstone Parkway approach to La Grange Parkway and install a northbound left turn lane on the La Grange Parkway approach to Fieldstone Parkway when warranted by the Annual Counts; and
- (b) Install a traffic signal at the LaGrange Parkway/Fieldstone Parkway intersection when Warrants are met; and
- (c) Add a second northbound left turn lane on the La Grange Parkway approach to Fieldstone Parkway upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per; and
- (d) Install a southbound left turn lane and a northbound right turn lane on the La Grange Parkway approach to Mount Laurel Road and install a westbound right turn lane on Mount Laurel Road when warranted by the Annual Counts; and
- (e) Install a traffic signal at the LaGrange Parkway/Mount Laurel Road intersection when Warrants are met; and

- (f) Add a second westbound left turn lane to the Mount Laurel Road approach to La Grange Parkway upon the earlier of the Annual Counts showing (i) operational conditions of the turning movement is at LOS D or worse or (ii) either the a.m. or p.m. peak hour volume of vehicles completing this movement exceeds 300 vehicles per hour. Concurrent with the installation of the second left turn lane on westbound Mount Laurel Road, La Grange Parkway will be widened by the addition of an additional southbound lane from Mount Laurel Road south to the existing 4-lane section.
- (g) The Owner shall construct the improvements to Six Mount Zion Road to bring it into conformance with VDOT standards from the existing tie in at Amenity H to the Property boundary in the following phases.
- (i) Phase 1 Six Mount Zion Road. Owner shall design and submit construction plans for the improvements to Six Mount Zion Road, from the existing Six Mount Zion Road to a point past the entrance to the school site depicted on the Preliminary Master Plan for Tracts 2 and 3 dated 9/08/2010, copy attached hereto, when the County issues its request for conveyance of the school site pursuant to Condition 5, construction will begin within 30 days of when the final construction plans for the road improvements have been approved following the conveyance of the school site to the County and site plan approval for the new school has been issued. Such construction shall be diligently pursued to completion.
- (ii) Phase 2 Six Mount Zion Road. The improvements to Six Mount Zion Road from the entrance to the school site (referenced above) to the intersection with Ware Creek Road will be completed prior to the County being obligated to issue more than 200 building permits for buildings in Tract 2 or a combination of Tracts 2 and 3.

(iii) Phase 3 Six Mount Zion Road. The improvements to Six Mount Zion Road from the intersection with Ware Creek Road to the entrance to Parcel G generally depicted on the Preliminary Master Plan from Tracts 2 and 3 dated 9/08/2010 will be completed prior to the County being obligated to issue more than 400 building permits for buildings in in Tracts 2 and 3.

With the prior approval of VDOT, at such time as any of the proffered improvements to the Fieldstone Parkway/La Grange Parkway intersection are triggered, Owner may install a single lane roundabout meeting VDOT requirements in lieu of the improvements to the Fieldstone Parkway/La Grange Parkway intersection proffered above in this Section.

- 3.9 <u>Bicycle Accommodation Improvements.</u> The improvements made by Owner to Route 30 and the Route 607/Route 30 intersection shall include shoulder bike lanes, provided such bike lanes can be installed within the existing right of way. All improvements to Route 600 within the Property shall include a shoulder bike lane except, with the approval of the Director of Planning, no bike lane shall be required where Route 600 passes under Interstate 64 if such a bike lane is not feasible due to pavement width restrictions under the bridge.
- 3.10 External Road Connections. There shall be no road connection directly from the Property onto Croaker Road. Within one year from the date of approval of the requested proffer amendment by the Board of Supervisors, Owner shall petition VDOT to permit the disconnection of Ware Creek Road immediately west of its intersection with Mount Laurel Road from the portion of Ware Creek Road that extends through the Property and, if VDOT approval is obtained, the applicant shall physically disconnect the road within 24 months of receipt of VDOT approval to prevent traffic from the Property from using Ware Creek Road to access

Croaker Road. If VDOT does not allow this disconnection, Owner shall not improve a segment of Ware Creek Road between its intersection with Bridge Road and the eastern boundary of the Property and shall not improve Ware Creek Road west of its intersection with Mount Laurel Road to the first subdivision road in the Property and through the use of signage and other measures as approved by VDOT shall attempt to de-emphasize Ware Creek Road as a means of ingress and egress to and from the Property.

- **4. Economic Development.**(a) As and when segments of the roads shown on the Master Plan within or adjacent to areas designated E, F, G or H on the Master Plan are constructed, water and sewer lines shall be installed adjacent to or within the road right-of-way or otherwise extended to such areas with capacity to serve the areas described above. The owner shall construct the improvements to Mt. Laurel Road in general conformance with the preliminary plans submitted by WSP Sells on 1/22/09, with the actual development plans for the improvements to meet then-current standards and to be approved by the County and VDOT in the following phases.
- (i) Phase 1 Mt. Laurel Road.From the point of intersection of Mt. Laurel Road and Six Mount Zion Road to station 23+00. Owner shall design and submit construction plans for the Mt. Laurel Road improvements when the County notifies the Owner that the first site plan for commercial development in Tract 11A has been submitted. Construction of the improvements will begin within 30 days of when the final construction plans for the road improvements have been approved following site plan approval and commencement of construction of any commercial development in Tract 11A and such construction shall be diligently pursued to completion.

- (ii) Phase 2 Mt. Laurel Road. From the point depicted by station 23+00 to station 47+00. Construction will begin within 30 days of site plan approval and commencement of construction of any commercial development in Tract 11B and such construction shall be diligently pursued to completion.
- (iii) Phase 3 Mt. Laurel Road.From the point depicted by station 47+00 to the intersection and tie in to the yet to be named Parkway. This phase of construction will be tied directly to the construction of the Parkway in phases 3 and 4 of the transportation improvements. The timing of such improvements will be determined by the updated traffic study referred to in Condition 3.4 above.
- ("OED"), any state or regional economic development agency, and/or any prospective user identified by the OED or such state or regional agency with a marketing information package for the areas of the Property designated E, F, G or H on the Master Plan. The marketing information shall contain relevant information about the property such as size and configuration of available sites, surveys, topographic information, utility availability and capacity, road access, stormwater management plans and similar information.
- (c) In Tracts 10B and 11A there shall be no more than 70,000 square feet of retail development and no single retail use shall exceed 7,500 square feet. If and when mixed use buildings are permitted by applicable zoning ordinances, no more than 10% of the floor area of any mixed use building in Tracts 10B and 11A shall be devoted to retail use.
- 2. Except as hereby amended the Existing Proffers remain unchanged and in full force and effect.

Witness the following signatures.

Registration No.:_____

GS STONEHOUSE GREEN LAND SUB LLC By:______ Title: STATE OF _____ CITY/COUNTY OF _____, to-wit: The foregoing instrument was acknowledged before me this _____ day of _____, of GS STONEHOUSE GREEN LAND SUB LLC, a Delaware limited liability company, on behalf of the company. NOTARY PUBLIC My commission expires:_____

GS STONEHOUSE GREEN LAND SUB 2 LLC

| By: | - |
|--|---------------------|
| Title: | |
| STATE OF | |
| CITY/COUNTY OF, to-wit: | |
| The foregoing instrument was acknowledged before me this, 2015 by,, | _ day of _ of GS |
| STONEHOUSE GREEN LAND SUB 2 LLC, a Delaware limited liability compthe company. | oany, on behalf of |
| NOTARY PUBLIC | |
| My commission expires: | |

GS STONEHOUSE GREEN LAND SUB 3 LLC

| By: | |
|---|-----------------|
| Title: | |
| STATE OF CITY/COUNTY OF, to-wit: | |
| The foregoing instrument was acknowledged before me this da, 2015 by, | ay of of GS |
| STONEHOUSE GREEN LAND SUB 3LLC, a Delaware limited liability company the company. | y, on behalf of |
| NOTARY PUBLIC | |
| My commission expires: | |

Tax Parcel Numbers



1001 Boulders Parkway Suite 300 Richmond, VA 23225 P 804.200.6500 F 804.560.1016 www.timmons.com

To: Mike Etchemendy (Greenfield Partners, LLC)

From: Scott Dunn, AICP, PTP

Re: Stonehouse Development – 2024 Supplemental Analyses

Date: January 28, 2015

Copy: Jennifer DeVaughn, PE & Thomas Ruff, EIT (Timmons Group)

Timmons Group has completed the supplemental analyses for Phase 1 of the Stonehouse development. The 2024 total analyses assumed full buildout of Phase 1 of the development with the applicable proffered improvements at the following intersections:

- Route 30 at Fieldstone Parkway;
- Route 30 at Interstate 64 westbound ramps;
- Route 30 at Interstate 64 eastbound ramps;
- Route 30 at LaGrange Parkway;
- Six Mount Zion Road at Mount Laurel Road; and
- Six Mount Zion Road at Fieldstone Parkway.

Analyses were also performed for 2024 total volumes that were adjusted to include 50% of Phase 2 site trips and 100% of Phase 2 site trips, including the proposed school facilities.

Please note that analyses were not performed at Rochambeau Drive and Croaker Road (Route 607) due to the directional distribution of traffic shown in Figures 8a and 8b of the 2007 URS traffic study. Based on the provided distributions, traffic from Areas 1 and 2 are limited to through movements and Route 60 and do not make use of Rochambeau Drive or the Croaker interchange.

For your convenience the following figures are provided at the end of the document:

- Figure 1: Surrounding Roadway Network and Study Intersections;
- Figure 2: 2013 Existing Geometry and Posted Speed Limits;
- Figures 3 and 4: 2013 Existing Volumes AM and PM Peak Hours;
- Figures 5 and 6: 2024 Background Volumes AM and PM Peak Hours;
- Figure 7: Stonehouse Phasing Plan and Proffered Improvements;
- Figure 8: Phase 1 Site Trip Distribution Percentages for Land Bays 1, 3, 5, 8, and 14;
- Figure 9: Phase 1 Site Trip Distribution Percentages for Tracts 10A, 10B, and 12;
- Figures 10 and 11: Phase 1 Site Trips for Land Bays 1, 3, 5, 8, and 14 AM and PM Peak Hours;
- Figures 12 and 13: Phase 1 Site Trips for Tracts 10A, 10B, and 12 AM and PM Peak Hours;
- Figures 14 and 15: Total Phase 1 Site Trips AM and PM Peak Hours;
- Figures 16 and 17: 2024 Total Volumes (Background + Phase 1) AM and PM Peak Hours;
- Figure 18: Phase 2 Site Trip Distribution Percentages for Tracts 2, 3, 11A, 11B, and 13, including the proposed school facilities;
- Figures 19 and 20: 50% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, including the proposed school facilities, AM and PM Peak Hours;

- Figures 21 and 22: 100% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, including the proposed school facilities, AM and PM Peak Hours;
- Figures 23 and 24: 2024 Modified Total Volumes (Background + Phase 1 + 50% Phase 2) AM and PM Peak Hours;
- Figures 25 and 26: 2024 Modified Total Volumes (Background + Phase 1 + 100% Phase 2) AM and PM Peak Hours;
- Figures 27 and 28: 2013 Existing AM and PM Peak Hour Volumes Levels of Service;
- Figures 29 and 30: 2024 Background AM and PM Peak Hour Volumes Levels of Service;
- Figures 31 and 32: 2024 Total AM and PM Peak Hour Volumes with No Improvements Levels of Service;
- Figure 33: 2024 Proposed Geometry for Phase 1 Site Trips (Applicable Proffered Improvements);
- Figures 34 and 35: 2024 Total AM and PM Peak Hour Volumes with Applicable Proffered Improvements Levels of Service;
- Figure 36: 2024 Proposed Geometry for Phase 1 Site Trips (Applicable Proffered Improvements plus Traffic Signal at I-64 Westbound Ramps);
- Figures 37 and 38: 2024 Total AM and PM Peak Hour Volumes with Applicable Proffered Improvements and Traffic Signal at I-64 WB Ramps Levels of Service;
- Figure 39: 2024 Proposed Geometry For 100% of Phase 1 Site Trips and 50% of Phase 2 Site Trips (Applicable Proffered Improvements and Signal at I-64 WB Ramps) Levels of Service;
- Figures 40 and 41: 2024 Total AM and PM Peak Hour Volumes (100% Phase 1 and 50% Phase 2) with Proffered Improvements and Signal at I-64 WB Ramps Levels of Service;
- Figure 42: 2024 Proposed Geometry For 100% of Phase 1 Site Trips and 100% of Phase 2 Site Trips (Applicable Proffered Improvements and Signal at I-64 WB Ramps) Levels of Service; and
- Figures 43 and 44: 2024 Total AM and PM Peak Hour Volumes (100% Phase 1 and 100% Phase 2) with Applicable Proffered Improvements and Signal at I-64 WB Ramps Levels of Service.

Existing Conditions:

The study intersections are shown on Figure 1 and the existing intersection geometry is shown on Figure 2 along with the posted speed limits. The 2013 existing AM and PM peak hour volumes are taken from the "2013 Stonehouse Traffic Data Collection & Analysis Memorandum" prepared by WSP USA Corp. on June 24, 2013. The counts were collected on May 14 and 21, 2013. The balanced AM (7:30 to 8:30) and PM (4:30 to 5:30) peak hour volumes are summarized on Figures 3 and 4.

2024 Volume Projections:

Existing 2013 volumes were projected to 2024 using a 2.5% annual growth rate. The 2024 AM and PM background volumes (without Stonehouse site trips) are shown on Figures 5 and 6.

The site trips for the remaining un-built portion of Phase 1 of the Stonehouse development were estimated using the land uses provided by the developer in conjunction with the residential and non-retail commercial trip rates contained in Table 20 of the 2007 URS Traffic Study. The Phase 1 site trips are summarized in Table 1. The Stonehouse phasing plan and proffered improvements are shown on Figure 7.

Table 1: Phase 1 Trip Generation Summary

| | | | | | | | WE | EKDAY | | [|
|-------------------|------------------------|-------------|---------------|--------------|-----------|------------|--------------|-----------|------------|--------------|
| | | IΤΕ | | | Д | M PEAK HO | JR | PN | 1 PEAK HO | UR |
| <u>AREA</u> | LAND USE | <u>CODE</u> | <u>AMOUNT</u> | <u>UNITS</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> |
| | | | | | | | | | | |
| RESIDENTIA | L USES | | | | | | | | | |
| Land Bay 1 | Single Family Detached | 210 | 60 | DU | 10 | 14 | 24 | 17 | 12 | 29 |
| Land Bay 3 | Single Family Detached | 210 | 30 | DU | 5 | 7 | 12 | 8 | 6 | 14 |
| Land Bay 5 | Single Family Detached | 210 | 120 | DU | 21 | 28 | 48 | 33 | 24 | 57 |
| Land Bay 8 | Single Family Detached | 210 | 40 | DU | 7 | 9 | 16 | 11 | 8 | 19 |
| Tract 12 | Single Family Detached | 210 | 56 | DU | 10 | 13 | 23 | 16 | 11 | 27 |
| Land Bay 14 | Single Family Detached | 210 | 45 | DU | 8 | 10 | 18 | 12 | 9 | 21 |
| | | | 351 | DU | 60 | 81 | 141 | 97 | 70 | 167 |
| | | | | | | | | | | |
| NON-RESIDE | NTIAL USES | | | | | | | | | |
| Tract 10A | Non-Retail Commercial | 110 | 300,000 | SF | 111 | 24 | 135 | 35 | 107 | 141 |
| Tract 10B | Non-Retail Commercial | 110 | 720,000 | SF | 266 | 58 | 324 | 83 | 256 | 338 |
| | | | 1,020,000 | SF | 377 | 82 | 459 | 117 | 362 | 479 |
| | | | | | | | | | | |
| | | Phase 17 | Total Deve | lopment: | 437 | 163 | 600 | 215 | 432 | 646 |
| | | | | | | | | | | |

Source: Trip generation estimates calculated using rates from 2007 URS Stonehouse Traffic Impact Study

The Phase 1 site trips were distributed according to the "Stonehouse Traffic Impact Study" prepared by URS on December 20, 2007 (Figures 8A and 8B). The trip distribution percentages for land bays 1, 3, 5, 8, and 14 are shown on Figure 8 and the trip distribution percentages for tracts 10A, 10B, and 12 are shown on Figure 9. The Phase 1 site trips for the AM and PM peak hours are summarized on Figures 10 through 15.

The 2024 total AM and PM volumes (with Stonehouse Phase 1 site trips) are shown on Figures 16 and 17.

The 2024 total volumes were adjusted to include 50% and 100% of the Phase 2 site trips (including the proposed school facilities). The Phase 2 trip generation is shown in Table 2 and the trip distribution percentages are shown on Figure 18.

The 50% Phase 2 site trips for the AM and PM peak hours are summarized on Figures 19 and 20 while the 100% Phase 2 site trips for the AM and PM peak hours are summarized on Figures 21 and 22.

The 2024 adjusted total AM and PM volumes with Phase 1 and 50% of Phase 2 site trips are shown on Figures 23 and 24. The 2024 adjusted total AM and PM volumes with Phase 1 and 100% of Phase 2 site trips are shown on Figures 25 and 26.

Table 2: Phase 2 Trip Generation Summary

| 50% of Pha | ase 2 Development | | | | | | WE | EKDAY | | |
|-------------|--------------------------|-------|------------|--------------|-----------|------------|--------------|-----------|------------|--------------|
| | | IΤΕ | | | Al | M PEAK HC | UR | Pl | M PEAK HO | UR |
| <u>AREA</u> | LAND USE | CODE | AMOUNT | <u>UNITS</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> |
| RESIDENTIA | A <i>L USES</i> | | | | | | | | | |
| Tract 2 | Single Family Detached | 210 | 200 | DU | 34 | 46 | 80 | 55 | 40 | 95 |
| Tract 3 | Single Family Detached | 210 | 175 | DU | 30 | 40 | 70 | 48 | 35 | 83 |
| | | | 375 | DU | 64 | 87 | 151 | 104 | 75 | 179 |
| NON-RESID | ENTIAL USES | | | | | | | | | |
| Tract 11A | Non-Retail Commercial | 110 | 338,400 | SF | 125 | 27 | 152 | 39 | 120 | 159 |
| Tract 11B | Non-Retail Commercial | 110 | 331,600 | SF | 123 | 27 | 149 | 38 | 118 | 156 |
| Tract 11B | Retail - Shopping Center | 820 | 50,000 | SF | 36 | 31 | 77 | 102 | 136 | 282 |
| Tract 13 | Non-Retail Commercial | 110 | 210,000 | SF | 78 | 17 | 95 | 24 | 75 | 99 |
| Tract S | Municipal/School | | 838,000 | SF | 52 | 43 | 95 | 48 | 36 | 84 |
| | | | 1,768,000 | SF | 413 | 144 | 568 | 251 | 484 | 780 |
| | Phase 2 | (50%) | Total Deve | elopment: | 477 | 231 | 718 | 355 | 559 | 959 |

| 100% of Ph | ase 2 Development | | | | WEEKDAY | | | | | | |
|-------------|--------------------------|---------------------|---------------|--------------|-----------|------------|--------------|-----------|------------|--------------|--|
| | | ITE | | | Al | m Peak Ho | UR | P | m Peak Ho | UR | |
| <u>AREA</u> | LAND USE | CODE | <u>AMOUNT</u> | <u>UNITS</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> | |
| RESIDENTIA | I USES | | | | | | | | | | |
| Tract 2 | Single Family Detached | 210 | 400 | DU | 68 | 92 | 161 | 111 | 80 | 190 | |
| Tract 3 | Single Family Detached | 210 | 350 | DU | 60 | 81 | 141 | 97 | 70 | 167 | |
| | | | 750 | DU | 128 | 173 | 302 | 208 | 149 | 357 | |
| | | | | | | | | | | | |
| NON-RESIDE | ENTIAL USES | | | | | | | | | | |
| Tract 11A | Non-Retail Commercial | 110 | 676,800 | SF | 250 | 54 | 305 | 78 | 240 | 318 | |
| Tract 11B | Non-Retail Commercial | 110 | 663,200 | SF | 245 | 53 | 298 | 76 | 235 | 312 | |
| Tract 11B | Retail - Shopping Center | 820 | 100,000 | SF | 54 | 47 | 117 | 162 | 216 | 449 | |
| Tract 13 | Non-Retail Commercial | 110 | 420,000 | SF | 155 | 34 | 189 | 48 | 149 | 197 | |
| Tract S | Municipal/School | | 838,000 | SF | 52 | 43 | 95 | 48 | 36 | 84 | |
| | | | 2,698,000 | SF | 758 | 231 | 1,004 | 412 | 876 | 1,361 | |
| | Phase 2 (| (100%) ⁻ | Total Deve | lopment: | 886 | 404 | 1,305 | 620 | 1,026 | 1,718 | |

Source: Trip generation estimates for single family, non-retail commercial, and municipal/school calculated using rates from 2007 URS Stonehouse Traffic Impact Study. Retail-shopping center estimates calculated using ITE Trip Generation Manual, 9^{th} Edition.

Operational Analysis/Signal Timings

Several items should be noted with respect to the completed analyses:

- 1. Capacity analyses at signalized and stop controlled intersections were completed using SYNCHRO 7.
- 2. The peak hour factor (PHF) by approach based on 2013 counts was used for the 2013 and 2024 analyses. A minimum PHF of 0.85 was used for the 2013 analyses while a minimum PHF of 0.92 was used for the 2024 analyses.
- The heavy vehicle percentages for each movement were calculated using the AM and PM peak hour counts.
- 4. The timings for the proposed traffic signals on Route 30 within the study area were optimized using a minimum cycle length of 60 seconds.

Preliminary Findings

Under 2013 existing conditions all movements operate at level of service (LOS) C or better. The levels of service are shown on Figures 27 and 28; the LOS and 95th percentile queue lengths are summarized in Table 3.

Under 2024 background conditions (without Stonehouse site trips) all movements are anticipated to operate at LOS D or better. The levels of service are shown on Figures 29 and 30; the LOS and 95th percentile queue lengths are summarized in Table 4.

When the Phase 1 Stonehouse site trips are added to the existing roadway network (without proffered improvements) in 2024 all movements are anticipated to operate at LOS C or better with the following exceptions:

- The westbound left from Fieldstone Parkway at Route 30 operates at LOS E during the PM peak hour.
- The westbound left-thru lane from the I-64 westbound off-ramp at Route 30 operates at LOS F during the AM and PM peak hours. [NOTE: The 95th percentile queue lengths for this movement do not reflect the actual length of the queue, which extends down the ramp and onto the mainline of I-64 westbound.]
- The westbound left from LaGrange Parkway at Route 30 operates at LOS E during the AM peak hour.

The 2024 total volumes (with Phase 1 site trips) levels of service without proffered improvements are shown on Figures 31 and 32; the LOS and 95th percentile queue lengths are summarized in Table 5.

Based on the 2024 total volumes with Phase 1 site trips, the following proffered improvements will be needed:

- The second westbound left turn lane on Fieldstone Parkway at Route 30 (lane has been constructed and is currently striped out); and
- The second southbound left turn lane on Route 30 at LaGrange Parkway.

Due to the required dual left turn lanes, traffic signals were assumed to be installed at the following locations:

- Route 30 at Fieldstone Parkway; and
- Route 30 at LaGrange Parkway.

The 2024 geometry with the proffered improvements indicated above is shown on Figure 33.

When the Phase 1 site trips are added to the existing roadway network in 2024 with the proffered left turn lane improvements and traffic signals (listed above) all movements are anticipated to operate at LOS C or better with one exception. On Route 30 at the I-64 westbound ramps, the westbound left-through lane operates at LOS F during the AM and PM peak hours. [NOTE: The 95th percentile queue lengths reported for this movement (see Table 6) do not reflect the actual length of the queue, which extends down the ramp and onto the mainline of I-64 westbound.]

The 2024 total volumes (with Phase 1 site trips) levels of service with the proffered improvements are shown on Figures 34 and 35; the LOS and 95th percentile queue lengths are summarized in Table 6.

To mitigate the queuing issue on the I-64 westbound off-ramp at Route 30, a traffic signal was assumed (even though the "2013 Stonehouse Traffic Data Collection & Analysis Memorandum" indicated that the traffic signal is not warranted based on projected volumes). The 2024 geometry with the proffered improvements and additional traffic signal are shown on Figure 36. The 2024 total volumes (with Phase 1 site trips) levels of service with the proffered improvements and additional traffic signal are shown on Figures 37 and 38; the LOS and 95th percentile queue lengths are summarized in Table 7. As indicated in Table 7, all movements are anticipated to operate at LOS C or better.

Based on the 2024 total volumes with all of Phase 1 and 50% of Phase 2 site trips, six additional proffered improvements will be needed:

- The second westbound left on LaGrange Parkway at Route 30 (lane has been constructed and is currently striped out).
- The second northbound left turn lane Route 30 at the I-64 westbound on-ramp with corresponding receiving lane on the ramp; and
- The second westbound left turn lane on the I-64 westbound off-ramp at Route 30.
- A westbound left turn lane on Six Mount Zion Road at Mount Laurel Road.
- An eastbound left turn lane on Six Mount Zion Road at Fieldstone Parkway.
- A traffic signal at the Six Mount Zion Road/Fieldstone Parkway intersection.

The proposed geometry is shown on Figure 39.

The 2024 modified total volumes with Phase 1 and 50% of Phase 2 site trips levels of service with the proffered improvements and additional traffic signals are shown on Figures 40 and 41; the LOS and 95th percentile queue lengths are summarized in Table 8. As indicated in Table 8, all movements are anticipated to operate at LOS C or better with the following exception:

• At the unsignalized intersection of Six Mount Zion Road and Mount Laurel Road, the stop-controlled northbound approach operates at LOS E during the PM peak hour.

This poor level of service is noted on the minor approach of the intersection. Projected volumes at this location are less than 10 vehicles during the peak. A traffic signal would alleviate this poor level of service; however, there are insufficient volumes to satisfy the signal warrant.

Based on the 2024 total volumes with all of Phase 1 and 100% of Phase 2 site trips, all of the additional proffered improvements listed for the 2024 total volumes with all of Phase 1 and 50% of Phase 2 site trips will be necessary (listed above), in addition to the following:

 Westbound Six Mount Zion Road will need to be widened to 2 lanes through the Fieldstone Parkway intersection.

The proposed geometry is shown on Figure 42.

Stonehouse Development Phase 1 – 2024 Supplemental Analyses January 28, 2015 Page 7 of 17

The 2024 modified total volumes with Phase 1 and 100% of Phase 2 site trips levels of service with the proffered improvements and additional traffic signal are shown on Figures 43 and 44; the LOS and 95th percentile queue lengths are summarized in Table 9. As indicated in Table 9, all movements are anticipated to operate at LOS C or better with the following exceptions:

- The westbound right turn at the intersection of Route 30 and LaGrange Parkway operates at a LOS D during the PM peak hour.
- At the unsignalized intersection of Six Mount Zion Road and Mount Laurel Road, the stop-controlled northbound approach operates at LOS F during the AM and PM peak hours.

This unacceptable level of service at the intersection of Route 30 and LaGrange Parkway intersection can be addressed by either (1) providing a free-flow channelized right turn or (2) providing a second left turn lane at the signal.

This poor level of service at the unsignalized intersection of Six Mount Zion Road and Mount Laurel Road is noted on the minor approach of the intersection. Projected volumes at this location are less than 10 vehicles during the peak. A traffic signal would alleviate this poor level of service; however, there are insufficient volumes to satisfy the signal warrant.

Table 3: Delay, LOS, and 95th Percentile Queue Length Summary 2013 Existing Volumes

| Type of Control 1. Route 30 (N-S) at Fieldstone Pkwy (E-W) Two-Way Stop 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | Movement and Approach WB Left ² WB Right ³ WB Approach NB U-Turn NB Thru NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Left NB Left NB Left NB Left NB Left | Turn Lane Storage (ft) | Delay ¹ (sec/veh) 13.2 9.0 12.9 0.0 † 7.7 † 71.6 | B A B A † † A A † † | 95th Percentile Queue Length (ft) 26 1 0 † 0 † 0 † | Delay ¹ (sec/veh) 17.8 11.0 17.1 0.0 † † 9.4 † | C B C A † † A | 95th Percentile Queue Length (ft) 30 2 0 † |
|---|--|------------------------|---|---|--|---|--------------------|--|
| Fieldstone Pkwy (E-W) Two-Way Stop 1 1 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | WB Right ³ WB Approach NB U-Turn NB Thru NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 350 | 9.0 12.9 0.0 † † † 7.7 † | A B A † † † A † | 1 0 + + 0 + | 11.0 17.1 0.0 † † † 9.4 | B | 2 0 † † |
| Two-Way Stop | WBApproach NB U-Turn NB Thru NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 350 | 12.9 0.0 † † † 7.7 † | ### B A † † ### A ### A † ### A ### A † ### A ### A | 0 † † 0 | 17.1 0.0 † † † 9.4 | C A † † † † | 0 † † |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | NB U-Turn NB Thru NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 350 | 0.0 † † † 7.7 † | A † † † A † | 0 + + 0 + | 0.0 † † † 9.4 | † † | 0 † † |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | NB Thru NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 350 | † † † † † † † † † † † † † † † † † † † | † † † † † A † | † † † 0 † † | † † † 9.4 | † † <i>†</i> | † † |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | NB Right ⁴ NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | | † | † | † 0 † | † † 9.4 | † <i>†</i> | † |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | NB Approach SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | | 7.7 † | <i>†</i> A | 0 † | <i>†</i> 9.4 | † | |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | SB Left SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 150 | 7.7 † <i>†</i> | A | 0 † | 9.4 | | |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | SB Thru SB Approach WB Left-Thru WB Approach NB Left NB Thru | 150 | † | † | † | | Α | |
| 2. Route 30 (N-S) at I-64 WB Ramps (E-W) Two-Way Stop | SB Approach WB Left-Thru WB Approach NB Left NB Thru | | † | | | + | | 2 |
| I-64 WB Ramps (E-W) Two-Way Stop | WB Left-Thru WB Approach NB Left NB Thru | | | † | | | † | † |
| I-64 WB Ramps (E-W) Two-Way Stop | <i>WB Approach</i> NB Left NB Thru | | 17.6 | | | † | † | |
| Two-Way Stop | NB Left NB Thru | | | С | 29 | 19.7 | С | 21 |
| · · · | NB Thru | | 17.6 | С | | 19.7 | С | |
| <u> </u> | | 200 | 10.4 | В | 12 | 8.9 | Α | 11 |
| , I | A/D 4 | | † | † | † | † | † | † |
| | NB Approach | | † | † | | † | † | |
| | SB Thru | | † | † | † | † | † | † |
| | SB Right | 300 | † | + | † | † | † | † |
| , | SB Approach | | † | † | | † | † | |
| 3. Route 30 (N-S) at | EB Left | | 11.8 | В | 1 | 11.2 | В | 2 |
| I-64 EB Ramps (E-W) | EB Approach | | 11.8 | В | | 11.2 | В | |
| · ` ` ′ | NB Thru | | † | † | t | † | † | † |
| , . | NB Right | 275 | † | t | t | † | Ť | † |
| | NB Approach | | † | † | | † | † | |
| | SB Thru | | † | † | † | † | † | † |
| , | SB Approach | | † | † | | † | † | |
| 4. Route 30 (N-S) at | WB Left ² | | 13.5 | В | 6 | 11.9 | В | 15 |
| LaGrange Pkwy (E-W) | WB Right ³ | | 9.2 | Α | 5 | 10.2 | В | 15 |
| Two-Way Stop | WB Approach | | 10.6 | В | | 11.0 | В | |
| , . | NB Thru | | † | t | Ť | † | Ť | † |
| | NB Right ⁴ | 325 | † | † | t | † | † | † |
| , <u> </u> | NB Approach | | <i>†</i> | † | | † | † | |
| | SB Left | 200 | 8.1 | Α | 11 | 8.1 | Α | 1 |
| <u> </u> | SB Thru | | † | † | † | † | † | † |
| , | SB Approach | | † | † | | † | † | |
| 5. Six Mount Zion Rd (E-W) at E | EB Thru-Right | | † | + | † | † | † | † |
| Mount Laurel Rd (N-S) | EB Approach | | † | † | | † | † | |
| ` ' | WB Left-Thru | | 0.3 | Α | 0 | 0.6 | Α | 0 |
| , | WB Approach | | † | † | | † | † | |
| <u> </u> | NB Left-Right | | 8.8 | Α | 0 | 9.1 | A | 1 |
| , | NB Approach | | 8.8 | Α | | 9.1 | Α | |
| 6. Six Mount Zion Rd (E-W) at E | EB Left-Thru | | 7.3 | Α | 2 | 6.9 | Α | 4 |
| Fieldstone Pkwy (N-S) | EB Approach | | <i>†</i> | † | | † | + | |
| · · · · · · · · · | WB Thru-Right | | † | + | † | † | † | † |
| , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | WB Approach | | <i>t</i> | + | | † | † | |
| | SB Left-Right | | 8.7 | Α | 8 | 8.5 | Α | 4 |
| , F | SB Approach | | 8.7 | A | | 8.5 | A | |

¹ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn.

 $^{^\}dagger$ SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes.

Table 4: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Background Volumes

| | | T | AM | PEAK I | HOUR | PM | PEAK H | HOUR |
|-------------------------------------|--------------------------|---------------------------------|---------------------------------|----------|--|---------------------------------|-------------|--|
| Intersection and Type of Control | Movement and Approach | Turn Lane Storage (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) |
| 1. Route 30 (N-S) at | WB Left ² | | 15.9 | С | 45 | 26.5 | D | 58 |
| Fieldstone Pkwy (E-W) | WB Right ³ | | 9.2 | Α | 2 | 12.1 | В | 2 |
| Two-Way Stop | WB Approach | | 15.3 | С | | 25.1 | D | |
| | NB U-Turn | 200 | 0.0 | Α | 0 | 0.0 | Α | 0 |
| | NB Thru | | † | † | † | † | † | † |
| | NB Right ⁴ | 350 | † | † | † | † | † | † |
| | NB Approach | | † | † | | † | † | |
| | SB Left | 150 | 7.9 | Α | 0 | 10.3 | В | 3 |
| | SB Thru | | † | t | † | † | † | † |
| | SB Approach | | † | † | | † | † | |
| 2. Route 30 (N-S) at | WB Left-Thru | | 29.0 | D | 63 | 32.6 | D | 46 |
| I-64 WB Ramps (E-W) | WB Approach | | 29.0 | D | | 32.6 | D | |
| Two-Way Stop | NB Left | 200 | 12.5 | В | 21 | 9.7 | Α | 17 |
| | NB Thru | | † | † | † | † | + | † |
| | NB Approach | | † | † | | † | † | |
| | SB Thru | | † | † | † | † | † | † |
| | SB Right | 300 | † | † | † | † | † | † |
| | SB Approach | | † | † | | † | + | |
| 3. Route 30 (N-S) at | EB Left | | 12.8 | В | 2 | 12.1 | В | 3 |
| I-64 EB Ramps (E-W) | EB Approach | | 12.8 | В | | 12.1 | В | |
| Two-Way Stop | NB Thru | | † | † | + | † | † | † |
| , , , , , , , | NB Right | 275 | † | t | + | † | † | † |
| | NB Approach | | <i>t</i> | † | | <i>†</i> | † | |
| | SB Thru | | † | † | + | † | + | † |
| | SB Approach | | † | + | | <i></i> | † | |
| 4. Route 30 (N-S) at | WB Left ² | | 15.5 | С | 8 | 13.4 | В | 22 |
| LaGrange Pkwy (E-W) | WB Right ³ | | 9.5 | A | 7 | 10.9 | В | 21 |
| Two-Way Stop | WB Approach | | 11.5 | В | | 12.0 | В | |
| | NB Thru | | † | † | † | † | † | + |
| | NB Right ⁴ | 325 | + | + | + | + | + | † |
| | NB Approach | 525 | <i>t</i> | + | | † | † | |
| | SB Left | 200 | 8.4 | A | 15 | 8.3 | A | 1 |
| | SB Thru | 200 | † | † | † | † | † | † |
| | SB Approach | | <i>t</i> | <i>t</i> | | | <i>t</i> | |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | † | † | + | † | † | † |
| Mount Laurel Rd (N-S) | EB Approach | | <i>t</i> | + | | <i>t</i> | <i>†</i> | |
| Two-Way Stop | WB Left-Thru | | 0.3 | A | 0 | 0.6 | A | 0 |
| 1 Wo Way Stop | WB Approach | | † | <i>t</i> | | † | † | |
| | NB Left-Right | | 8.9 | A | 1 | 9.3 | A | 1 |
| | NB Approach | | 8.9 | A | | 9.3 | A | |
| 6. Six Mount Zion Rd (E-W) at | EB Left-Thru | | 7.3 | A | 2 | 7.0 | A | 4 |
| Fieldstone Pkwy (N-S) | | | 7.3 † | † A | | 7.0 | † | |
| , , , | EB Approach | | † | + | † | † | + | + |
| Two-Way Stop | WB Thru-Right | | <i>†</i> | † † | T | † | † | |
| | WB Approach | | | | | | | |
| | SB Left-Right | | 8.7 | A | 9 | 8.6 | A | 5 |
| | SB Approach | | 8.7 | A | | 8.6 | Α | |

¹ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn.

 $[\]ensuremath{^\dagger}$ SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes.

Table 5: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Total Volumes without Improvements

| | | _ | AM | PEAK I | HOUR | PM | PEAK H | HOUR |
|---|-----------------------|--------------|-----------|----------|-------------|-----------|----------|-------------|
| Intersection and | Movement and | Turn Lane | | | 95th | | | 95th |
| Type of Control | Approach | Storage | Delay 1 | LOS 1 | Percentile | Delay 1 | LOS 1 | Percentile |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | (ft) | (sec/veh) | 103 | Queue | (sec/veh) | LOS | Queue |
| 1.0. (20.0) | 2 | | 22.4 | | Length (ft) | 27.2 | _ | Length (ft) |
| 1. Route 30 (N-S) at | WB Left ² | | 22.1 | C | 88 | 37.2 | E | 107 |
| Fieldstone Pkwy (E-W) | WB Right ³ | | 9.3 | A | 3 | 12.8 | В | 10 |
| Two-Way Stop | WB Approach | | 20.7 | С | | 31.3 | D | |
| | NB U-Turn | 200 | 0.0 | Α | 0 | 0.0 | Α | 0 |
| | NB Thru | | † | † | † | † | t | † |
| | NB Right ⁴ | 350 | † | † | † | † | † | † |
| | NB Approach | | † | † | | † | † | |
| | SB Left | 150 | 8.0 | Α | 3 | 10.5 | В | 5 |
| | SB Thru | | † | † | † | † | † | † |
| | SB Approach | | † | † | | † | † | |
| 2. Route 30 (N-S) at | WB Left-Thru | | 104.6 | F | 247 | 122.4 | F | 159 |
| I-64 WB Ramps (E-W) | WB Approach | | 104.6 | F | | 122.4 | F | |
| Two-Way Stop | NB Left | 200 | 13.6 | В | 28 | 10.6 | В | 31 |
| | NB Thru | | † | † | t | † | t | † |
| | NB Approach | | † | † | | † | † | |
| | SB Thru | | † | + | † | † | † | † |
| | SB Right | 300 | † | † | † | † | † | † |
| | SB Approach | | † | + | | † | + | |
| 3. Route 30 (N-S) at | EB Left | | 14.2 | В | 3 | 13.0 | В | 5 |
| I-64 EB Ramps (E-W) | EB Approach | | 14.2 | В | | 13.0 | В | |
| Two-Way Stop | NB Thru | | + | † | + | † | † | † |
| | NB Right | 275 | † | + | + | † | † | + |
| | NB Approach | 2,3 | | † · | | | + | |
| | SB Thru | | † | † | + | † | † | † |
| | SB Approach | | <i>†</i> | <i>t</i> | | <i>t</i> | <i>†</i> | ' |
| 4. Route 30 (N-S) at | WB Left ² | | 39.0 | E | 49 | 23.7 | C | 100 |
| LaGrange Pkwy (E-W) | WB Right ³ | | 9.8 | A | 13 | 14.3 | В | 69 |
| | | | 20.8 | C | | 18.4 | С | |
| Two-Way Stop | WB Approach NB Thru | | † | † | † | † | † | † |
| | | 325 | + | + | + | † | + | + |
| | NB Right 4 | 325 | | | | <i>†</i> | † | |
| | NB Approach | 200 | <i>†</i> | † | | | | |
| | SB Left | 200 | 9.3 | A | 38 | 8.7 | A | 7 |
| | SB Thru | | † | † | † | † | † | t |
| 5 6: 14 17: 51/51/0 | SB Approach | | <i>†</i> | † | | † | <i>†</i> | |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | † | † | † | † | † | † |
| Mount Laurel Rd (N-S) | EB Approach | | † | † | | <i>†</i> | † | |
| Two-Way Stop | WB Left-Thru | | 0.2 | A | 0 | 0.1 | Α | 0 |
| | WB Approach | | <i>t</i> | † | | <i>†</i> | † | |
| | NB Left-Right | | 11.9 | В | 1 | 12.9 | В | 1 |
| | NB Approach | | 11.9 | В | | 12.9 | В | |
| 6. Six Mount Zion Rd (E-W) at | EB Left-Thru | | 8.0 | Α | 27 | 7.4 | Α | 12 |
| Fieldstone Pkwy (N-S) | EB Approach | | † | † | | † | † | |
| Two-Way Stop | WB Thru-Right | | † | † | † | † | † | † |
| | WB Approach | | † | † | | † | † | |
| | SB Left-Right | | 9.1 | Α | 18 | 10.5 | В | 49 |
| | SB Approach | | 9.1 | Α | | 10.5 | В | |

¹ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn.

 $^{^\}dagger$ SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes.

Table 6: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Total Volumes with Applicable Proffered Improvements

| | | T | AM | PEAK H | OUR | PM | PEAK H | OUR |
|-------------------------------------|--------------------------|---------------------------------|---------------------------------|----------|--|---------------------------------|----------|--|
| Intersection and Type of Control | Movement and Approach | Turn Lane Storage (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) |
| 1. Route 30 (N-S) at | WB Left | 250 | 15.4 | В | 59 | 20.3 | С | 61 |
| Fieldstone Pkwy (E-W) | WB Left ² | | 15.4 | В | 59 | 20.3 | С | 61 |
| Signalized | WB Right ³ | | 13.9 | В | 17 | 18.6 | В | 29 |
| | WB Approach | | 15.2 | В | | 19.8 | В | |
| | NB U-Turn | 200 | 0.0 | Α | 0 | 0.0 | Α | 0 |
| | NB Thru | | 9.4 | Α | 58 | 9.5 | Α | 186 |
| | NB Right ⁴ | 350 | 0.1 | Α | 0 | 0.2 | Α | 0 |
| | NB Approach | | 6.8 | Α | | 7.8 | Α | |
| | SB Left | 150 | 5.0 | Α | 15 | 4.2 | Α | 11 |
| | SB Thru | | 6.6 | Α | 114 | 3.6 | Α | 40 |
| | SB Approach | | 6.5 | A | | 3.7 | A | |
| | Overall | | 8.2 | Α | | 8.3 | Α | |
| 2. Route 30 (N-S) at | WB Left-Thru | | 104.6 | F | 247 | 122.4 | F | 159 |
| I-64 WB Ramps (E-W) | WB Approach | | 104.6 | F | | 122.4 | F | |
| Two-Way Stop | NB Left | 200 | 13.6 | В | 28 | 10.6 | В | 31 |
| ,, | NB Thru | | † | + | † | † | + | † |
| | NB Approach | | - · + | <i>t</i> | | † | † | |
| | SB Thru | | † | + | † | † | + | + |
| | SB Right | 300 | † | + | † | † | + | † |
| | SB Approach | 300 | - | <i>†</i> | | <i>†</i> | · + | |
| 3. Route 30 (N-S) at | EB Left | | 14.2 | В | 3 | 13.0 | В | 5 |
| I-64 EB Ramps (E-W) | EB Approach | | 14.2 | В | | 13.0 | В | |
| Two-Way Stop | NB Thru | | † | † | † | † | † | † |
| 1 WO-Way Stop | | 275 | + | + | + | + | + | + |
| | NB Right | 2/5 | - | | | <i>†</i> | <u> </u> | |
| | NB Approach | | † | + | † | † | + | † |
| | SB Thru | | | ļ | | | | |
| 4.5 | SB Approach | | <i>†</i> | † | | <i>†</i> | † | |
| 4. Route 30 (N-S) at | WB Left ² | | 22.8 | С | 54 | 21.3 | C | 77 |
| LaGrange Pkwy (E-W) | WB Right 3 | | 11.1 | В | 19 | 11.7 | В | 41 |
| Signalized | WB Approach | | 15.5 | В | | 15.9 | В | |
| | NB Thru | 225 | 11.5 | В | 68 | 15.2 | В | 63 |
| | NB Right ⁴ | 325 | 0.3 | Α | 0 | 0.1 | Α | 0 |
| | NB Approach | | 5.7 | A | | 12.4 | В | |
| | SB Left | 200 | 16.7 | В | 95 | 19.7 | В | 12 |
| | SB Left | 200 | 16.7 | В | 95 | 19.7 | В | 12 |
| | SB Thru | | 2.9 | Α | 41 | 6.2 | A | 54 |
| | SB Approach | | 9.7 | A | | 8.7 | A | |
| | Overall | | 9.0 | Α | | 12.7 | В | |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | † | † | † | † | † | † |
| Mount Laurel Rd (N-S) | EB Approach | | <i>†</i> | † | | † | + | |
| Two-Way Stop | WB Left-Thru | | 0.2 | Α | 0 | 0.1 | Α | 0 |
| | WB Approach | | <i>†</i> | + | | + | † | |
| | NB Left-Right | | 11.9 | В | 1 | 12.9 | В | 1 |
| | NB Approach | | 11.9 | В | | 12.9 | В | |
| 6. Six Mount Zion Rd (E-W) at | EB Left-Thru | | 8.0 | Α | 27 | 7.4 | Α | 12 |
| Fieldstone Pkwy (N-S) | EB Approach | | † | † | | † | † | |
| Two-Way Stop | WB Thru-Right | | † | † | † | † | † | † |
| | WB Approach | | <i>†</i> | † | | † | † | |
| | SB Left-Right | | 9.1 | Α | 18 | 10.5 | В | 49 |
| | SB Approach | | 9.1 | Α | | 10.5 | В | |

 $^{^{1}}$ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn not controlled by the signal.

[†] SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes. Proffered improvements shown in RED text.

Table 7: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Total Volumes with Applicable Proffered Improvements and Signal at I-64 WB Ramps

| | | T | AM | PEAK H | HOUR | PM | PEAK H | IOUR |
|----------------------------------|-----------------------|--------------|-----------|----------|----------------------|-----------|----------|----------------------|
| Intersection and | Movement and | Turn Lane | | | 95th | | | 95th |
| Type of Control | Approach | Storage | Delay 1 | LOS 1 | Percentile | Delay 1 | LOS 1 | Percentile |
| | | (ft) | (sec/veh) | | Queue Length (ft) | (sec/veh) | | Queue Length (ft) |
| 1. Route 30 (N-S) at | WB Left | 250 | 23.3 | С | 73 | 28.7 | С | 68 |
| Fieldstone Pkwy (E-W) | WB Left ² | 230 | 23.3 | c | 73 | 28.7 | С | 68 |
| Signalized | WB Right ³ | | 20.9 | C | 19 | 26.6 | C | 30 |
| Signalized | WB Approach | | 23.0 | C | | 28.2 | C | |
| | NB U-Turn | 200 | 0.0 | A | 0 | 0.0 | A | 0 |
| | NB Thru | 200 | 9.0 | A | 62 | 8.6 | Α | 202 |
| | NB Right ⁴ | 350 | 0.1 | A | 02 | 0.2 | A | 0 |
| | NB Approach | 330 | 6.5 | A | | 7.0 | A | |
| | SB Left | 150 | 4.0 | A | 15 | 4.1 | A | 13 |
| | SB Thru | 130 | 5.8 | A | 118 | 3.6 | A | 48 |
| | | | | | | 3.0 | | |
| | SB Approach | | 5.7 | A | | | A | |
| 2. D., t. 20 (N.C) -t | Overall | | 9.1 | A | | 8.9 | A | |
| 2. Route 30 (N-S) at | WB Left-Thru | | 31.2 | C | #174 | 34.4 | С | 98 |
| I-64 WB Ramps (E-W) | WB Approach | 200 | 31.2 | C | | 34.4 | С | |
| Signalized | NB Left | 200 | 10.1 | В | 54 | 4.4 | A | 60 |
| | NB Thru | | 4.4 | A | 22 | 3.6 | A | 67 |
| | NB Approach | | 7.0 | A | | 3.9 | A | |
| | SB Thru | 200 | 12.9 | В | #193 | 9.8 | Α | 147 |
| | SB Right ⁴ | 300 | 0.0 | A | m0 | 0.0 | Α | m0 |
| | SB Approach | | 12.4 | В | | 9.5 | A | |
| 2.2.4.20(4.4) | Overall | | 14.0 | В | | 8.4 | A | |
| 3. Route 30 (N-S) at | EB Left | | 14.2 | В | 3 | 13.0 | В | 5 |
| I-64 EB Ramps (E-W) | EB Approach | | 14.2 | В | | 13.0 | В | |
| Two-Way Stop | NB Thru | 075 | † | † | † | † | † | † |
| | NB Right | 275 | † | † | + | † | † | † |
| | NB Approach | | <i>†</i> | + | | <i>†</i> | † | |
| | SB Thru | | † | † | + | † | † | + |
| 4. D., to 20 (N.C) -t | SB Approach | | | <i>†</i> | | | | |
| 4. Route 30 (N-S) at | WB Left ² | | 22.8 | С | 54 | 20.2 | С | 157 |
| LaGrange Pkwy (E-W) | WB Right ³ | | 11.1 | В | 19 | 11.6 | В | 100 |
| Signalized | WB Approach | | 15.5 | В | | 15.4 | В | |
| | NB Thru | 225 | 11.5 | В | 68 | 15.6 | В | 124 |
| | NB Right ⁴ | 325 | 0.3 | Α | 0 | 0.1 | Α | 0 |
| | NB Approach | | 5.7 | A | | 12.7 | В | |
| | SB Left | 200 | 16.7 | В | 95 | 20.4 | С | 34 |
| | SB Left | 200 | 16.7 | В | 95 | 20.4 | С | 34 |
| 1 | SB Thru | | 2.9 | A | 41 | 6.6 | A | 65 |
| | SB Approach | | 9.7 | A | | 9.1 | A | |
| E COMMON TO SECOND | Overall | | 9.0 | A | | 12.7 | В | |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | † | † | † | † | † | † |
| Mount Laurel Rd (N-S) | EB Approach | | <i>†</i> | † | | <i>†</i> | † | |
| Two-Way Stop | WB Left-Thru | | 0.2 | Α | 0 | 0.1 | Α | 0 |
| | WB Approach | | <i>t</i> | † | | <i>†</i> | <i>†</i> | |
| | NB Left-Right | | 11.9 | В | 11 | 12.9 | В | 1 |
| C. City Mayork 7ic - D.1 (F.140) | NB Approach | | 11.9 | В | | 12.9 | В | |
| 6. Six Mount Zion Rd (E-W) at | EB Left-Thru | | 8.0 | A | 27 | 7.4 | A | 12 |
| Fieldstone Pkwy (N-S) | EB Approach | | <i>t</i> | <i>†</i> | | <i>t</i> | † | |
| Two-Way Stop | WB Thru-Right | | † | † | † | † | † | † |
| | WB Approach | | <i>†</i> | + | | <i>t</i> | <i>†</i> | |
| 1 | SB Left-Right | | 9.1 | A | 18 | 10.5 | В | 49 |
| | SB Approach | | 9.1 | Α | | 10.5 | В | |

 $^{^{\}rm 1}$ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

Proffered improvements shown in RED text.

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn not controlled by the signal.

 $^{\ ^\}dagger \ \text{SYNCHRO} \ \text{does not provide level of service or delay for unsignalized movements with no conflicting volumes}.$

^{# - 95}th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

 $[\]mbox{\ensuremath{m}}$ - Volume for 95th percentile queue is metered by upstream signal.

Table 8: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Modified Total Volumes (Phase 1 and 50% Phase 2) with Applicable Proffered Improvements and Signal at I-64 WB Ramps

| | | Turn | AM | PEAK I | OUR | PM | PEAK H | OUR |
|-------------------------------------|--------------------------|-------------------------|---------------------------------|----------|-----------------------------|---------------------------------|------------------|-----------------------------|
| Intersection and Type of Control | Movement and Approach | Lane Storage (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue | Delay ¹ (sec/veh) | LOS ¹ | 95th Percentile Queue |
| | | (IL) | (,, | | Length (ft) | (,, | | Length (ft) |
| 1. Route 30 (N-S) at | WB Left | 250 | 23.3 | С | 73 | 28.7 | С | 68 |
| Fieldstone Pkwy (E-W) | WB Left ² | | 23.3 | С | 73 | 28.7 | С | 68 |
| Signalized | WB Right ³ | | 20.9 | С | 19 | 26.6 | С | 30 |
| | WB Approach | | 23.0 | С | | 28.2 | С | |
| | NB U-Turn | 200 | 0.0 | Α | 0 | 0.0 | Α | 0 |
| | NB Thru | | 8.8 | Α | 70 | 8.7 | Α | 118 |
| | NB Right 4 | 350 | 0.1 | Α | 0 | 0.2 | Α | 0 |
| | NB Approach | | 6.5 | Α | | 7.2 | Α | |
| | SB Left | 150 | 4.0 | Α | 15 | 4.3 | Α | 13 |
| | SB Thru | | 6.0 | Α | 126 | 3.7 | Α | 52 |
| | SB Approach | | 5.9 | Α | | 3.7 | Α | |
| | Overall | | 9.1 | Α | | 8.9 | Α | |
| 2. Route 30 (N-S) at | WB Left ² | | 31.7 | С | #153 | 32.1 | С | 92 |
| I-64 WB Ramps (E-W) | WB Left-Thru | | 30.9 | С | #149 | 32.1 | С | 92 |
| Signalized | WB Approach | | 31.3 | С | | 32.1 | С | |
| | NB Left | 200 | 25.2 | С | 69 | 28.7 | С | 121 |
| | NB Left | 200 | 25.2 | С | 69 | 28.7 | Ċ | 121 |
| | NB Thru | | 4.1 | Α | 23 | 3.9 | Α | 86 |
| | NB Approach | | 15.0 | В | | 13.1 | В | |
| | SB Thru | | 16.0 | В | #167 | 12.3 | В | 144 |
| | SB Right ⁴ | 300 | 0.0 | Α | m0 | 0.0 | Α | m0 |
| | SB Approach | | 15.5 | В | | 11.9 | В | |
| | Overall | | 18.3 | В | | 14.9 | В | |
| 3. Route 30 (N-S) at | EB Left | | 16.7 | c | 4 | 14.8 | В | 6 |
| I-64 EB Ramps (E-W) | EB Approach | | 16.7 | C | | 14.8 | В | |
| Two-Way Stop | NB Thru | | † | † | + | † | † | t |
| , | NB Right | 275 | † | † | + | † | + | † |
| | NB Approach | 2/3 | | · + | | <i>t</i> | † | |
| | SB Thru | | + | + | + | + | † | + |
| | SB Approach | | <i>t</i> | † | | <i>t</i> | † | |
| 4. Route 30 (N-S) at | WB Left | 250 | 23.2 | C | 53 | 26.7 | C | #180 |
| LaGrange Pkwy (E-W) | WB Left ² | | 23.2 | C | 53 | 26.7 | C | #180 |
| Signalized | WB Right ³ | | 10.1 | В | 30 | 18.0 | В | 329 |
| o.ga.zea | WB Approach | | 15.1 | B | | 21.6 | C | |
| | NB Thru | | 15.1 | В | 75 | 20.6 | C | 144 |
| | NB Right ⁴ | 325 | 0.6 | A | 0 | 0.2 | A | 0 |
| | NB Approach | 323 | 5.8 | A | | 13.4 | В | |
| | SB Left | 200 | 19.7 | В | 169 | 18.3 | B | 81 |
| | SB Left | 200 | 19.7 | В | 169 | 18.3 | В | 81 |
| | SB Thru | 200 | 3.2 | A | 40 | 5.3 | A | 47 |
| | | | 13.5 | B | 40 | 11.2 | B | 4/ |
| | SB Approach | | | В | | 16.7 | В | |
| E Civ Mount 7ice Dd /F MA -+ | Overall ER Thru Bight | | 11.3 † | † † | + | 16.7 | † B | + |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | T / | † | - · | T / | T † | Т |
| Mount Laurel Rd (N-S) | EB Approach | 100 | | | | | | |
| Two-Way Stop | WB Left | 100 | 10.0 | A | 0 | 8.7 | A | 0 |
| | WB Thru | | † | † | † | † | † | † |
| | WB Approach | | 0.1 | A | | 0.0 | A | |
| | NB Left-Right | | 22.3 | С | 3 | 47.0 | E | 6 |
| C. Ch. Marrie Tr. B. 19719 | NB Approach | 200 | 22.3 | С | 100 | 47.0 | E | |
| 6. Six Mount Zion Rd (E-W) at | EB Left | 200 | 14.7 | В | 193 | 17.5 | В | #151 |
| Fieldstone Pkwy (N-S) | EB Thru | | 9.4 | A | 166 | 8.1 | A | 117 |
| Signalized | EB Approach | | 11.8 | В | | 11.5 | В | |
| | WB Thru-Right | | 7.1 | Α | 73 | 10.7 | В | 211 |
| | WB Approach | | 7.1 | Α | | 10.7 | В | |
| | SB Left-Right | | 17.4 | В | 0 | 23.8 | С | 137 |
| | SB Approach | | 17.4 | В | | 23.8 | С | |
| | Overall | | 11.8 | В | | 14.4 | В | |

¹ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

 $\textit{Proffered improvements shown in } \textit{\textbf{RED}} \textit{ text.}$

NOTE

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn not controlled by the signal.

[†] SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes.

[#] - 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m - Volume for 95th percentile queue is metered by upstream signal.

⁻ Signals at Route 30/I-64 WB Ramps and Route 30/Fieldstone Parkway assumed to be coordinated.

Table 9: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Modified Total Volumes (Phase 1 and 100% Phase 2) with Applicable Proffered Improvements and Signal at I-64 WB Ramps

| | | Turn | AM | PEAK I | OUR | PM | PEAK H | OUR |
|-------------------------------------|--------------------------|-------------------------|---------------------------------|------------------|-----------------------------|---------------------------------------|----------|-----------------------------|
| Intersection and Type of Control | Movement and Approach | Lane Storage (ft) | Delay ¹ (sec/veh) | LOS ¹ | 95th Percentile Queue | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue |
| | | | | | Length (ft) | | | Length (ft) |
| 1. Route 30 (N-S) at | WB Left | 250 | 23.3 | С | 73 | 28.7 | С | 68 |
| Fieldstone Pkwy (E-W) | WB Left ² | | 23.3 | С | 73 | 28.7 | С | 68 |
| Signalized | WB Right ³ | | 20.9 | С | 19 | 26.6 | С | 30 |
| | WB Approach | | 23.0 | С | | 28.2 | С | |
| | NB U-Turn | 200 | 0.0 | A | 0 | 0.0 | Α | 0 |
| | NB Thru | | 9.6 | Α | 78 | 8.8 | Α | 122 |
| | NB Right ⁴ | 350 | 0.1 | Α | 0 | 0.2 | Α | 0 |
| | NB Approach | | 7.2 | Α | | 7.4 | Α | |
| | SB Left | 150 | 4.0 | Α | 15 | 4.5 | Α | 13 |
| | SB Thru | | 6.1 | Α | 134 | 3.8 | Α | 55 |
| | SB Approach | | 6.0 | A | | 3.8 | Α | |
| | Overall | | 9.2 | A | | 8.9 | A | |
| 2. Route 30 (N-S) at | WB Left ² | | 30.3 | С | #178 | 30.5 | С | 118 |
| I-64 WB Ramps (E-W) | WB Left-Thru | | 30.9 | С | #183 | 30.5 | С | 118 |
| Signalized | WB Approach | 200 | 30.6 | C | | 30.5 | С | |
| | NB Left | 200 | 31.8 | С | #97 | 31.7 | С | 155 |
| | NB Left | 200 | 31.8 | С | #97 | 31.7 | С | 155 |
| | NB Thru | | 5.1 | A | 29 | 5.1 | A | 95 |
| | NB Approach | | 19.6 | В | | 16.0 | В | |
| | SB Thru | 200 | 21.7 | С | #335 | 15.3 | В | 173 |
| | SB Right ⁴ | 300 | 0.0 | A | m0 | 0.0 | A | m0 |
| | SB Approach | | 21.0 | C | | 14.8 | В | |
| 2. Dt- 20 (N.C) -t | Overall | | 22.8 19.3 | C | | 17.6 16.5 | B C | |
| 3. Route 30 (N-S) at | EB Left EB Approach | | 19.3 | C | 5 | 16.5 | C | 8 |
| I-64 EB Ramps (E-W) Two-Way Stop | NB Thru | | † | † | † | 10.5 | † | + |
| Two-way Stop | NB Right | 275 | + | + | + | + | + | + |
| | | 2/5 | <u>'</u> | + | <u> </u> | | + | <u> </u> |
| | NB Approach SB Thru | | † | + | + | + | + | + |
| | SB Approach | | <i>t</i> | + | | , , , , , , , , , , , , , , , , , , , | <i>†</i> | |
| 4. Route 30 (N-S) at | WB Left | 250 | 23.8 | C | 73 | 33.4 | C | #287 |
| LaGrange Pkwy (E-W) | WB Left ² | 250 | 23.8 | C | 73 | 33.4 | C | #287 |
| Signalized | WB Right ³ | | 9.7 | A | 58 | 37.4 | D | #721 |
| o.g.i.a.zea | WB Approach | | 15.2 | B | | 35.8 | D | |
| | NB Thru | | 18.0 | В | 75 | 34.4 | C | 144 |
| | NB Right ⁴ | 325 | 0.9 | A | 0 | 0.4 | A | 0 |
| | NB Approach | | 6.0 | Α | | 19.5 | В | |
| | SB Left | 200 | 30.3 | С | #288 | 21.8 | С | 124 |
| | SB Left | 200 | 30.3 | c | #288 | 21.8 | С | 124 |
| | SB Thru | | 3.8 | A | 40 | 7.6 | Α | 47 |
| | SB Approach | | 22.3 | C | | 15.5 | В | |
| | Overall | | 15.6 | В | | 26.7 | С | |
| 5. Six Mount Zion Rd (E-W) at | EB Thru-Right | | t | † | t | t | t | t |
| Mount Laurel Rd (N-S) | EB Approach | | † | t | | † | † | |
| Two-Way Stop | WB Left | 100 | 12.4 | В | 1 | 9.8 | Α | 1 |
| | WB Thru | | t | † | Ť | † | † | Ť |
| | WB Approach | | 0.1 | Α | | 0.0 | Α | |
| | NB Left-Right | | 55.6 | F | 8 | 775.3 | F | 36 |
| | NB Approach | | 55.6 | F | | 775.3 | F | |
| 6. Six Mount Zion Rd (E-W) at | EB Left | 200 | 9.1 | Α | 125 | 29.9 | С | #158 |
| Fieldstone Pkwy (N-S) | EB Thru | | 12.2 | В | 446 | 14.6 | В | 341 |
| Signalized | EB Approach | | 11.2 | В | | 18.3 | В | |
| | WB Thru-Right | | 17.0 | В | 117 | 28.3 | С | 370 |
| | WB Approach | | 17.0 | В | | 28.3 | С | |
| | SB Left-Right | | 31.3 | С | 0 | 28.9 | С | 161 |
| | SB Approach | | 31.3 | С | | 28.9 | С | |
| | Overall | | 14.6 | В | | 24.8 | С | |

 $^{^{1}}$ Overall intersection LOS and delay not reported for two-way stop controlled intersections.

 $\textit{Proffered improvements shown in } \textit{\textbf{RED}} \textit{ text.}$

NOTE

² Through lane must turn left.

³ Through lane must turn right.

⁴ Channelized right turn not controlled by the signal.

[†] SYNCHRO does not provide level of service or delay for unsignalized movements with no conflicting volumes.

[#] - 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

m - Volume for 95th percentile queue is metered by upstream signal.

⁻ Signals at Route 30/I-64 WB Ramps and Route 30/Fieldstone Parkway assumed to be coordinated.

Roundabout Analysis

Per the VDOT Road Design Manual, roundabouts are to be considered when a project includes re-constructing or constructing a new intersection. It should be noted that while this requirement exists, the approved proffers associated with the Stonehouse rezoning provide specific geometric improvements at each intersection and do not include the construction of roundabouts. This supplemental analysis addresses re-structuring the phasing only, not altering the proffers themselves.

With respect to this body of work, two corridors are impacted – the Route 30 (Barhamsville Road) corridor and the LaGrange Parkway/Six Mount Zion Road corridor.

Specific to Route 30 (Barhamsville Road):

- Route 30 is a 4-lane divided corridor with a posted speed limit of 55 mph.
- The 2013 VDOT counts indicate this section of Route 30 carries a high percentage of heavy vehicles (13%).
- The Fieldstone Parkway/Route 30 intersection is constructed to its ultimate geometry, minus the traffic signal.
- The I-64 interchange ramps consist of numerous channelized movements for both entering/exiting traffic movements and cited long term improvements consist of a signal at the westbound ramp terminus and a northbound left turn lane that can be accommodated in the existing median.
- The LaGrange Parkway/Route 30 intersection is also fully built out with the exception of a traffic signal and a southbound left turn lane that can be accommodated in the existing median.

Given the posted speed limit, the presence of heavy vehicles, and the minimal changes necessary to fully build out and accommodate projected traffic volumes along Route 30, roundabouts are not recommended at these locations. Furthermore, it is anticipated that the inscribed diameter of a multilane roundabout along Route 30 would be approximately 200' to 220', which is twice as wide as the existing road and would require additional right of way (ROW).

The LaGrange Parkway/Six Mount Zion Road corridor holds more potential for the installation of roundabouts given the extent of work necessary to accommodate future improvements. That being noted, SIDRA analyses were conducted assuming the installation of a single lane roundabout at both the Mount Laurel Road and Fieldstone Parkway intersections. The operational analysis is summarized in Table 10 below:

Table 10: LOS and Delay Summary
LaGrange Parkway/Six Mount Zion Road Corridor Roundabouts

| | Mount Laurel Road/LaGrange Parkway | | | | Fieldstone Parkway/LaGrange Parkway | | | |
|--------------|------------------------------------|-------|---------|-------|-------------------------------------|-------|---------|-------|
| Scenario | AM Peak | | PM Peak | | AM Peak | | PM Peak | |
| | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay |
| Phase 2 50% | С | 18.2 | D | 25.8 | С | 18.1 | С | 15.9 |
| Phase 2 100% | F | 98.3 | F | 134.8 | F | 97.3 | F | 84.6 |

Based on the information above, single lane roundabouts could effectively serve both intersections assuming 50% buildout of Phase 2. At full buildout, a multilane roundabout would be needed at both intersections to provide an acceptable level of service.

It is assumed the inscribed diameter for a single lane roundabout would be approximately 120', while the inscribed diameter for a multilane roundabout would be approximately 175'. Under either scenario, it is anticipated that additional right of way (ROW) will be necessary to accommodate the addition of a roundabout.

Conclusions

The analyses of the 2024 total volumes with Phase 1 site trips indicate that all movements (at both the signalized and unsignalized intersections) will operate at LOS C or better during the AM and PM peak hours with the following proffered improvements:

- The second westbound left turn lane on Fieldstone Parkway at Route 30 (lane has been constructed and is currently striped out);
- A traffic signal on Route 30 at Fieldstone Parkway;
- A traffic signal on Route 30 at I-64 westbound ramps;
- The second southbound left turn lane on Route 30 at LaGrange Parkway; and
- A traffic signal on Route 30 at LaGrange Parkway.

With the addition of 50% of the Phase 2 site trips the following additional proffers are required:

- The second westbound left on LaGrange Parkway at Route 30 (lane has been constructed and is currently striped out).
- The second northbound left turn lane Route 30 at the I-64 westbound on-ramp with corresponding receiving lane on the ramp; and
- The second westbound left turn lane on the I-64 westbound off-ramp at Route 30.
- A westbound left turn lane on Six Mount Zion Road at Mount Laurel Road.
- An eastbound left turn lane on Six Mount Zion Road at Fieldstone Parkway.
- A traffic signal at the Six Mount Zion Road/Fieldstone Parkway intersection.

Assuming the above improvements, all movements will continue to operate at LOS C or better during the AM and PM peak hours with the exception of the unsignalized, stop-controlled intersections of Six Mount Zion Road at Mount Laurel Road, which operate at LOS E during the PM peak hour.

With the addition of 100% of the Phase 2 site trips the following additional proffers are required:

 Westbound Six Mount Zion Road will need to be widened to 2 lanes through the Fieldstone Parkway intersection.

Assuming the above improvements, all movements will continue to operate at LOS C or better during the AM and PM peak hours with following exceptions:

- The westbound right turn at the intersection of Route 30 and LaGrange Parkway operates at a LOS D during the PM peak hour.
- At the unsignalized intersection of Six Mount Zion Road and Mount Laurel Road, the stop-controlled northbound approach operates at LOS F during the AM and PM peak hours.

Stonehouse Development Phase 1 – 2024 Supplemental Analyses January 28, 2015 Page 17 of 17

A couple additional items should be noted:

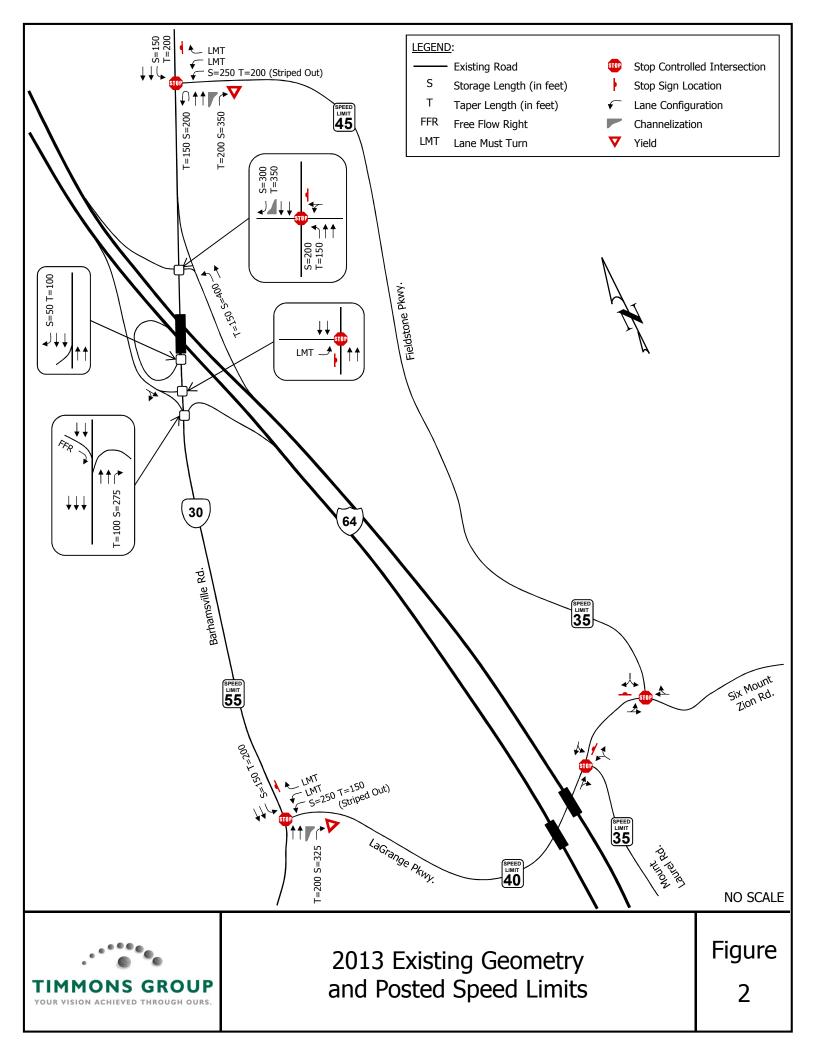
- VDOT was contacted regarding the underpass at Six Mount Zion Road and I-64. There are no truck/vehicle restrictions shown for the facility indicating that it is sufficient to accommodate all traffic. In addition, the Structures and Bridges database indicates that both overpasses have 16 feet of clearance and can accommodate tractor trailers.
- The operational analyses indicate that additional carrying capacity is available at the subject intersections following the build out of Phase 2 to accommodate potential development in Phases 3 and 4. Accommodations will need to be made to provide access to Six Mount Zion Road via facilities other than Ware Creek Road.

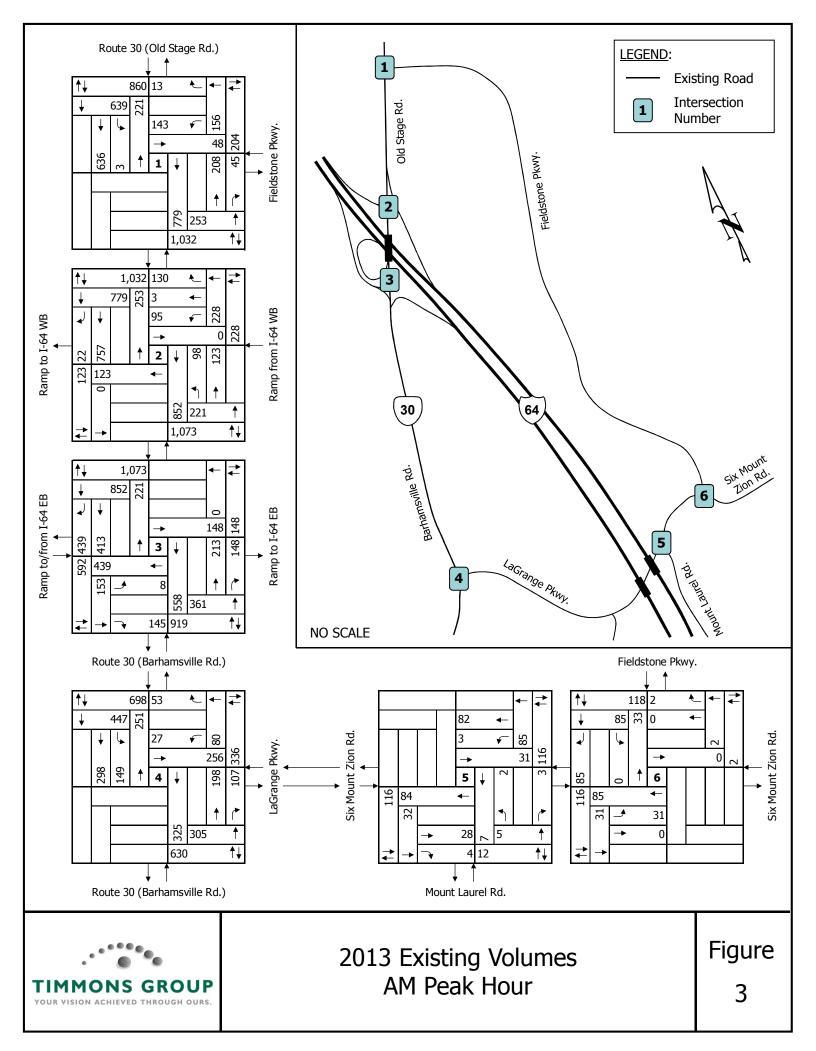


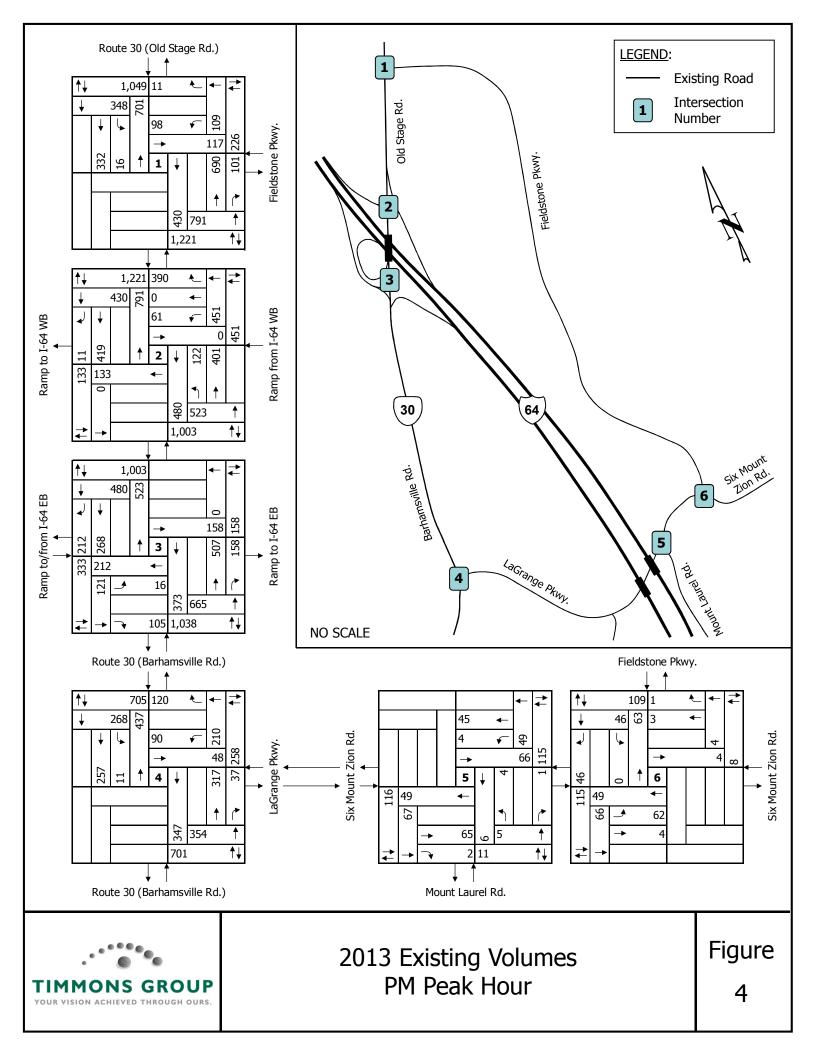


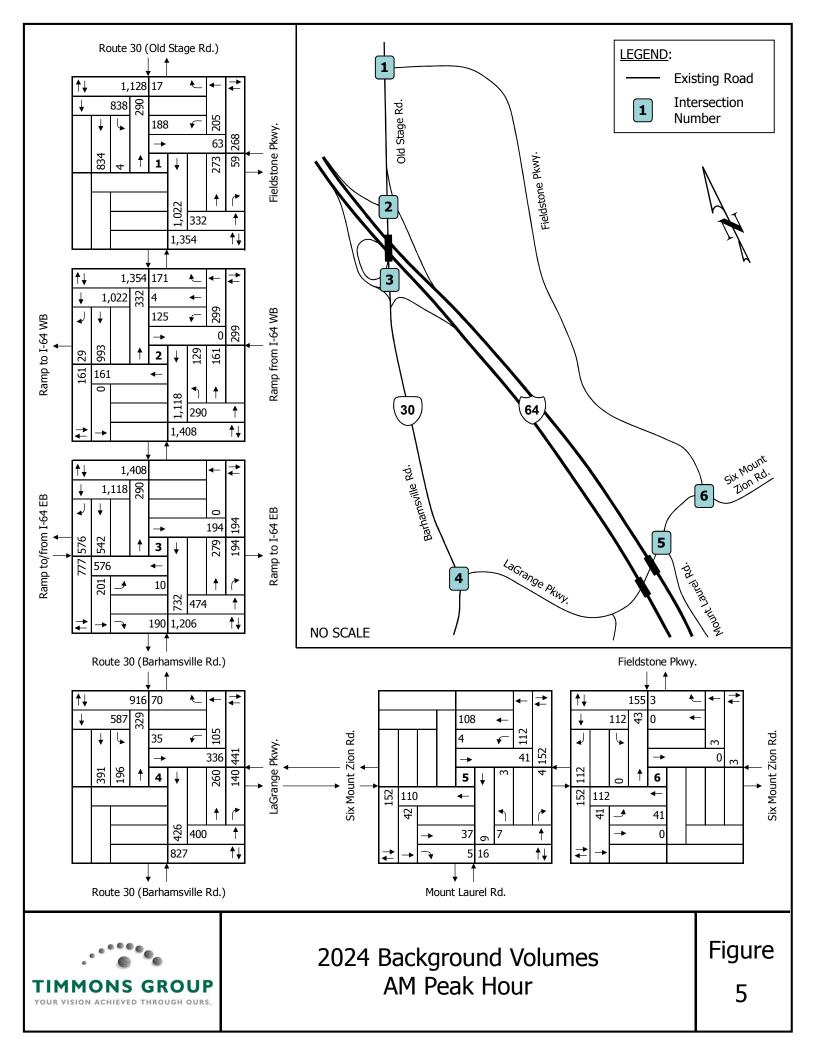
Surrounding Roadway Network and Study Intersections

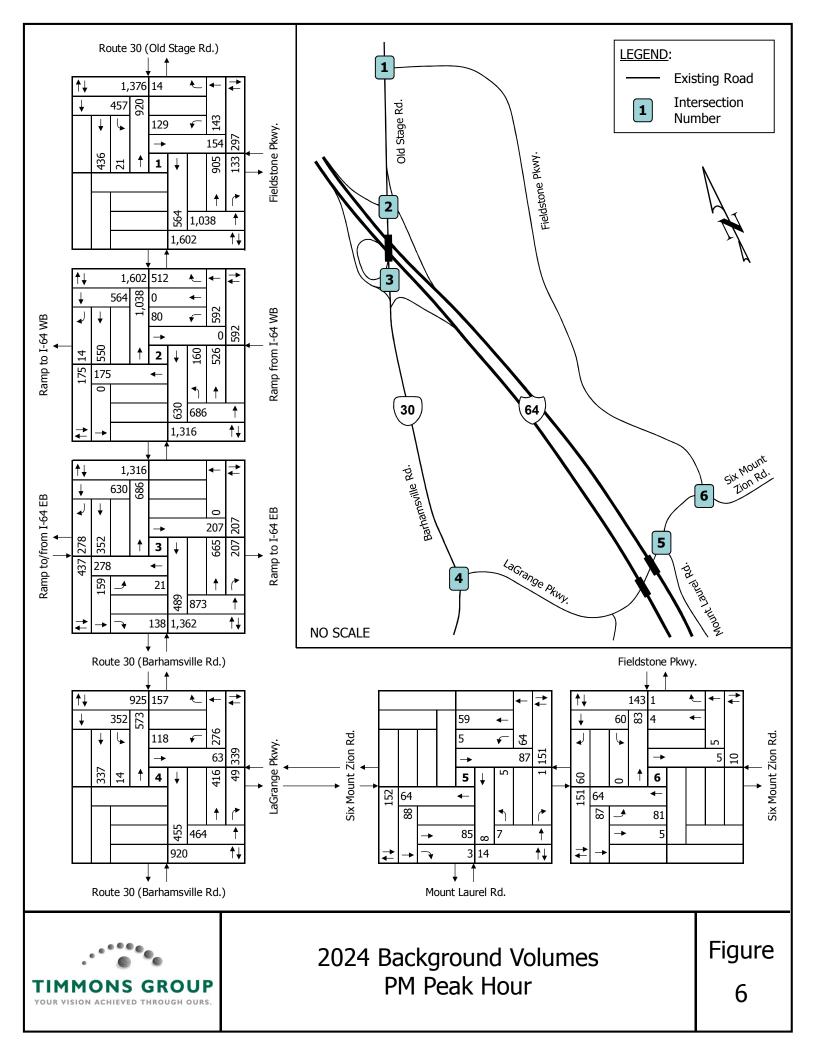
Figure 1

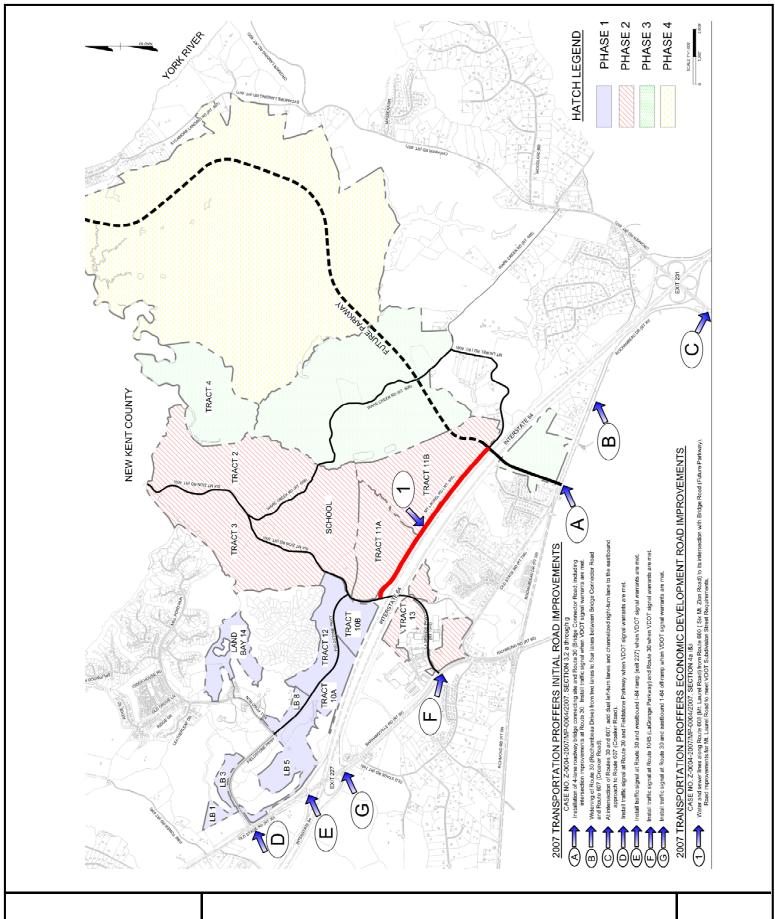








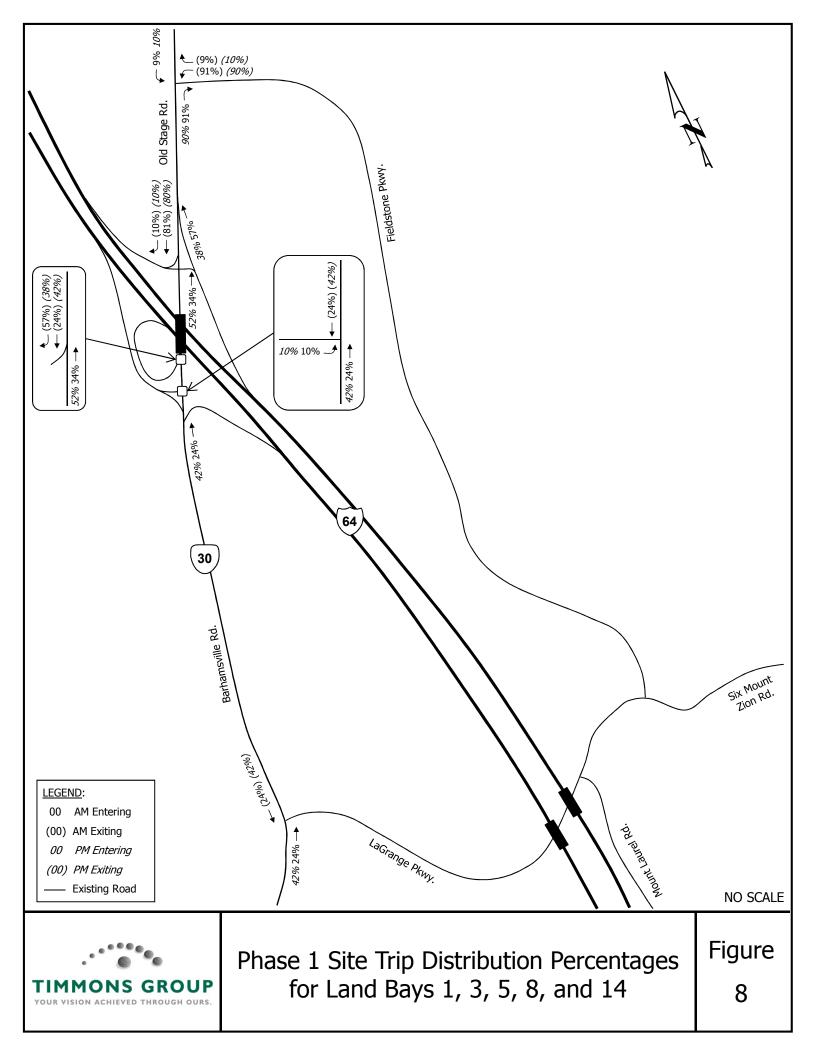


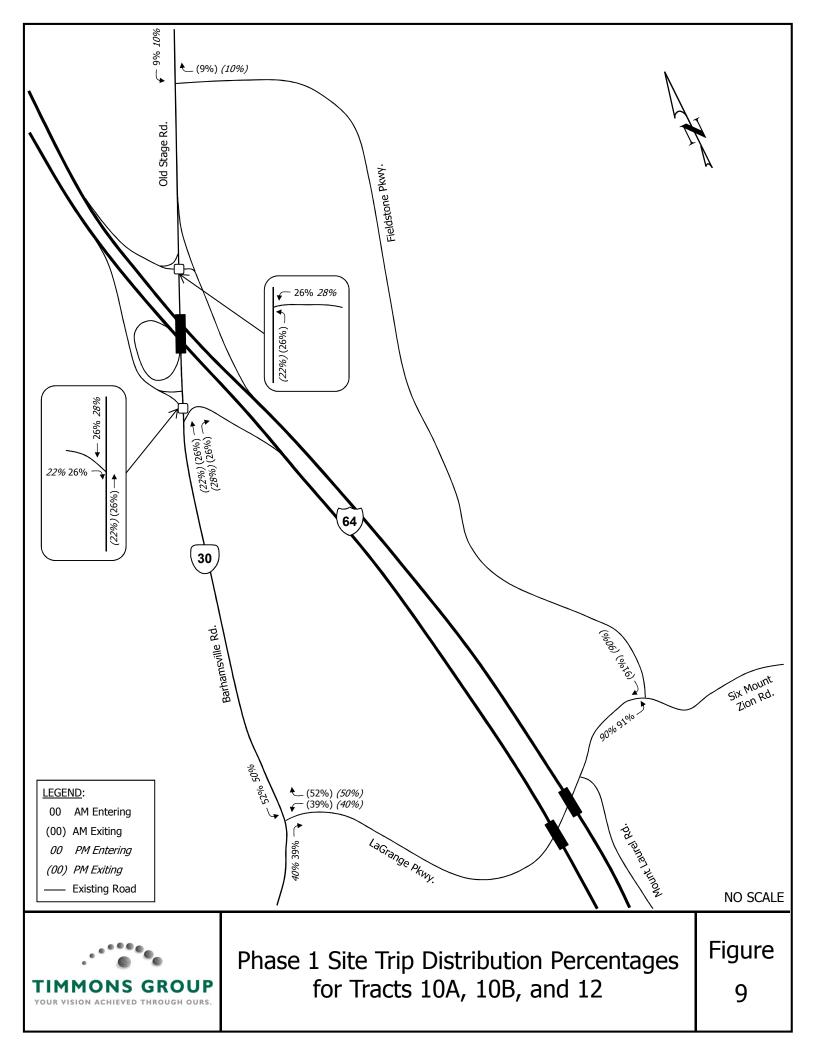


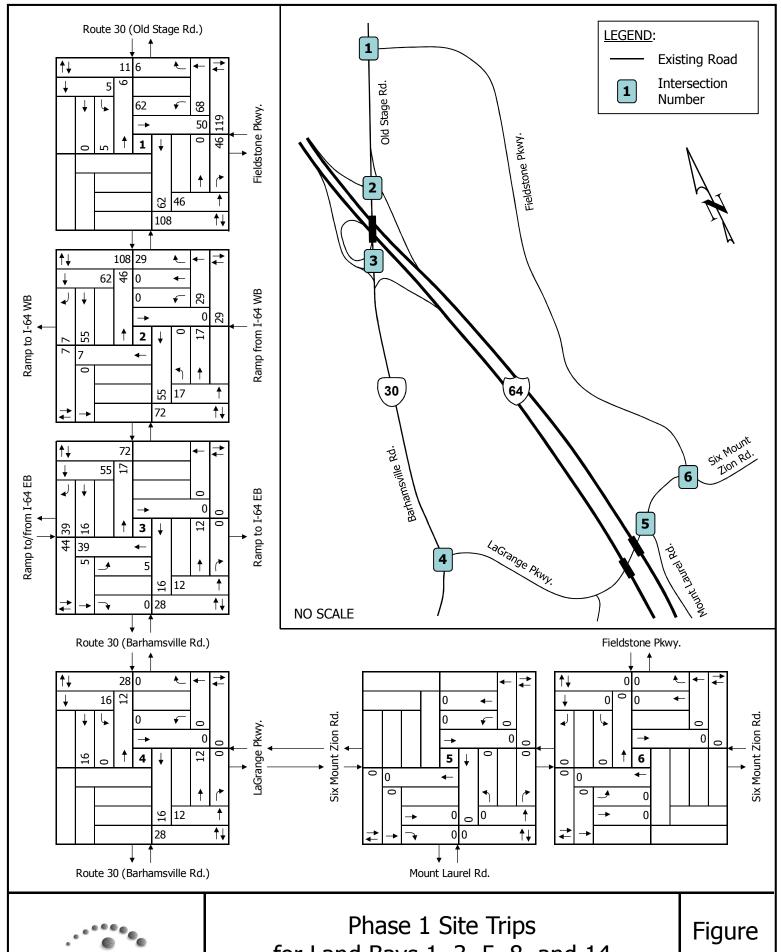


Stonehouse Phasing Plan and Proffered Improvements

Figure 7



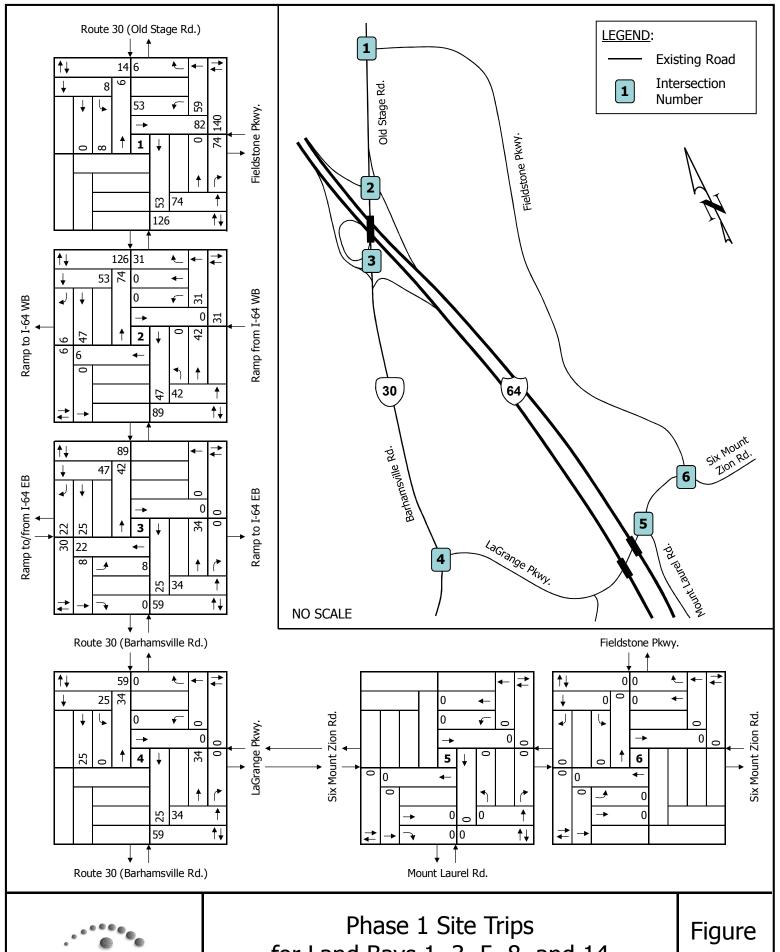






Phase 1 Site Trips for Land Bays 1, 3, 5, 8, and 14 AM Peak Hour

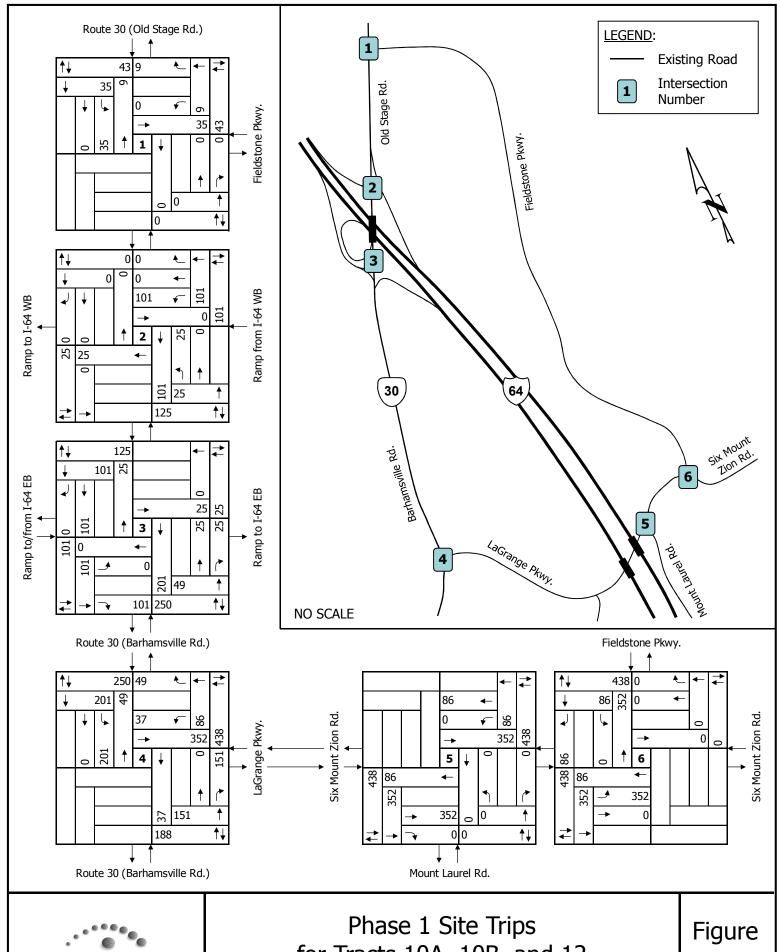
igure 10



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Phase 1 Site Trips for Land Bays 1, 3, 5, 8, and 14 PM Peak Hour

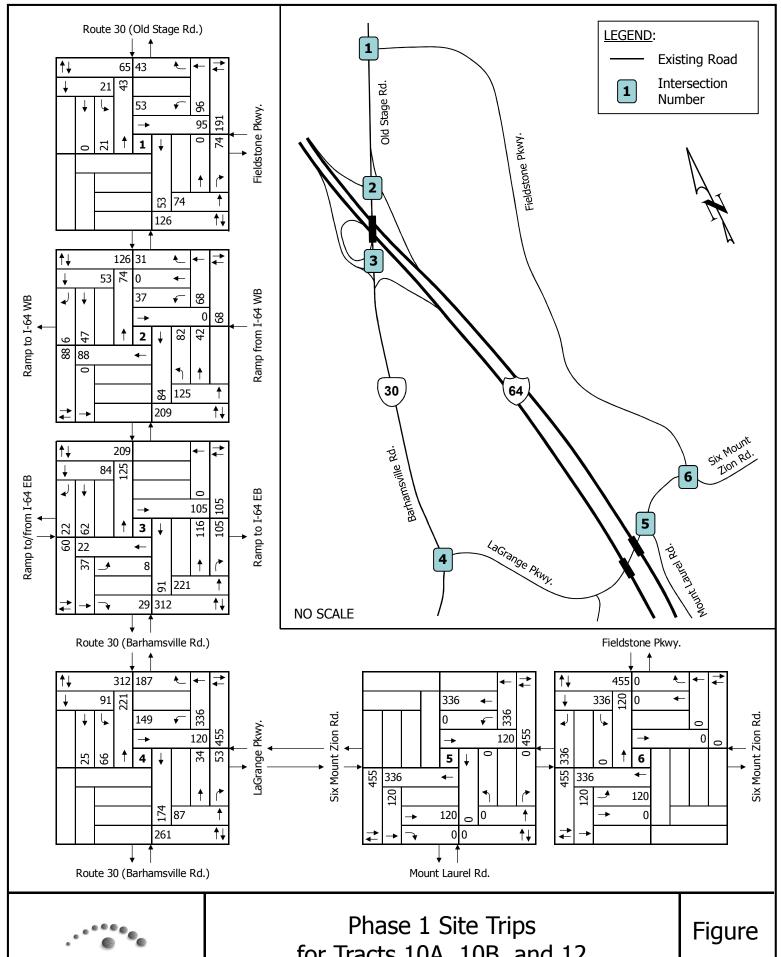
igure 11





Phase 1 Site Trips for Tracts 10A, 10B, and 12 AM Peak Hour

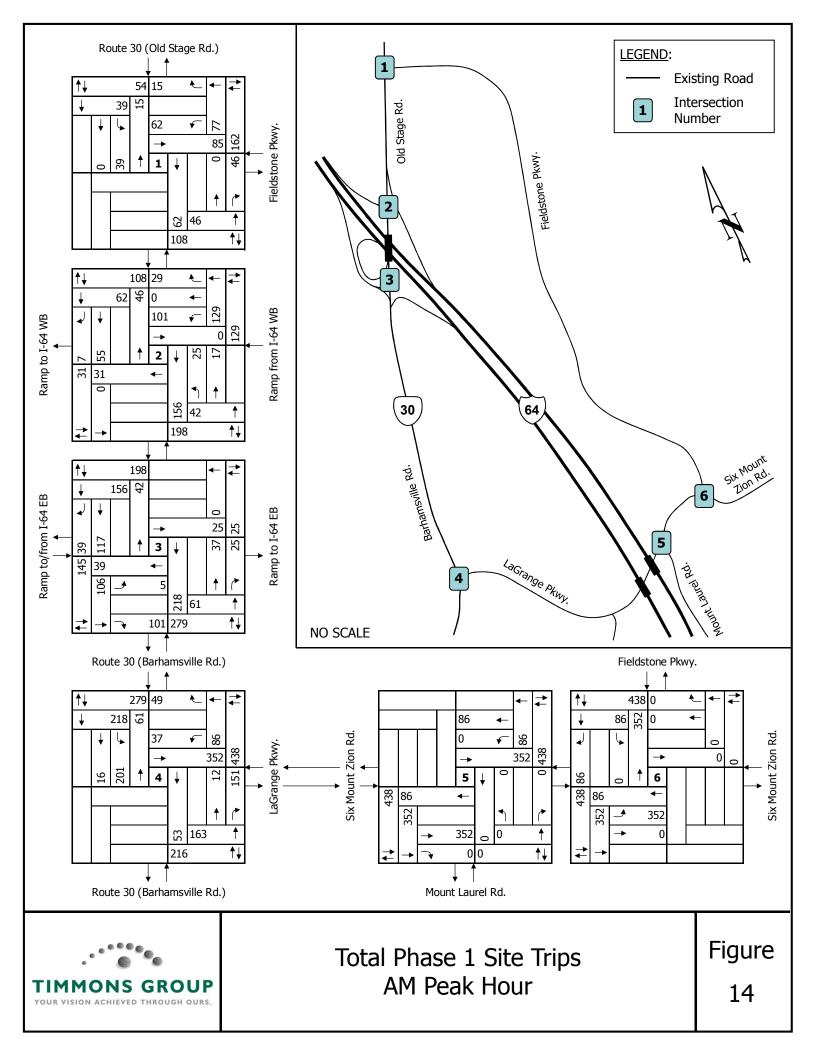
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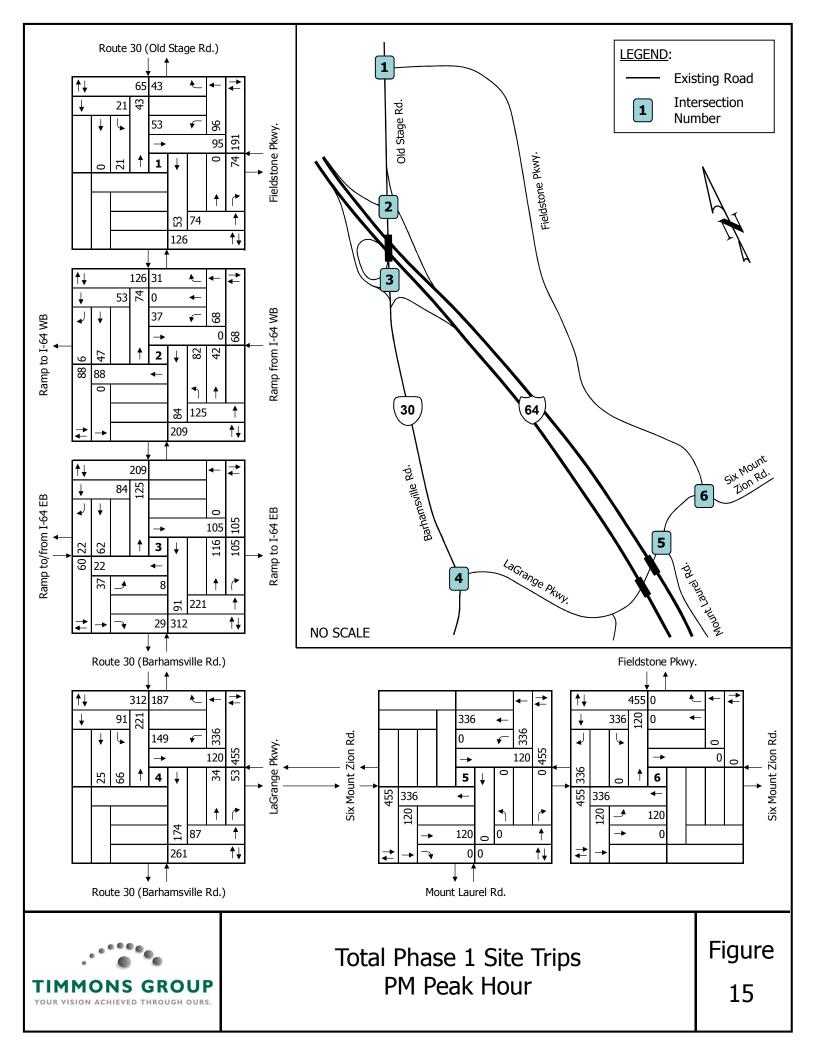


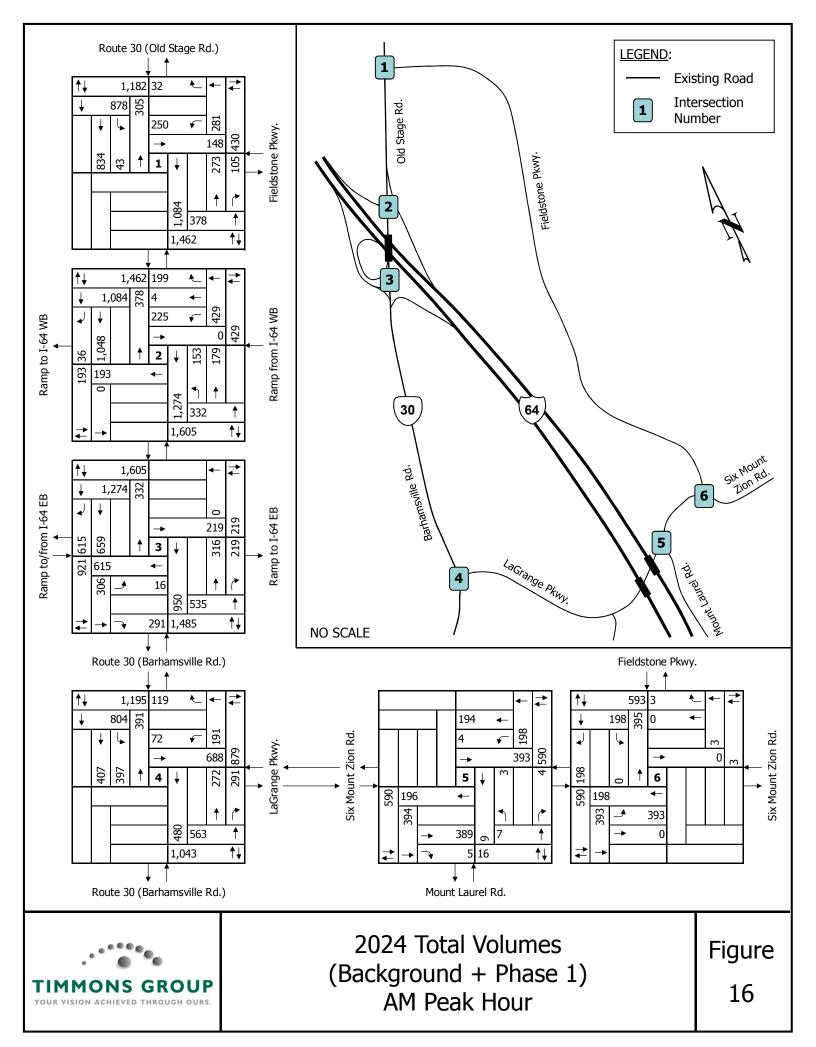
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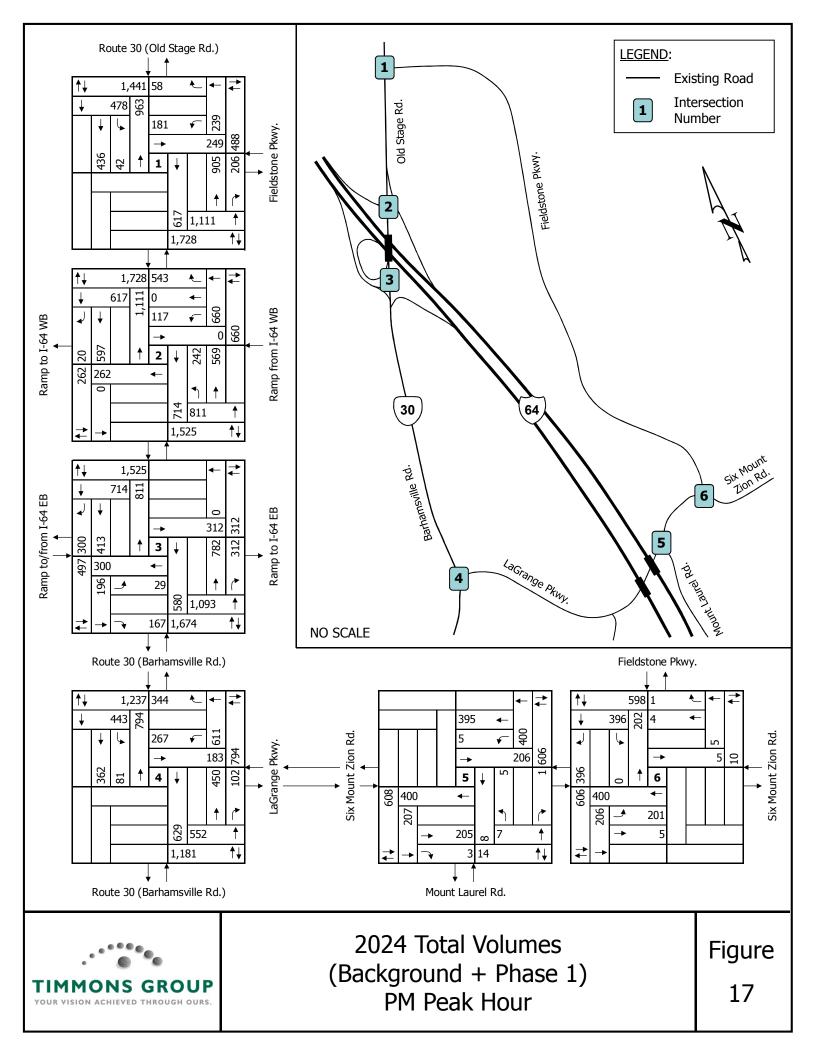
for Tracts 10A, 10B, and 12 PM Peak Hour

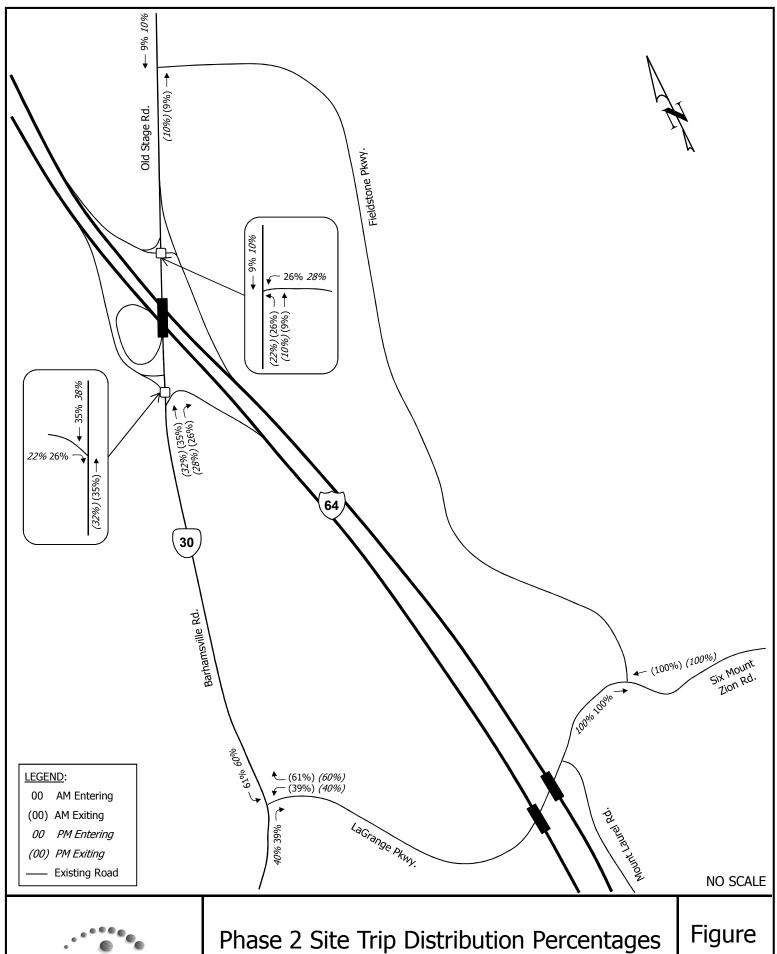
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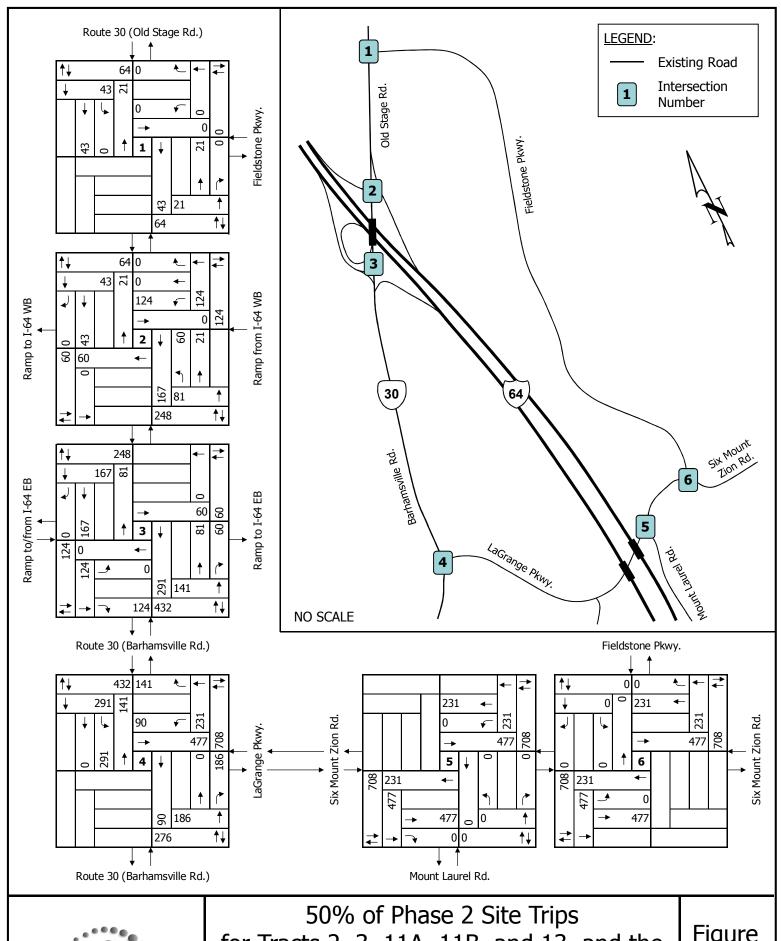






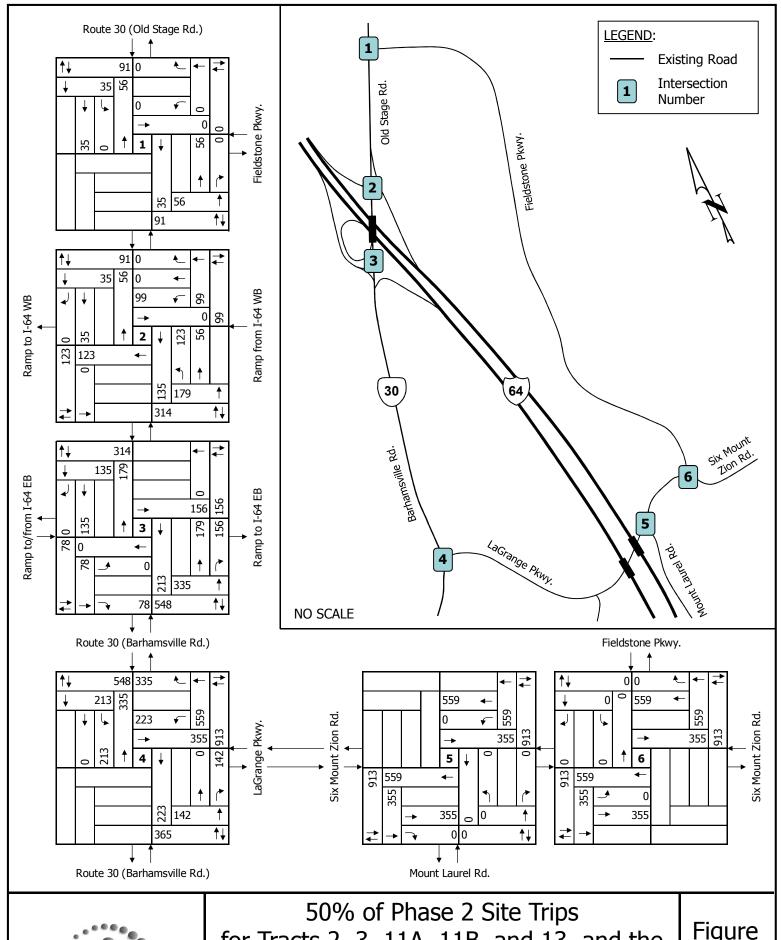


Phase 2 Site Trip Distribution Percentages for Tracts 2, 3, 11A, 11B, and 13, and the Proposed School Facilities



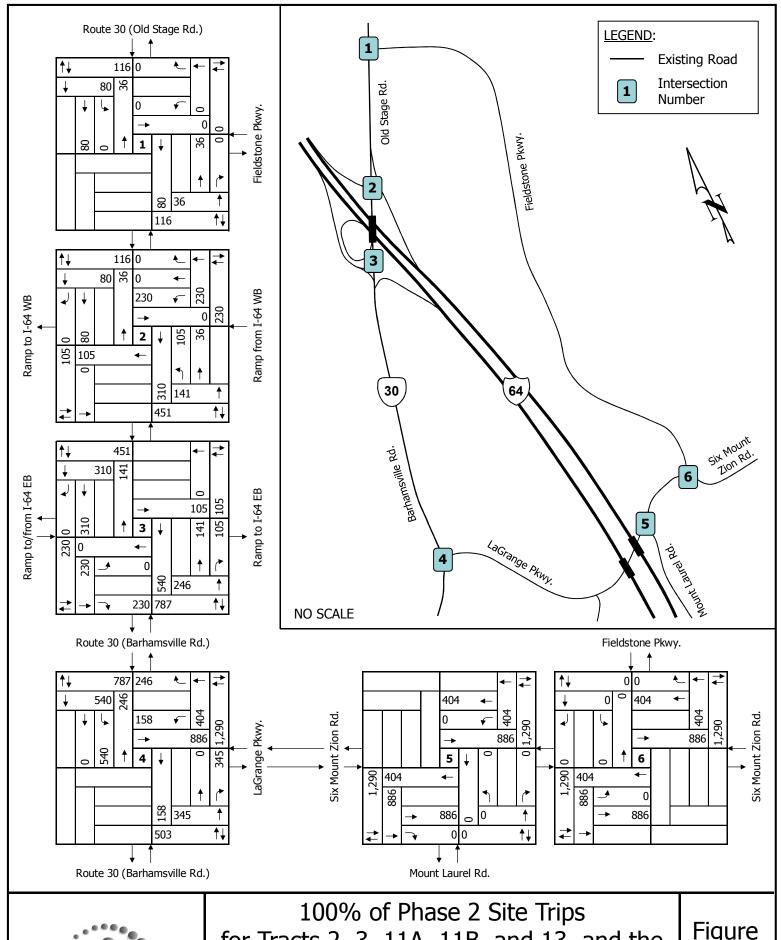


50% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, and the Proposed School Facilities AM Peak Hour



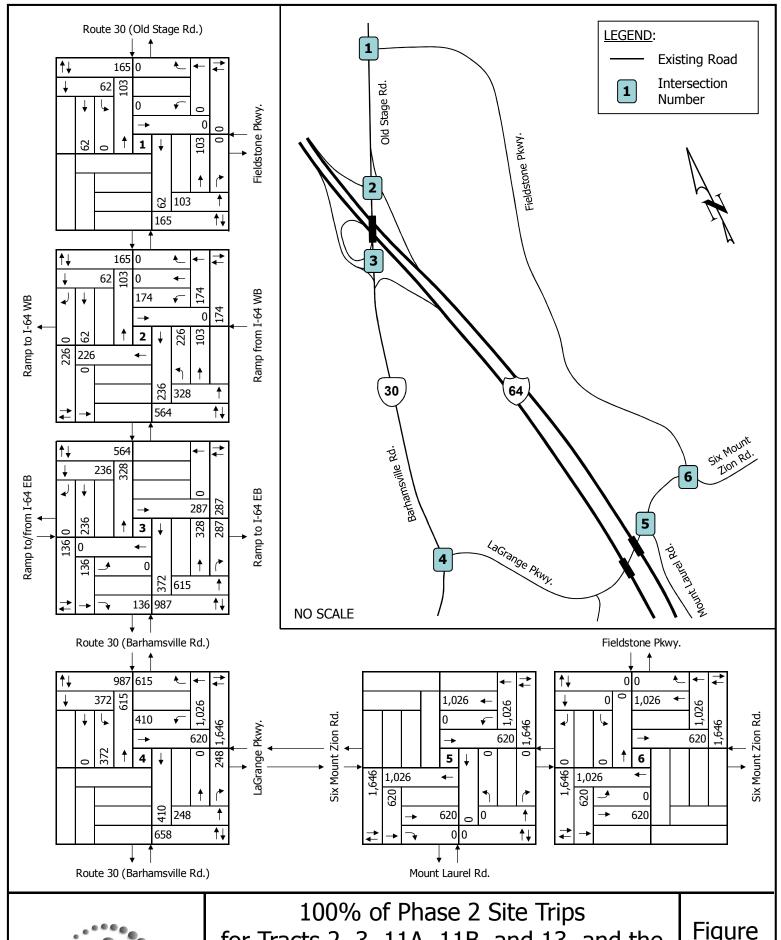


50% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, and the Proposed School Facilities PM Peak Hour



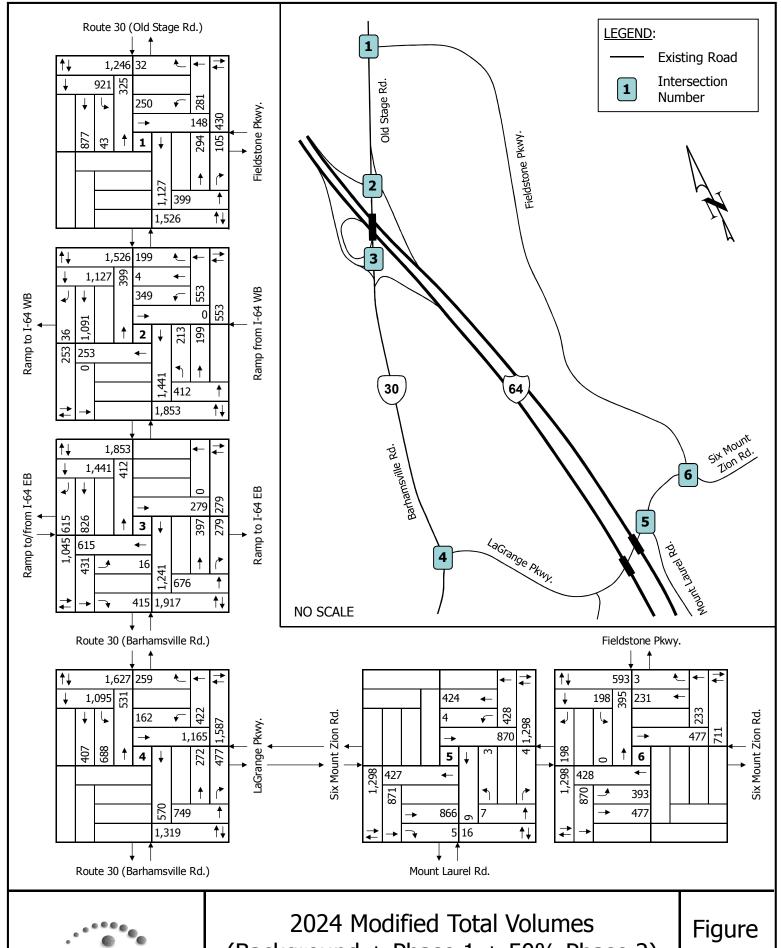


100% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, and the Proposed School Facilities AM Peak Hour



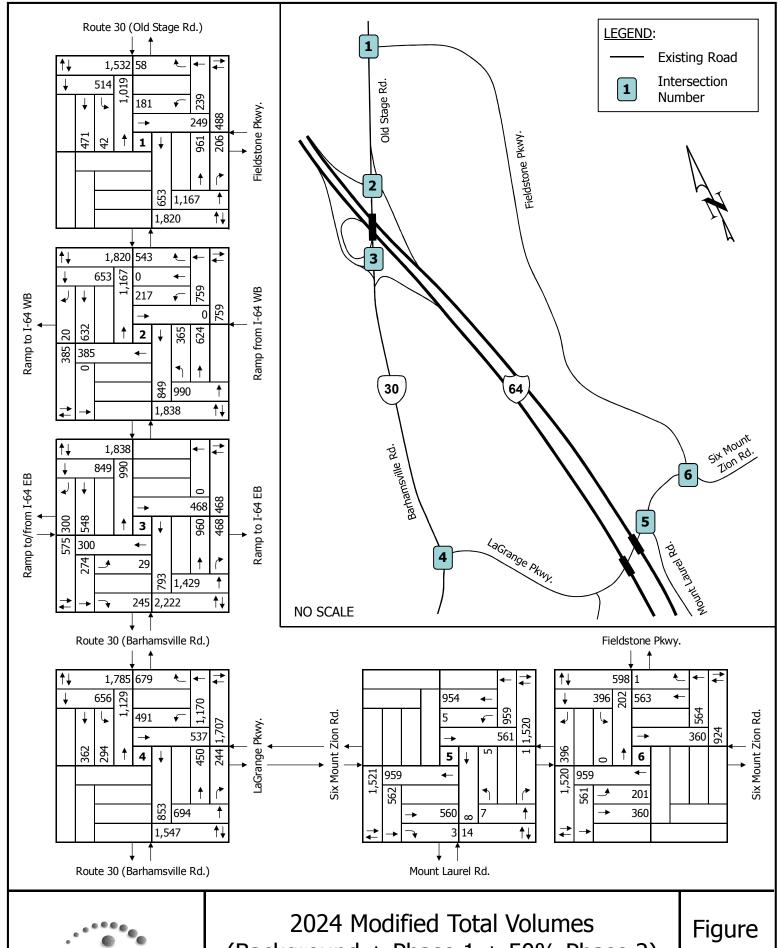


100% of Phase 2 Site Trips for Tracts 2, 3, 11A, 11B, and 13, and the Proposed School Facilities PM Peak Hour



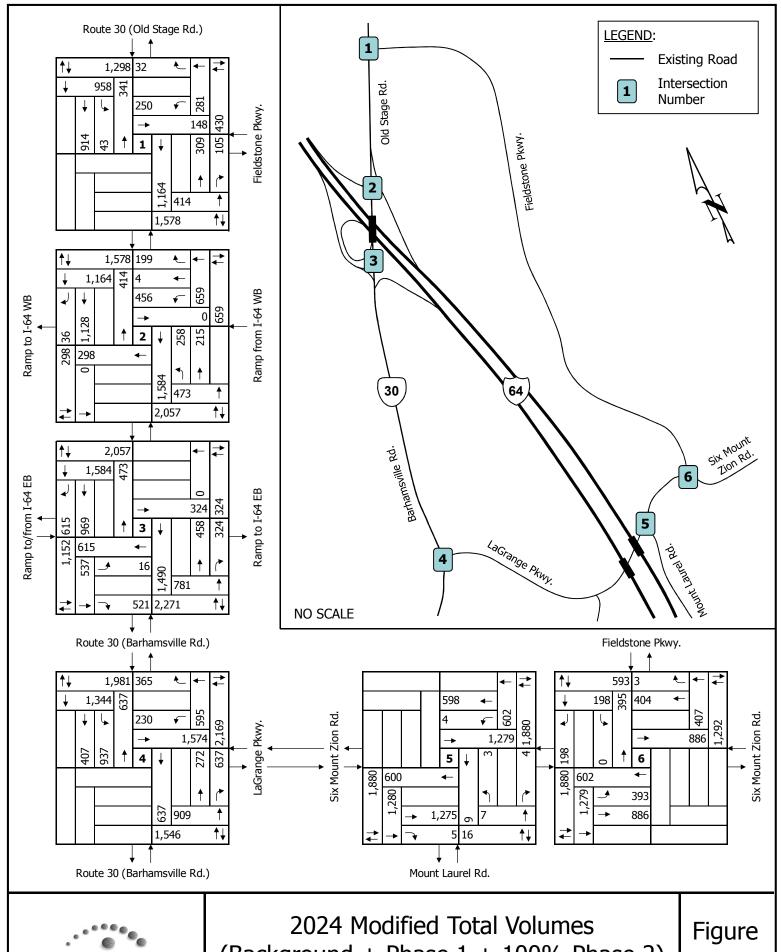
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2024 Modified Total Volumes (Background + Phase 1 + 50% Phase 2) AM Peak Hour



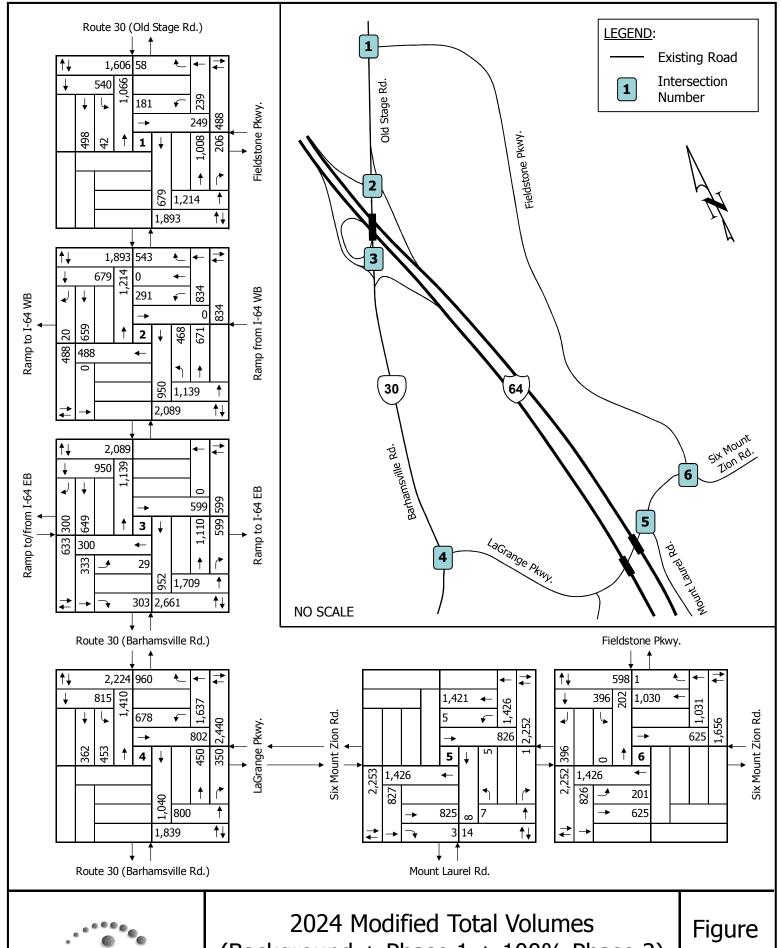
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2024 Modified Total Volumes (Background + Phase 1 + 50% Phase 2) PM Peak Hour



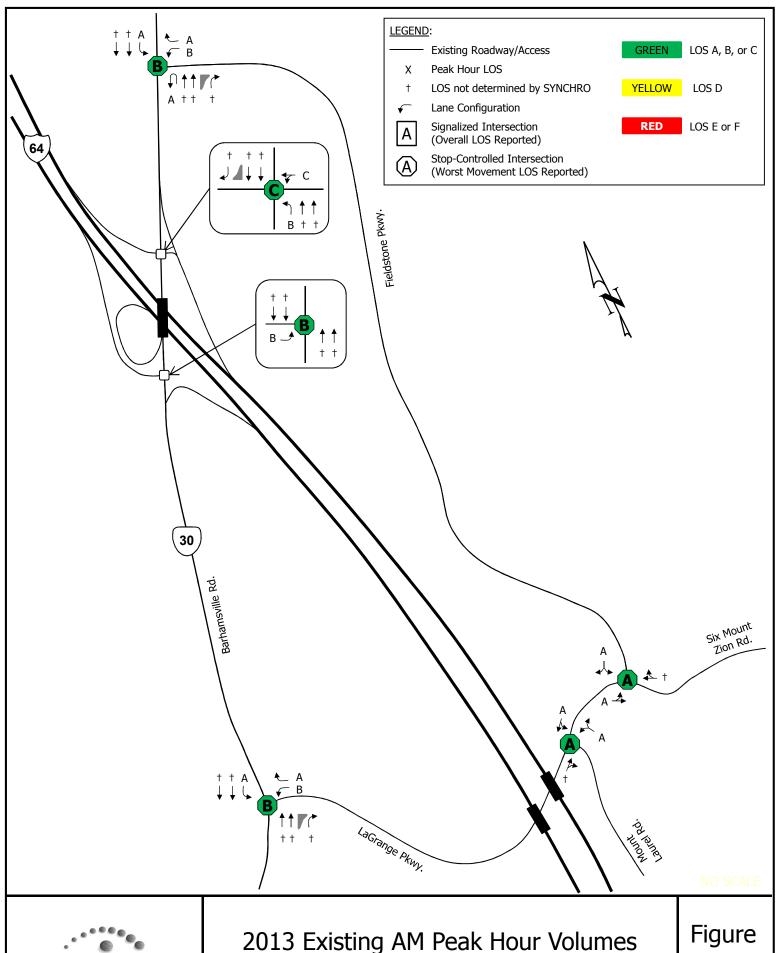


2024 Modified Total Volumes (Background + Phase 1 + 100% Phase 2) AM Peak Hour



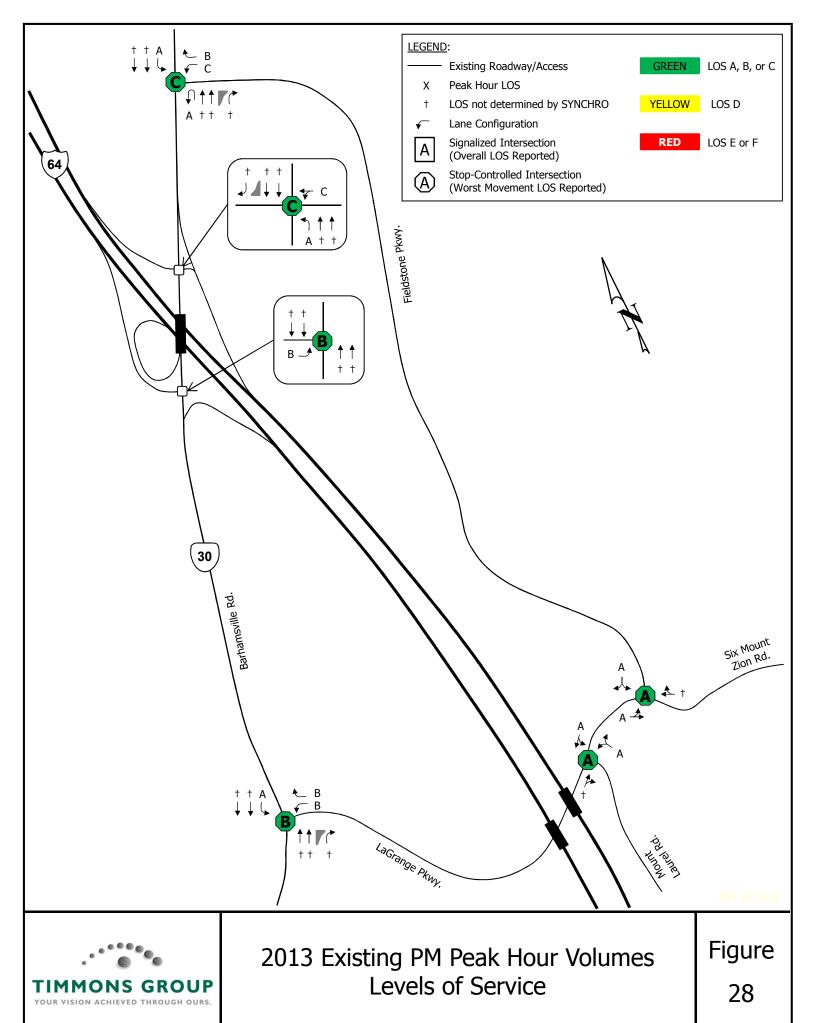
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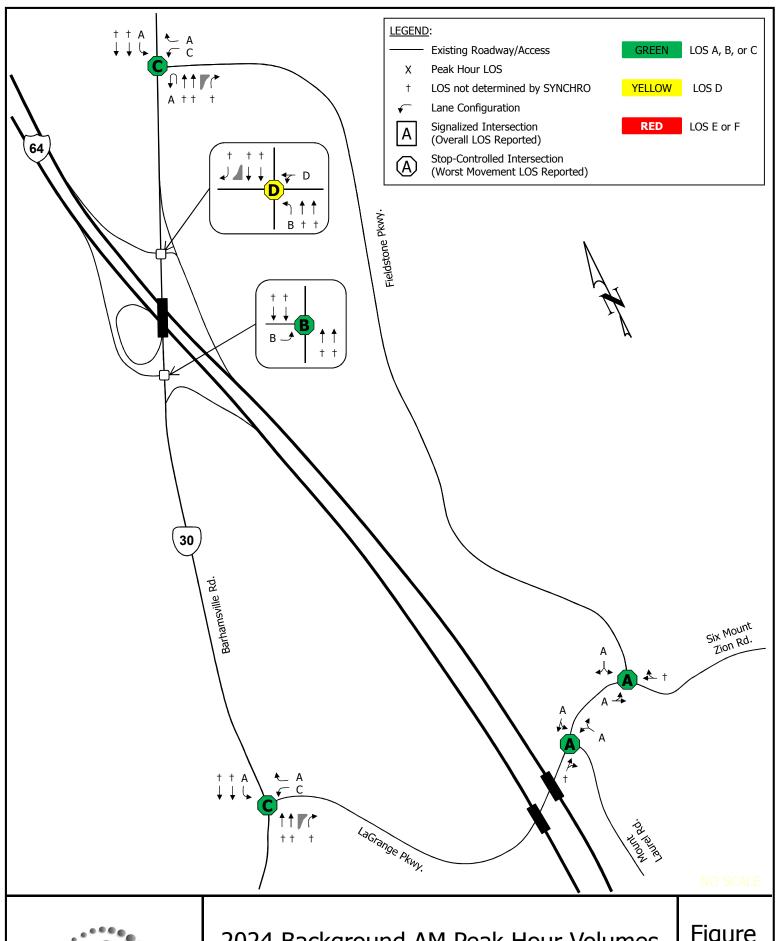
2024 Modified Total Volumes (Background + Phase 1 + 100% Phase 2) PM Peak Hour





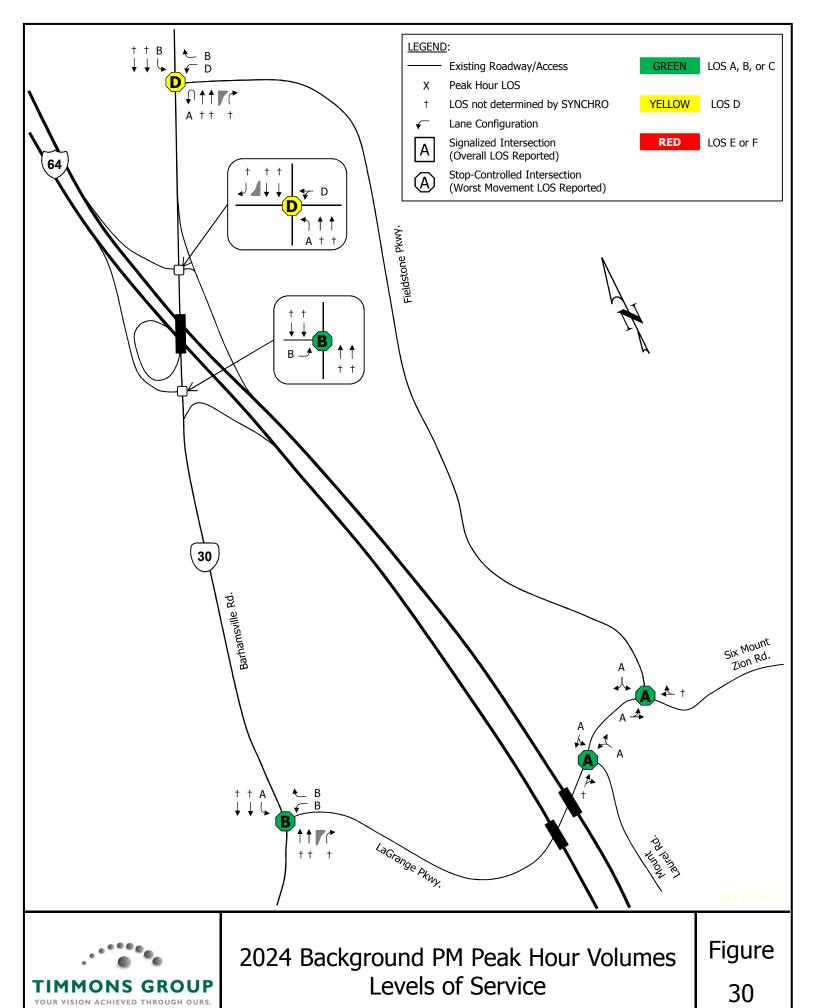
2013 Existing AM Peak Hour Volumes Levels of Service

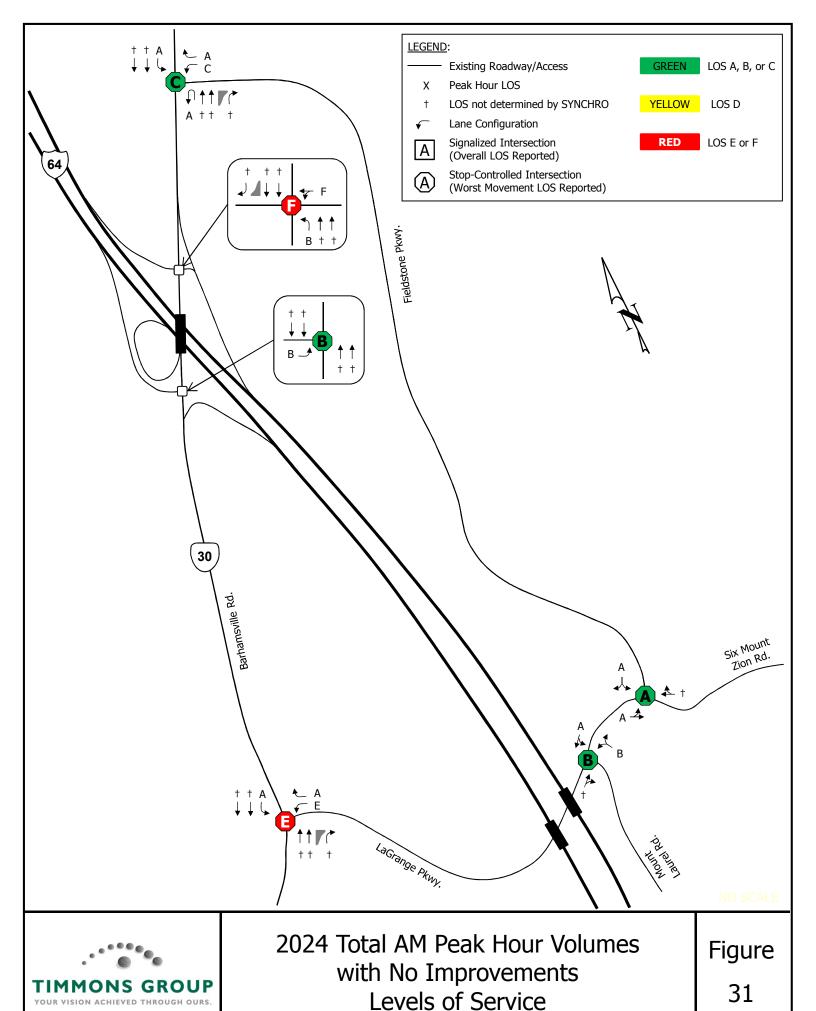


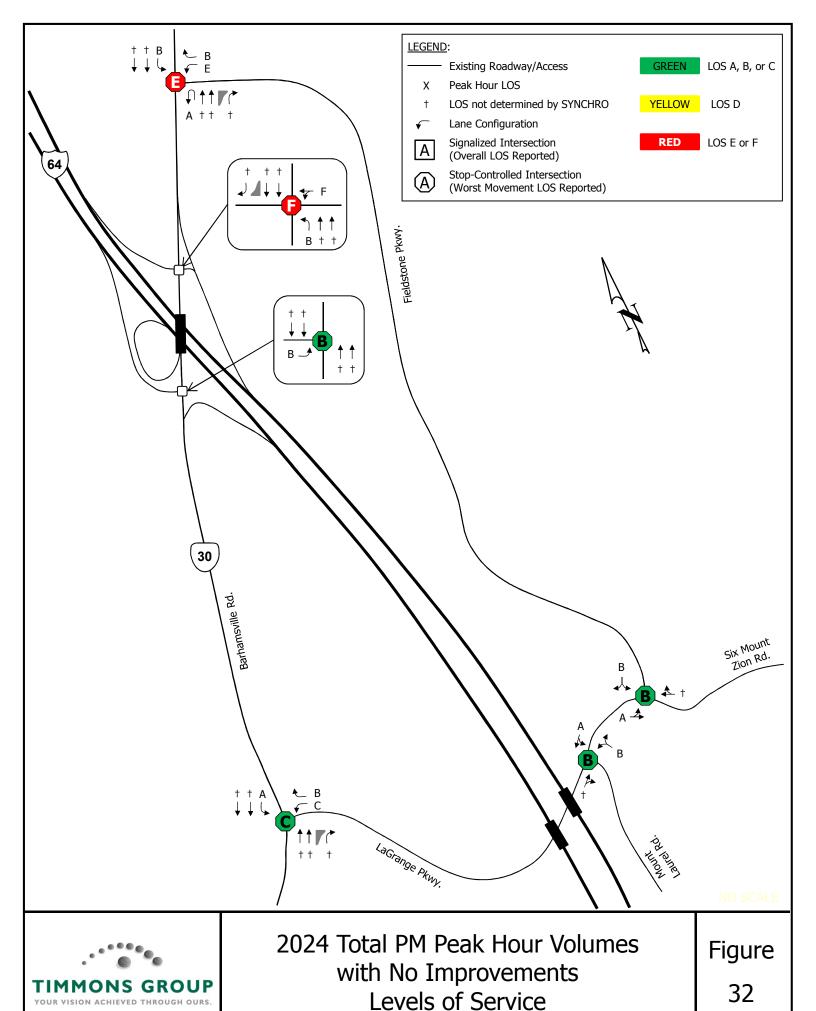


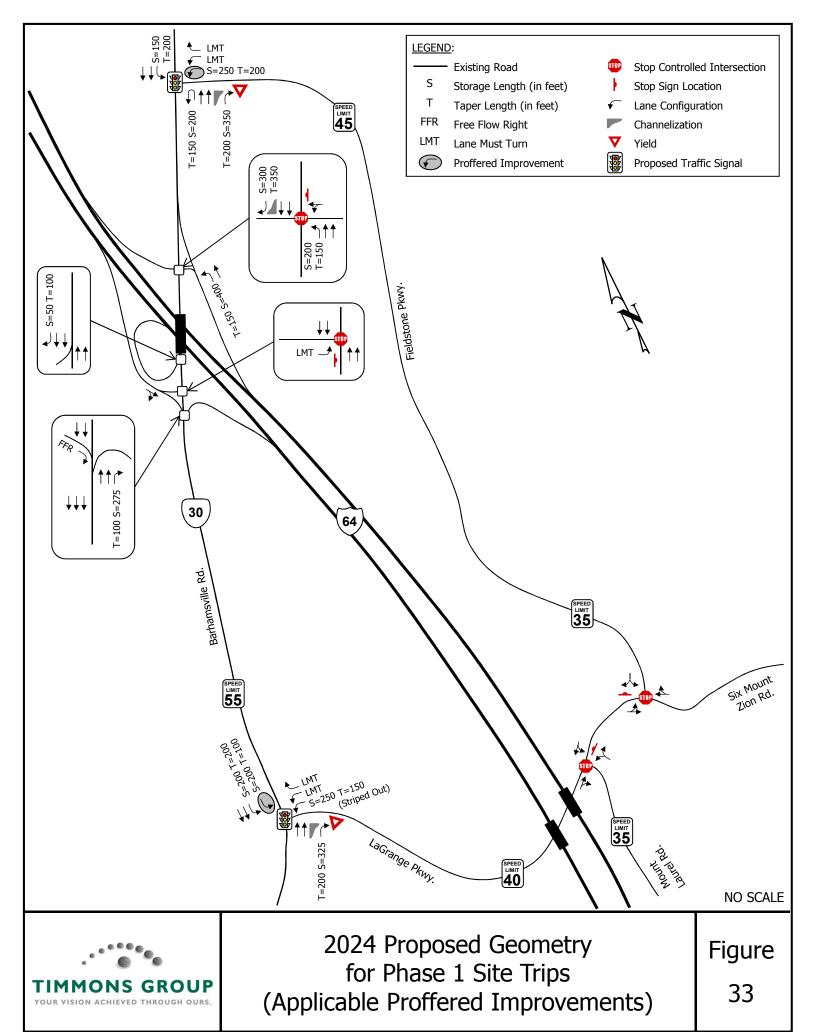


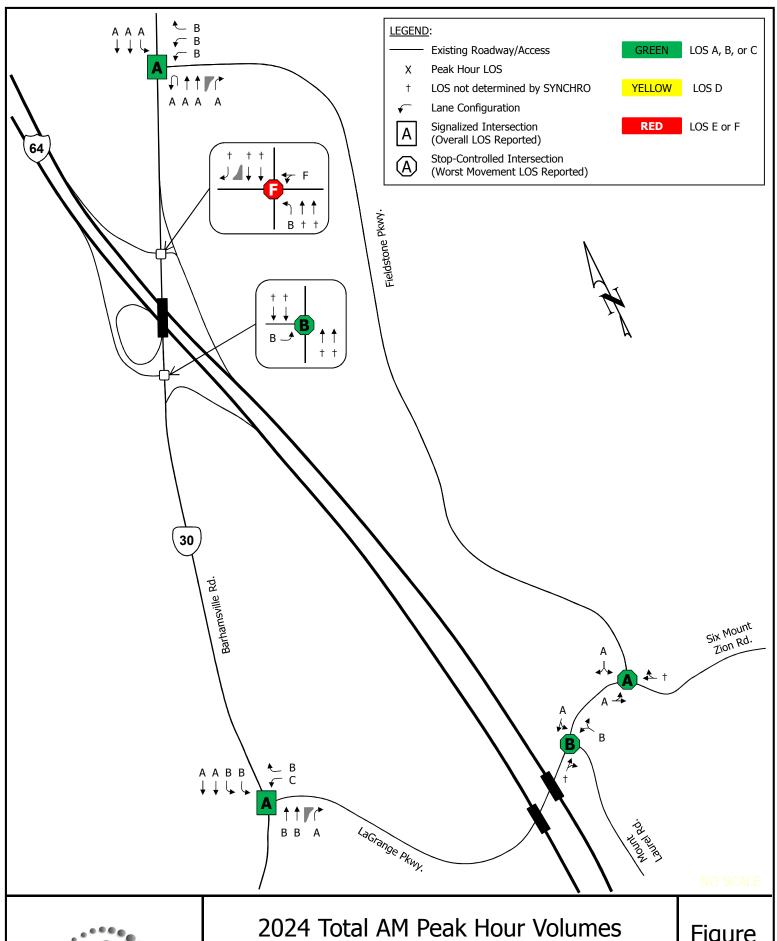
2024 Background AM Peak Hour Volumes Levels of Service





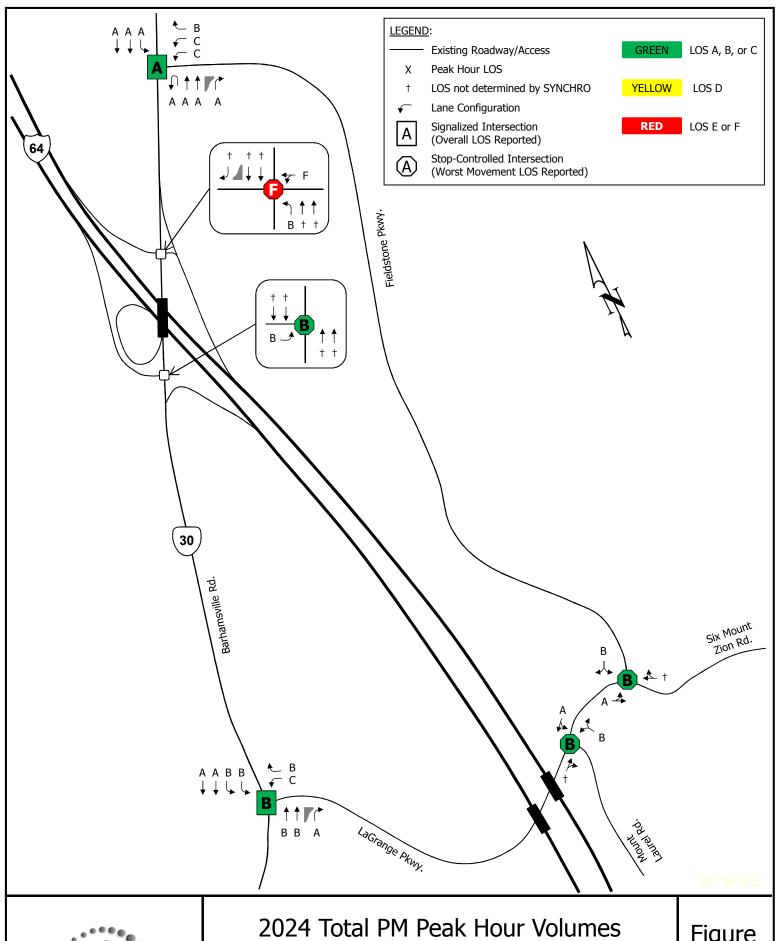






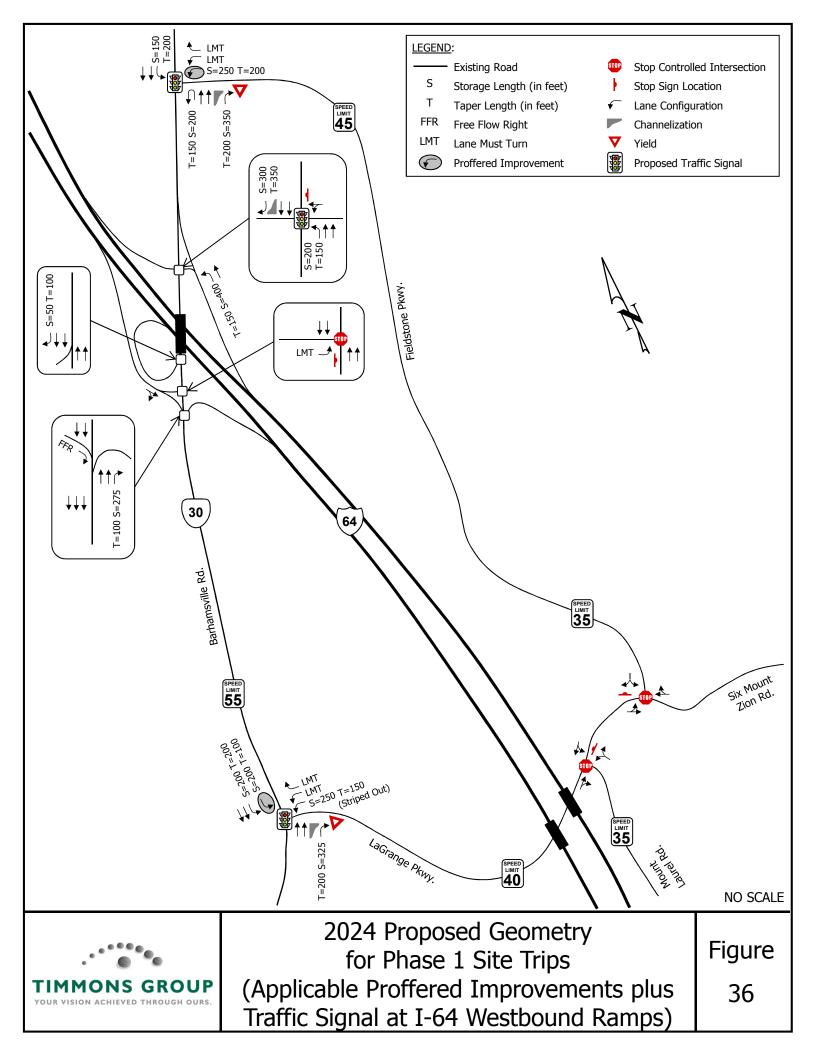


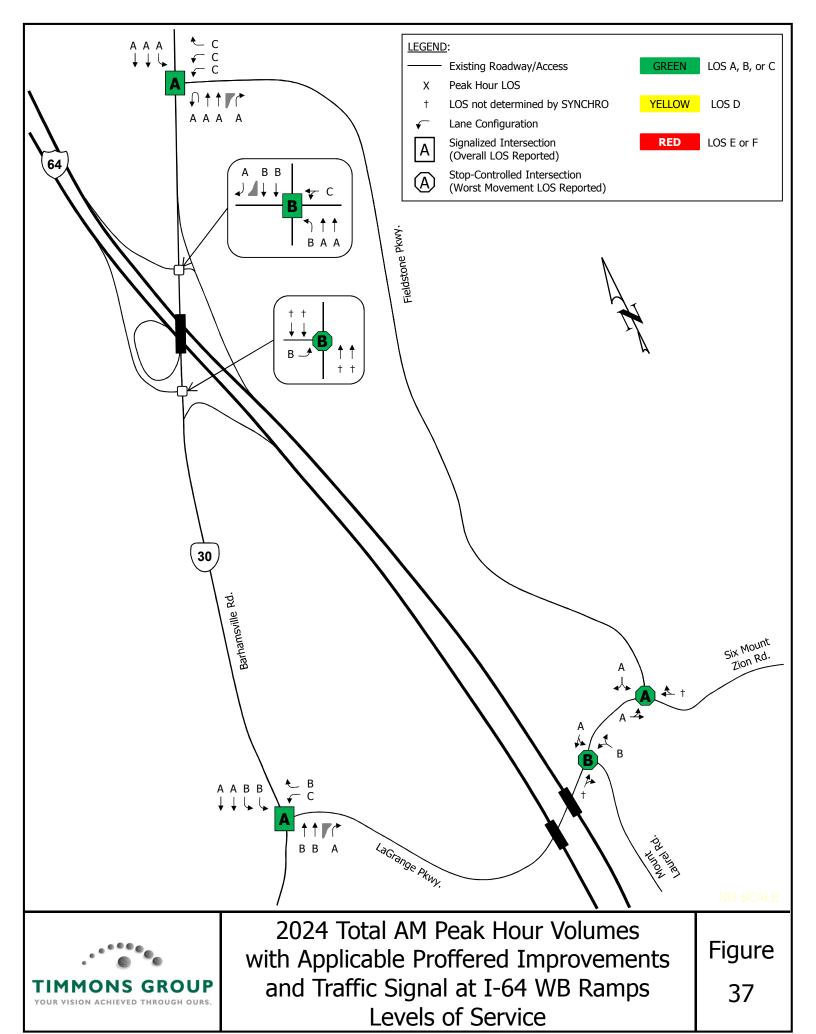
2024 Total AM Peak Hour Volumes with Applicable Proffered Improvements Levels of Service

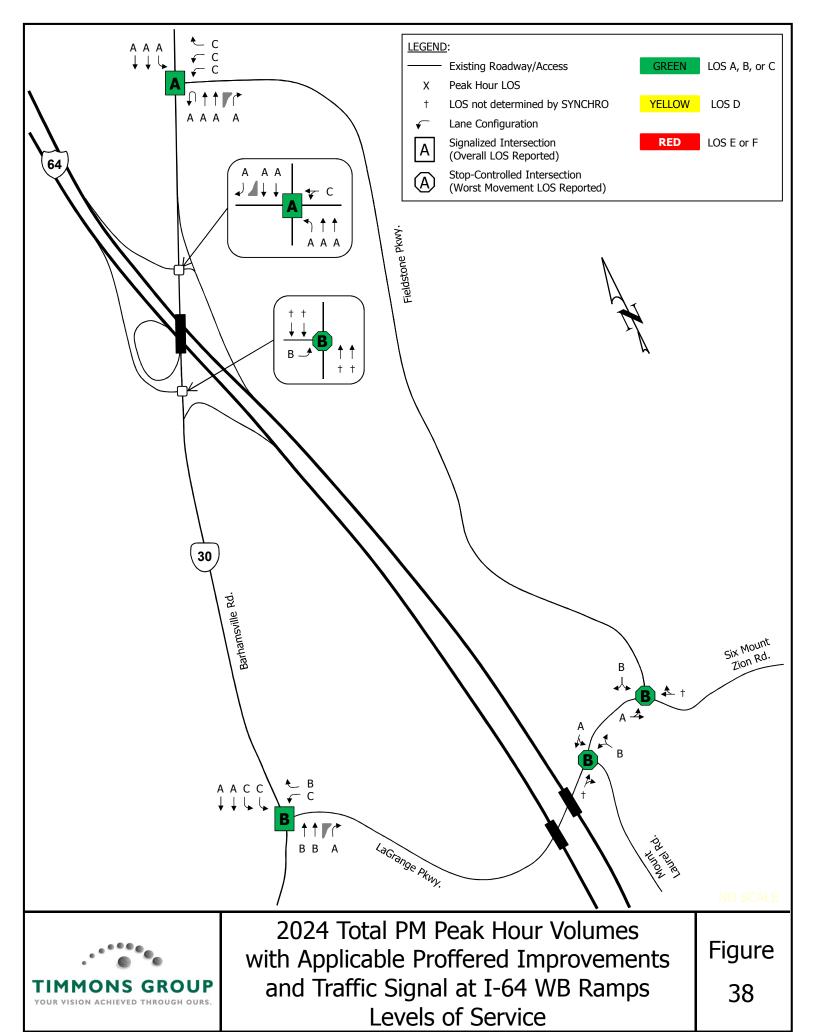


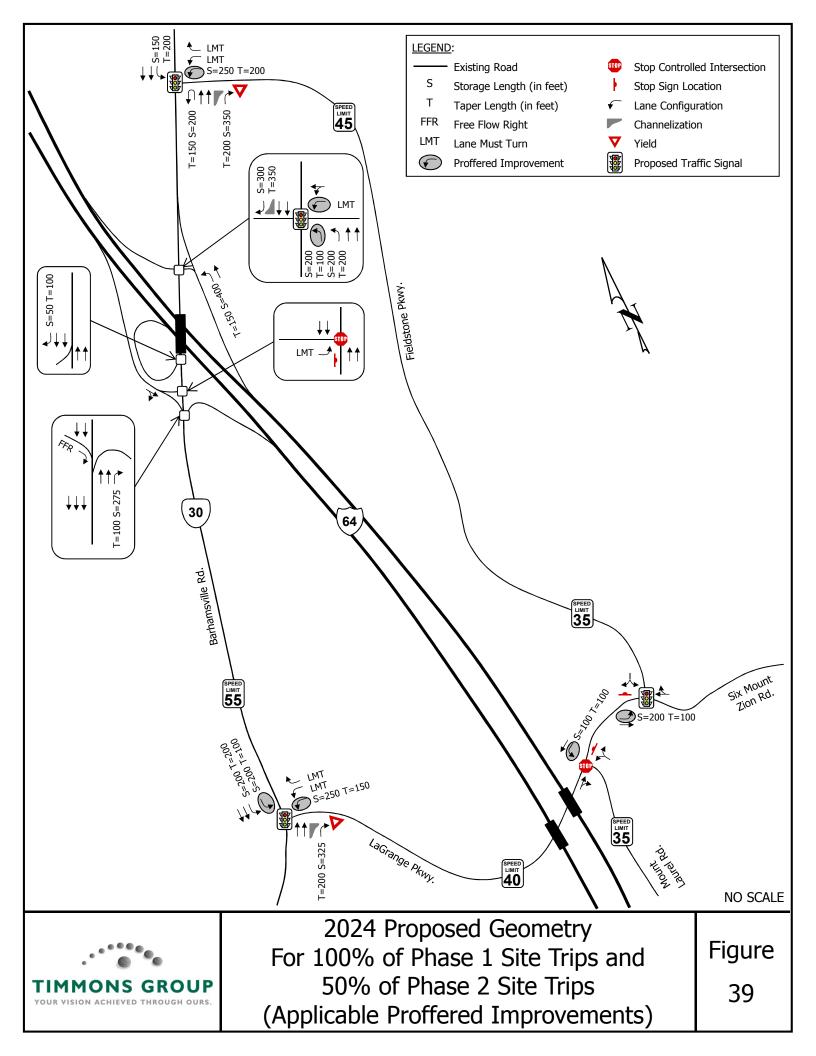


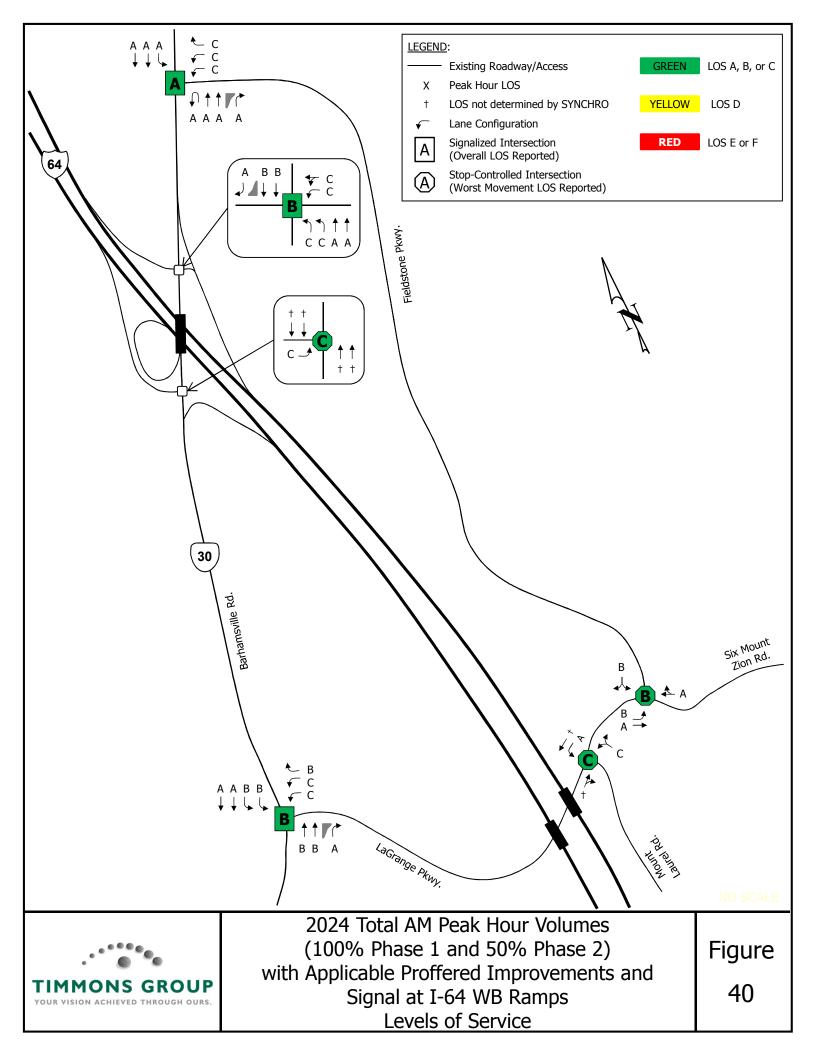
2024 Total PM Peak Hour Volumes with Applicable Proffered Improvements Levels of Service

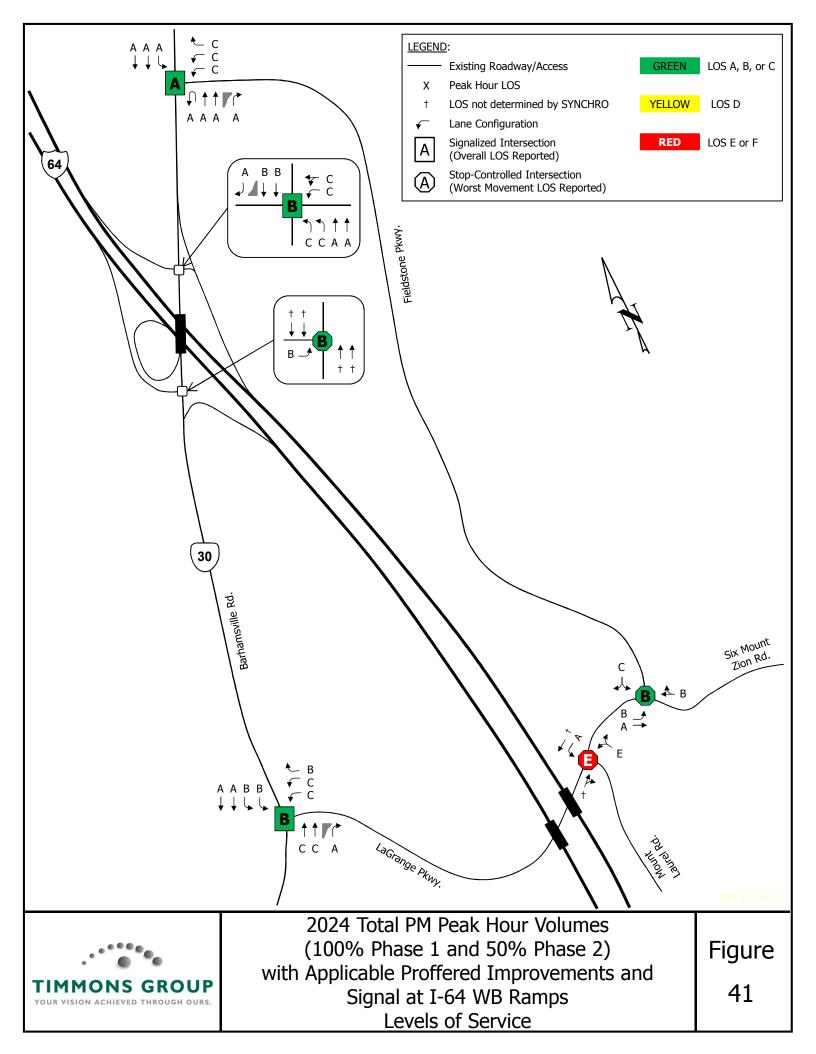


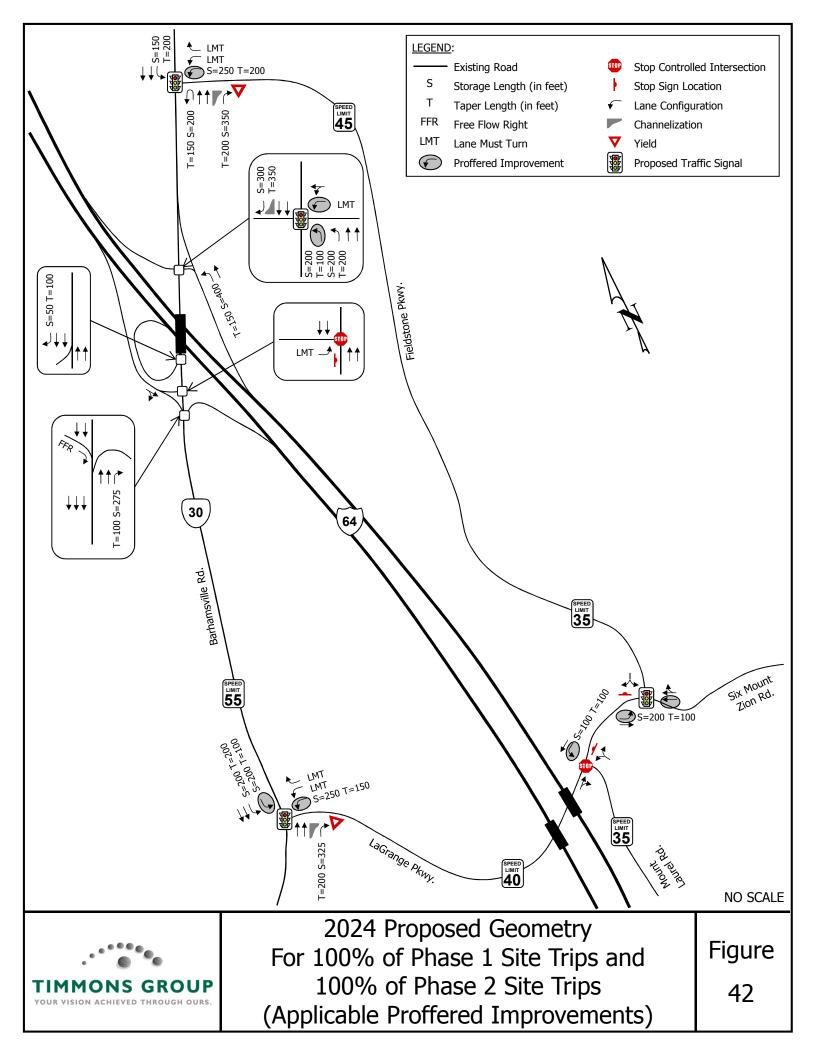


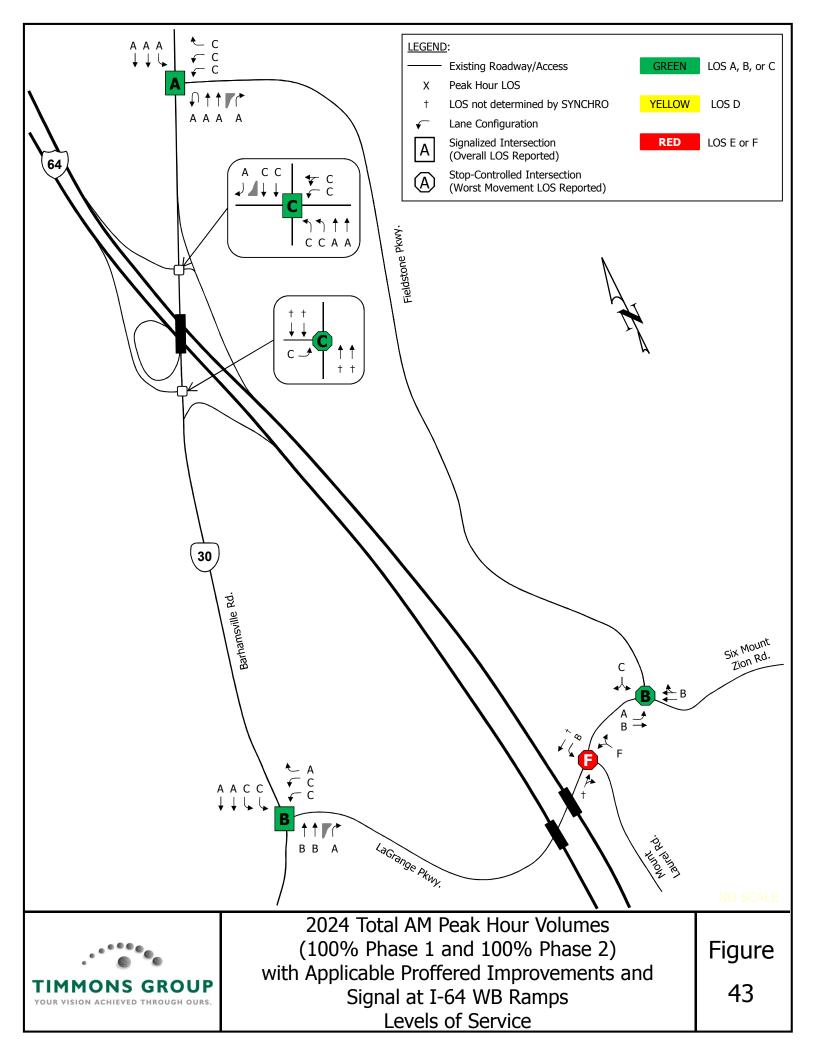


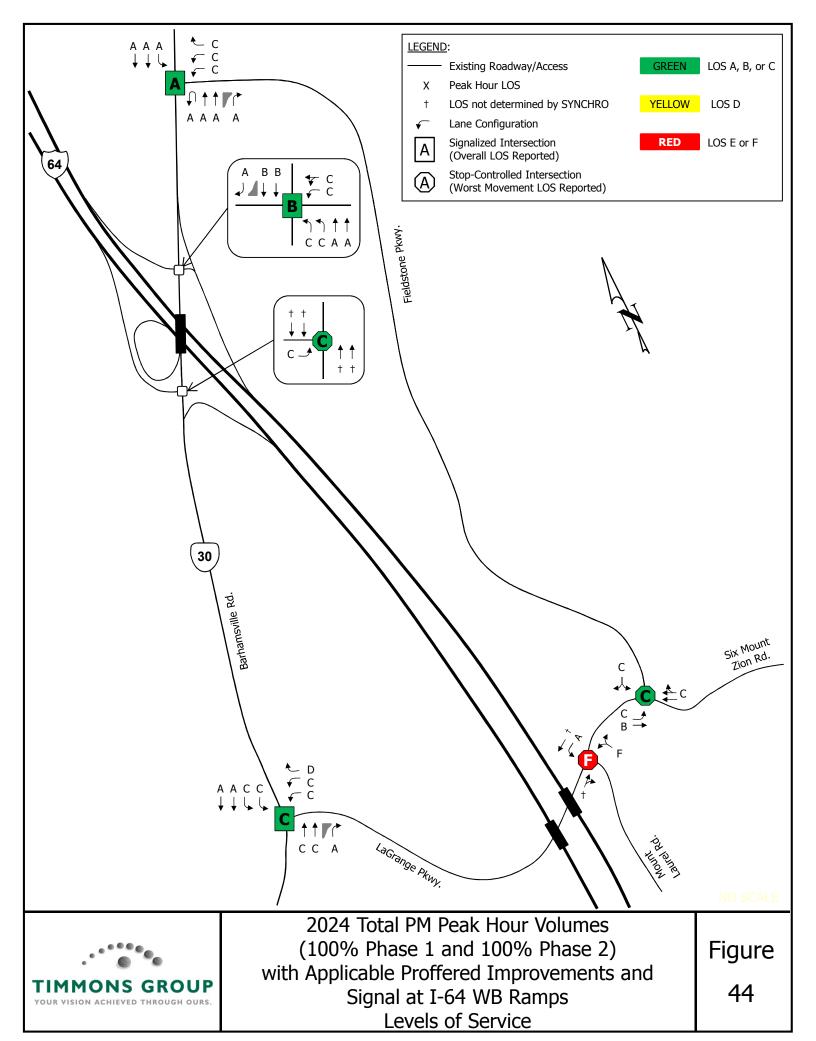














1001 Boulders Parkway Suite 300 Richmond, VA 23225 P 804.200.6500 F 804.560.1016 www.timmons.com

To: Ellen Cook (James City County); Tommy Catlett (VDOT)

From: Scott Dunn, AICP, PTP

Re: Stonehouse Development – 2024 Supplemental Analyses on Six Mount Zion Road

Date: March 16, 2015

Copy: Mike Etchemendy (Greenfield Partners, LLC); Vernon Geddy; Steve Worthington, PE (TG);

Thomas Ruff, EIT (TG)

In response to the recent comments received from James City County (JCC) and the Virginia Department of Transportation (VDOT), Timmons Group has completed supplemental analyses using adjusted 2024 total volumes for the following two intersections:

- Six Mount Zion Road at Mount Laurel Road; and
- Six Mount Zion Road at Fieldstone Parkway.

2024 Volume Projections:

Per the comments received, the volumes from Tracts 11A and 11B were redistributed onto the network as follows:

- Tract 11A 50% of the traffic enters/exits Six Mount Zion Road opposite Fieldstone Parkway and 50% is assigned to Mount Laurel Road
- Tract 11B 100% of the traffic will enter/exits Six Mount Zion via Mount Laurel Road.

It should be noted that a minor percentage of traffic associated with Tracts 11A and 11B was assigned to Fieldstone Parkway and Six Mount Zion Road to the east given the commercial nature of the development and its interaction with the residential development and associated traffic. This adjustment will decrease the previously provided 2024 volumes at the Route 30/LaGrange Parkway intersection; however, not to the extent that the previous recommendations will change.

Figure 1 shows the 2024 total volumes with all of Phase 1 and both 50% and 100% Phase 2 site trips for the AM and PM peak hours, excluding the traffic from Tracts 11A and 11B.

Figure 2 shows the projected site-generated traffic for Tracts 11A and 11B based on the revised distributions summarized above.

The trip generation estimates for Tracts 11A and 11B were taken directly from the January 2015 submittal and are shown highlighted in Table 1.

Table 1: Phase 2 Trip Generation Summary

| 50% of Phase 2 Development | | | | WEEKDAY | | | | | | |
|----------------------------|----------------------------------|------|--------------|-----------|-----------|--------------|--------------|------------|--------------|--|
| ITE | | | | Α | m Peak HC | UR | PM PEAK HOUR | | | |
| <u>AREA</u> | LAND USE | CODE | AMOUNT UNITS | <u>IN</u> | OUT | <u>TOTAL</u> | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> | |
| RESIDENTIA | 11 IISES | | | | | | | | | |
| Tract 2 | Single Family Detached | 210 | 200 DU | 34 | 46 | 80 | 55 | 40 | 95 | |
| Tract 3 | Single Family Detached | 210 | 175 DU | 30 | 40 | 70 | 48 | 35 | 83 | |
| | | | 375 DU | 64 | 87 | 151 | 104 | 75 | 179 | |
| NON-RESID | ENTIAL USES | | | | | | | | | |
| Tract 11A | Non-Retail Commercial | 110 | 338,400 SF | 125 | 27 | 152 | 39 | 120 | 159 | |
| Tract 11B | Non-Retail Commercial | 110 | 331,600 SF | 123 | 27 | 149 | 38 | 118 | 156 | |
| Tract 11B | Retail - Shopping Center | 820 | 50,000 SF | 36 | 31 | 77 | 102 | 136 | 282 | |
| Tract 13 | Non-Retail Commercial | 110 | 210,000 SF | 78 | 17 | 95 | 24 | 75 | 99 | |
| Tract S | Municipal/School | | 838,000 SF | 52 | 43 | 95 | 48 | 36 | 84 | |
| | | | 1,768,000 SF | 413 | 144 | 568 | 251 | 484 | 780 | |
| | Phase 2 (50%) Total Development: | | | 477 | 231 | 718 | 355 | 559 | 959 | |

| 100% of Phase 2 Development | | | | WEEKDAY | | | | | | |
|-----------------------------|-----------------------------------|------|---------------|--------------|-----------|------------|--------------|-----------|------------|--------------|
| | | ITE | | am Peak Hour | | | PM PEAK HOUR | | | |
| <u>AREA</u> | LAND USE | CODE | <u>AMOUNT</u> | <u>UNITS</u> | <u>IN</u> | <u>OUT</u> | TOTAL | <u>IN</u> | <u>OUT</u> | <u>TOTAL</u> |
| RESIDENTIA | I IISES | | | | | | | | | |
| Tract 2 | Single Family Detached | 210 | 400 | DH | 68 | 92 | 161 | 111 | 80 | 190 |
| Tract 3 | Single Family Detached | 210 | 350 | | 60 | 81 | 141 | 97 | 70 | 167 |
| Truce 5 | Single Fairing Detached | 210 | | DU | 128 | 173 | 302 | 208 | 149 | 357 |
| | | | , 50 | 50 | 120 | 175 | 302 | 200 | 115 | 337 |
| NON-RESIDE | ENTIAL USES | | | | | | | | | |
| Tract 11A | Non-Retail Commercial | 110 | 676,800 | SF | 250 | 54 | 305 | 78 | 240 | 318 |
| Tract 11B | Non-Retail Commercial | 110 | 663,200 | SF | 245 | 53 | 298 | 76 | 235 | 312 |
| Tract 11B | Retail - Shopping Center | 820 | 100,000 | SF | 54 | 47 | 117 | 162 | 216 | 449 |
| Tract 13 | Non-Retail Commercial | 110 | 420,000 | SF | 155 | 34 | 189 | 48 | 149 | 197 |
| Tract S | Municipal/School | | 838,000 | SF | 52 | 43 | 95 | 48 | 36 | 84 |
| | | | 2,698,000 | SF | 758 | 231 | 1,004 | 412 | 876 | 1,361 |
| | | | | | | | | | | |
| | Phase 2 (100%) Total Development: | | | 886 | 404 | 1,305 | 620 | 1,026 | 1,718 | |

Source: Trip generation estimates for single family, non-retail commercial, and municipal/school calculated using rates from 2007 URS Stonehouse Traffic Impact Study. Retail-shopping center estimates calculated using ITE Trip Generation Manual, 9^{th} Edition.

Figure 3 shows the project 2024 Total traffic volumes, for the Six Mount Zion Road/Mount Laurel Road and Six Mount Zion Road/Fieldstone Parkway intersections. The projected volumes were calculated by combining the volumes from Figure 1 with the redistributed Tract 11A and Tract 11B volumes from Figure 2.

Operational Analysis/Signal Timings

Several items should be noted with respect to the completed analyses:

- 1. Capacity analyses at signalized and stop controlled intersections were completed using SYNCHRO 8.
- 2. The peak hour factor (PHF) by approach based on original 2013 counts was used for the 2024 analyses. A minimum PHF of 0.92 was used for the 2024 analyses.
- The heavy vehicle percentages for each movement were calculated using the AM and PM peak hour counts.
- 4. The timings for the proposed traffic signals on Six Mount Zion Road within the study area were optimized using a minimum cycle length of 90 seconds.

Preliminary Findings

Based on the revised 2024 total volumes shown on Figure 3, Phase 1 and 50% of Phase 2 (including traffic from Tracts 11A and 11B) development will require the following seven (7) improvements:

- 1. A traffic signal at the Six Mount Zion Road/Fieldstone Parkway intersection;
- 2. An eastbound left turn lane on Six Mount Zion Road at Fieldstone Parkway;
- 3. A southbound right turn lane on Fieldstone Parkway at Six Mount Zion Road;
- 4. A traffic signal at the Six Mount Zion Road/Mount Laurel Road intersection;
- 5. A westbound left turn lane on Six Mount Zion Road at Mount Laurel Road;
- 6. An eastbound right turn lane on Six Mount Zion Road at Mount Laurel Road; and
- 7. A northbound right turn lane on Mount Laurel Road at Six Mount Zion Road.

Each of the above improvements is contained in the original Stonehouse proffers.

The operation analysis indicates that each of the two intersections and their respective movements will operate at a LOS C or better. A summary of the findings, including level of service (LOS), delay, and 95th percentile queue lengths are summarized in Table 2.

Based on the revised 2024 total volumes shown on Figure 3, Phase 1 and 100% of Phase 2 development will require the installation of a second eastbound left turn lane on Six Mount Zion Road at Fieldstone Parkway; again, this is an original Stonehouse proffered improvement.

It should be noted that the northbound Mount Laurel Road approach shows 462 PM peak hour lefts. While this volume exceeds the established threshold for dual lefts, the operational analysis indicates the additional lane is not necessary with respect to LOS.

The operational analysis indicates that each of the two intersections and their respective movements will operate at a LOS C or better. A summary of the findings, LOS, delay, and 95th percentile queue lengths are summarized in Table 3.

Table 2: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Modified Total Volumes (Phase 1 and 50% Phase 2)

| | | Turn Lane Storage (ft) | AM | PEAK H | HOUR | PM PEAK HOUR | | |
|-------------------------------------|--------------------------|---------------------------------|------------------------------|------------------|--|---------------------------------|-------|--|
| Intersection and Type of Control | Movement and Approach | | Delay ¹ (sec/veh) | LOS ¹ | 95th Percentile Queue Length (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) |
| 1. Six Mount Zion Road (E-W) at | EB Left | 200 | 28.5 | С | 292 | 16.8 | В | 155 |
| Mt. Laurel Road (N-S) | EB Thru-Right | | 7.4 | Α | 74 | 4.2 | Α | 64 |
| Signalized | EB Approach | | 20.6 | С | | 10.6 | В | |
| | WB Left-Thru-Right | | 27.8 | С | 153 | 16.7 | В | 150 |
| | WB Approach | | 27.8 | С | | <i>16.7</i> | В | |
| | NB Left-Thru-Right | | 18.2 | В | 21 | 18.0 | В | 51 |
| | NB Approach | | 18.2 | В | | 18.0 | В | |
| | SB Left-Thru | | 18.1 | В | 19 | 17.0 | В | 9 |
| | SB Right | 200 | 4.3 | Α | 22 | 6.6 | Α | 55 |
| | SB Approach | | 5.0 | Α | | 6.7 | Α | |
| | Overall | | 18.4 | В | | 10.7 | В | |
| 2. Six Mount Zion Road (E-W) at | EB Thru | | 8.0 | Α | 178 | 8.1 | Α | 166 |
| Mt. Laurel Road (N-S) | EB Right | 200 | 4.3 | Α | 16 | 6.3 | Α | 22 |
| Signalized | EB Approach | | 7.1 | Α | | 7.7 | Α | |
| | WB Left | 200 | 4.6 | Α | 16 | 6.4 | Α | 22 |
| | WB Thru | | 5.2 | Α | 81 | 11.9 | В | 309 |
| | WB Approach | | 5.1 | Α | | 11.6 | В | |
| | NB Left | LMT | 13.1 | В | 44 | 16.1 | В | 181 |
| | NB Right | 200 | 12.4 | В | 14 | 12.7 | В | 26 |
| | NB Approach | | 12.9 | В | | <i>15.5</i> | В | |
| | Overall | | 6.9 | Α | | 11.1 | В | |

¹ Overall intersection LOS and delay reported for signalized intersections and roundabouts only.

^{# - 95}th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Table 3: Delay, LOS, and 95th Percentile Queue Length Summary 2024 Modified Total Volumes (Phase 1 and 100% Phase 2)

| | | Turn Lane Storage (ft) | AM | PEAK H | OUR | PM PEAK HOUR | | |
|-------------------------------------|---------------------------|---------------------------------|------------------------------|--------|--|------------------------------|-------|--|
| Intersection and Type of Control | Movement and Approach | | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) | Delay ¹ (sec/veh) | LOS 1 | 95th Percentile Queue Length (ft) |
| 1. Six Mount Zion Road (E-W) at | EB Dual Left ² | 200 | 23.7 | С | 139 | 19.9 | В | 100 |
| Mt. Laurel Road (N-S) | EB Thru-Right | | 8.1 | Α | 136 | 5.5 | Α | 145 |
| Signalized | EB Approach | | <i>15.7</i> | В | | 11.2 | В | |
| | WB Left-Thru-Right | | 24.9 | С | 216 | 18.2 | В | 234 |
| | WB Approach | | 24.9 | С | | 18.2 | В | |
| | NB Left-Thru-Right | | 17.6 | В | 32 | 19.8 | В | 93 |
| | NB Approach | | 17.6 | В | | 19.8 | В | |
| | SB Left-Thru | | 17.2 | В | 27 | 17.4 | В | 13 |
| | SB Right | 200 | 6.7 | Α | 31 | 9.2 | Α | 101 |
| | SB Approach | | 7.6 | Α | | 9.3 | Α | |
| | Overall | | 16.2 | В | | 13.0 | В | |
| 2. Six Mount Zion Road (E-W) at | EB Thru | | 9.5 | Α | 336 | 13.6 | В | 369 |
| Mt. Laurel Road (N-S) | EB Right | 200 | 4.4 | Α | 22 | 9.6 | Α | 40 |
| Signalized | EB Approach | | 7.9 | Α | | 12.4 | В | |
| | WB Left | 200 | 5.8 | Α | 43 | 10.2 | В | 52 |
| | WB Thru | | 5.2 | Α | 137 | 28.0 | С | #776 |
| | WB Approach | | 5.3 | Α | | 26.8 | С | |
| | NB Left | LMT | 19.8 | В | 101 | 31.3 | С | 323 |
| | NB Right | 200 | 18.0 | В | 24 | 17.0 | В | 30 |
| | NB Approach | | 19.4 | В | | 28.4 | С | |
| | Overall | | 8.0 | Α | | 22.3 | С | |

 $^{^{1}}$ Overall intersection LOS and delay reported for signalized intersections and roundabouts only.

² Dual left turn lanes; average storage is provided.

^{# - 95}th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Roundabout Analysis

Per the VDOT Road Design Manual, roundabouts are to be considered when a project includes re-constructing or constructing a new intersection. It should be noted that while this requirement exists, the approved proffers associated with the Stonehouse rezoning provide specific geometric improvements at each intersection and do not include the construction of roundabouts. This supplemental analysis addresses re-structuring the phasing only, not altering the proffers themselves.

The LaGrange Parkway/Six Mount Zion Road corridor holds more potential for the installation of roundabouts given the extent of work necessary to accommodate future improvements. That being noted, SIDRA analyses were conducted assuming the installation of a single lane roundabout at both the Mount Laurel Road and Fieldstone Parkway intersections. The operational analysis is summarized in Table 4 below:

Table 4: LOS and Delay Summary
LaGrange Parkway/Six Mount Zion Road Corridor Roundabouts

| | Mount Lau | rel Road/Si | x Mount Zi | on Road | Fieldstone | Parkway/Si | x Mount | Zion Road |
|--------------|-----------|-------------|------------|---------|------------|------------|---------|-----------|
| Scenario | AM Pe | eak | PM | Peak | AM | Peak | PIV | 1 Peak |
| | LOS | Delay | LOS | Delay | LOS | Delay | LOS | Delay |
| Phase 2 50% | С | 17.0 | С | 18.6 | В | 10.5 | Α | 9.3 |
| Phase 2 100% | F | 89.3 | F | 107.3 | С | 18.9 | В | 14.5 |

Based on the information above, a single lane roundabout could effectively serve the Fieldstone Parkway at Six Mount Zion Road intersection at both the 50% buildout and 100% buildout. A single lane roundabout could effectively serve the Mount Laurel Road at Six Mount Zion Road intersection assuming 50% buildout of Phase 2; at full buildout, a multilane roundabout would be needed at the Mount Laurel Road at Six Mount Zion Road intersection to provide an acceptable level of service.

It is assumed the inscribed diameter for a single lane roundabout would be approximately 120', while the inscribed diameter for a multilane roundabout would be approximately 175'. Under either scenario, it is anticipated that additional right of way (ROW) will be necessary to accommodate a roundabout.

Conclusions

The analyses of the revised 2024 total volumes with Phase 1 site trips plus the addition of 50% of the Phase 2 site trips, indicate that all movements on Six Mount Zion Road will operate at LOS C or better during the AM and PM peak hours assuming the inclusion of the following proffered improvements:

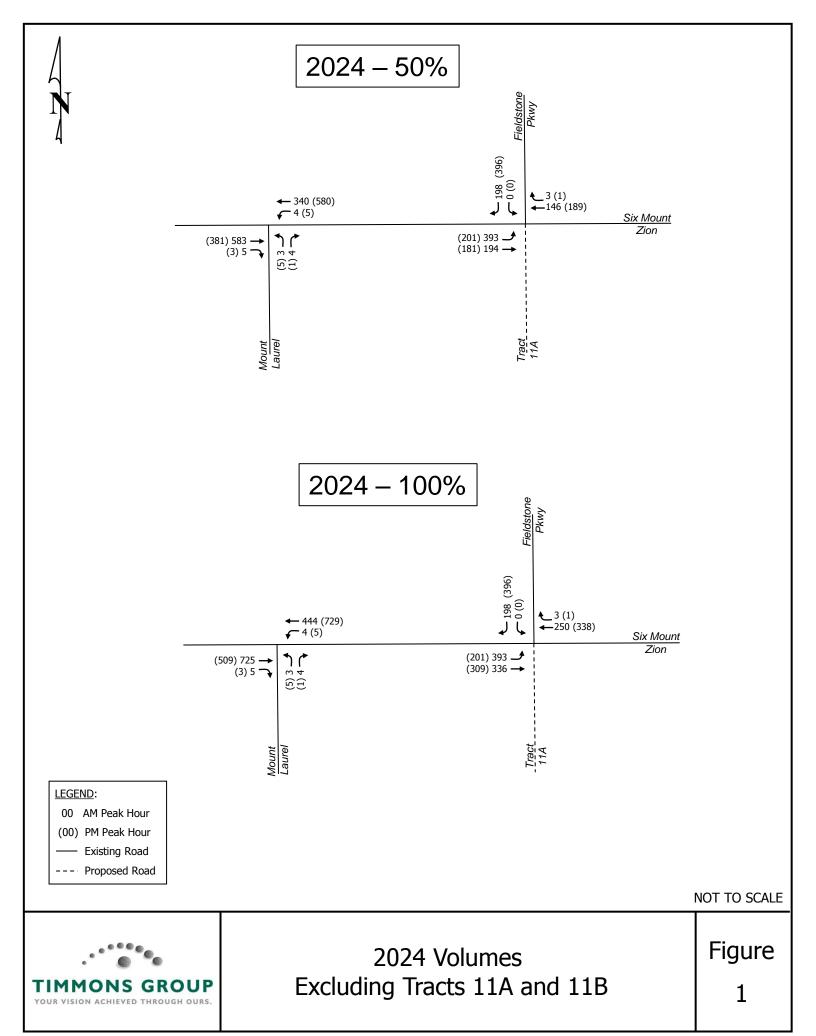
- 1. A traffic signal at the Six Mount Zion Road/Fieldstone Parkway intersection;
- 2. An eastbound left turn lane on Six Mount Zion Road at Fieldstone Parkway;
- 3. A southbound right turn lane on Fieldstone Parkway at Six Mount Zion Road;
- 4. A traffic signal at the Six Mount Zion Road/Mount Laurel Road intersection;
- 5. A westbound left turn lane on Six Mount Zion Road at Mount Laurel Road;
- 6. An eastbound right turn lane on Six Mount Zion Road at Mount Laurel Road; and
- 7. A northbound right turn lane on Mount Laurel Road at Six Mount Zion Road.

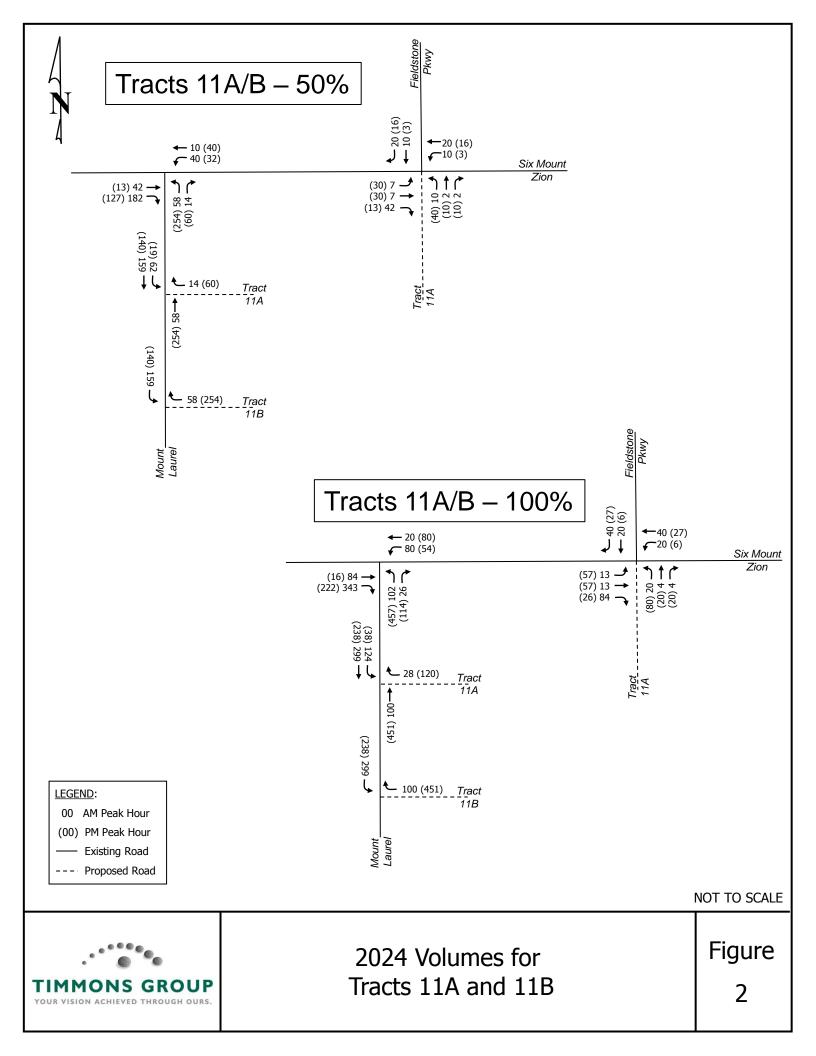
At full buildout, Phase 1 site trips plus 100% of the Phase 2 site trips, the following additional proffered improvements are required:

A second left turn lane will need to be installed on Six Mount Zion Road at Fieldstone Parkway.

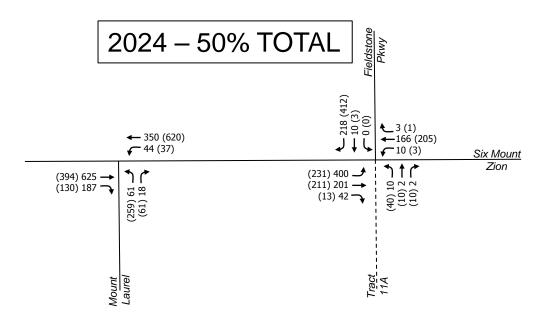
Assuming the above improvements, all movements on Six Mount Zion Road, Fieldstone Parkway, and Mount Laurel Road will continue to operate at LOS C or better during the AM and PM peak hours.

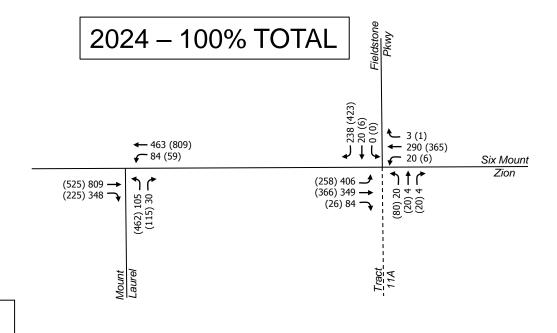
Lastly, the roundabout analysis indicates that a single lane roundabout may be a viable alternative to a conventional signalized intersection at Six Mount Zion Road and Fieldstone Parkway.











LEGEND:

00 AM Peak Hour

(00) PM Peak Hour

Existing Road

-- Proposed Road

NOT TO SCALE



2024 Volumes Including Tracts 11A and 11B Figure

3

Appendix A SYNCHRO & SimTraffic Analysis of 2024 Future Conditions

5: Mount Laurel Rd & Six Mount Zion Rd

| | - | • | • | ← | 4 | ~ |
|-------------------------|------|------|------|------|------|------|
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group Flow (vph) | 679 | 203 | 48 | 380 | 66 | 20 |
| v/c Ratio | 0.68 | 0.21 | 0.16 | 0.38 | 0.20 | 0.06 |
| Control Delay | 10.2 | 1.4 | 5.7 | 6.2 | 17.1 | 9.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 10.2 | 1.4 | 5.7 | 6.2 | 17.1 | 9.3 |
| Queue Length 50th (ft) | 82 | 0 | 4 | 37 | 12 | 0 |
| Queue Length 95th (ft) | 178 | 16 | 16 | 81 | 44 | 14 |
| Internal Link Dist (ft) | 982 | | | 397 | 583 | |
| Turn Bay Length (ft) | | 200 | 200 | | | 200 |
| Base Capacity (vph) | 1863 | 1583 | 557 | 1863 | 964 | 871 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.36 | 0.13 | 0.09 | 0.20 | 0.07 | 0.02 |
| Intersection Summary | | | | | | |

| | → | • | • | • | 4 | / | | | |
|---------------------------------|------------|------|-------|----------|------------|------------------|---|------|--|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | | | |
| Lane Configurations | † | 7 | ች | ^ | * | # | | | |
| Volume (vph) | 625 | 187 | 44 | 350 | 61 | 18 | | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | | | |
| Total Lost time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 1.00 | 0.85 | | | |
| Flt Protected | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | | | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 | | | |
| Flt Permitted | 1.00 | 1.00 | 0.30 | 1.00 | 0.95 | 1.00 | | | |
| Satd. Flow (perm) | 1863 | 1583 | 556 | 1863 | 1770 | 1583 | | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | | | |
| Adj. Flow (vph) | 679 | 203 | 48 | 380 | 66 | 20 | | | |
| RTOR Reduction (vph) | 0 | 93 | 0 | 0 | 0 | 16 | | | |
| Lane Group Flow (vph) | 679 | 110 | 48 | 380 | 66 | 4 | | | |
| Turn Type | NA | Perm | Perm | NA | Prot | Perm | | | |
| Protected Phases | 4 | . 0 | . 0 | 8 | 2 | | | | |
| Permitted Phases | • | 4 | 8 | | _ | 2 | | | |
| Actuated Green, G (s) | 20.6 | 20.6 | 20.6 | 20.6 | 7.3 | 7.3 | | | |
| Effective Green, g (s) | 20.6 | 20.6 | 20.6 | 20.6 | 7.3 | 7.3 | | | |
| Actuated g/C Ratio | 0.54 | 0.54 | 0.54 | 0.54 | 0.19 | 0.19 | | | |
| Clearance Time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | | |
| Lane Grp Cap (vph) | 1012 | 860 | 302 | 1012 | 340 | 304 | | | |
| v/s Ratio Prot | c0.36 | | | 0.20 | c0.04 | | | | |
| v/s Ratio Perm | | 0.07 | 0.09 | | | 0.00 | | | |
| v/c Ratio | 0.67 | 0.13 | 0.16 | 0.38 | 0.19 | 0.01 | | | |
| Uniform Delay, d1 | 6.2 | 4.2 | 4.3 | 5.0 | 12.8 | 12.4 | | | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | | |
| Incremental Delay, d2 | 1.8 | 0.1 | 0.2 | 0.2 | 0.3 | 0.0 | | | |
| Delay (s) | 8.0 | 4.3 | 4.6 | 5.2 | 13.1 | 12.4 | | | |
| Level of Service | Α | A | A | Α | В | В | | | |
| Approach Delay (s) | 7.1 | | | 5.1 | 12.9 | | | | |
| Approach LOS | Α | | | Α | В | | | | |
| Intersection Summary | | | | | | | | | |
| HCM 2000 Control Delay | | | 6.9 | H | CM 2000 | Level of Service | е | Α | |
| HCM 2000 Volume to Capac | city ratio | | 0.55 | | | | | | |
| Actuated Cycle Length (s) | | | 37.9 | | um of lost | . , | | 10.0 | |
| Intersection Capacity Utilizati | ion | | 48.3% | IC | U Level o | of Service | | Α | |
| Analysis Period (min) | | | 15 | | | | | | |
| c Critical Lane Group | | | 10 | | | | | | |

6: Tract 11A Entrance/Fieldstone Pkwy & Six Mount Zion Rd

| | ٠ | → | ← | † | ļ | 4 |
|-------------------------|------|----------|----------|----------|------|------|
| Lane Group | EBL | EBT | WBT | NBT | SBT | SBR |
| Lane Group Flow (vph) | 435 | 264 | 194 | 15 | 12 | 237 |
| v/c Ratio | 0.79 | 0.25 | 0.58 | 0.03 | 0.02 | 0.21 |
| Control Delay | 32.9 | 6.7 | 34.1 | 22.1 | 23.5 | 1.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 32.9 | 6.7 | 34.1 | 22.1 | 23.5 | 1.3 |
| Queue Length 50th (ft) | 164 | 44 | 75 | 4 | 4 | 0 |
| Queue Length 95th (ft) | 292 | 74 | 153 | 21 | 19 | 22 |
| Internal Link Dist (ft) | | 738 | 646 | 282 | 897 | |
| Turn Bay Length (ft) | 200 | | | | | 200 |
| Base Capacity (vph) | 807 | 1594 | 664 | 452 | 515 | 1326 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.54 | 0.17 | 0.29 | 0.03 | 0.02 | 0.18 |
| Intersection Summary | | | | | | |

| | ۶ | → | • | • | ← | • | 4 | † | / | / | Ţ | ✓ |
|-------------------------------|------------|----------|-------|------|-------------|------------|---------|----------|------|----------|------|-------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | Ť | î» | | | ĵ. | | | 4 | | | ર્ન | 7 |
| Volume (vph) | 400 | 201 | 42 | 10 | 166 | 3 | 10 | 2 | 2 | 1 | 10 | 218 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | | 1.00 | | | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | 1.00 | 1.00 |
| Satd. Flow (prot) | 1770 | 1814 | | | 1854 | | | 1765 | | | 1855 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | | 0.97 | | | 0.88 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 1770 | 1814 | | | 1805 | | | 1611 | | | 1843 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 435 | 218 | 46 | 11 | 180 | 3 | 11 | 2 | 2 | 1 | 11 | 237 |
| RTOR Reduction (vph) | 0 | 11 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 79 |
| Lane Group Flow (vph) | 435 | 253 | 0 | 0 | 193 | 0 | 0 | 14 | 0 | 0 | 12 | 158 |
| Turn Type | Prot | NA | | Perm | NA | | Perm | NA | | Perm | NA | pt+ov |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | 6 | 6 7 |
| Permitted Phases | | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 21.8 | 39.8 | | | 13.0 | | | 19.4 | | | 19.4 | 46.2 |
| Effective Green, g (s) | 21.8 | 39.8 | | | 13.0 | | | 19.4 | | | 19.4 | 46.2 |
| Actuated g/C Ratio | 0.32 | 0.58 | | | 0.19 | | | 0.28 | | | 0.28 | 0.67 |
| Clearance Time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | 557 | 1043 | | | 339 | | | 451 | | | 516 | 1056 |
| v/s Ratio Prot | c0.25 | 0.14 | | | | | | | | | | c0.10 |
| v/s Ratio Perm | | | | | c0.11 | | | 0.01 | | | 0.01 | |
| v/c Ratio | 0.78 | 0.24 | | | 0.57 | | | 0.03 | | | 0.02 | 0.15 |
| Uniform Delay, d1 | 21.5 | 7.3 | | | 25.6 | | | 18.1 | | | 18.0 | 4.2 |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 7.0 | 0.1 | | | 2.2 | | | 0.1 | | | 0.0 | 0.1 |
| Delay (s) | 28.5 | 7.4 | | | 27.8 | | | 18.2 | | | 18.1 | 4.3 |
| Level of Service | С | Α | | | С | | | В | | | В | Α |
| Approach Delay (s) | | 20.6 | | | 27.8 | | | 18.2 | | | 5.0 | |
| Approach LOS | | С | | | С | | | В | | | Α | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 18.4 | Н | CM 2000 | Level of | Service | | В | | | |
| HCM 2000 Volume to Capa | city ratio | | 0.51 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 69.2 | | um of lost | | | | 15.0 | | | |
| Intersection Capacity Utiliza | tion | | 51.6% | IC | CU Level of | of Service | 1 | | Α | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | |

| | - | \rightarrow | • | • | • | ~ |
|-------------------------|------|---------------|------|------|------|------|
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group Flow (vph) | 428 | 141 | 40 | 674 | 282 | 66 |
| v/c Ratio | 0.46 | 0.16 | 0.09 | 0.73 | 0.56 | 0.13 |
| Control Delay | 10.2 | 2.1 | 7.7 | 15.3 | 22.2 | 6.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 10.2 | 2.1 | 7.7 | 15.3 | 22.2 | 6.2 |
| Queue Length 50th (ft) | 67 | 0 | 5 | 128 | 64 | 0 |
| Queue Length 95th (ft) | 166 | 22 | 22 | 309 | 181 | 26 |
| Internal Link Dist (ft) | 982 | | | 397 | 583 | |
| Turn Bay Length (ft) | | 200 | 200 | | | 200 |
| Base Capacity (vph) | 1712 | 1466 | 788 | 1712 | 1075 | 988 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.25 | 0.10 | 0.05 | 0.39 | 0.26 | 0.07 |
| Intersection Summary | | | | | | |

| | - | • | • | • | 4 | <i>></i> | | |
|-------------------------------|------------|------|-------|---------|------------|------------------|---|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | | |
| Lane Configurations | † | 7 | * | | ሻ | # | | |
| Volume (vph) | 394 | 130 | 37 | 620 | 259 | 61 | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | | |
| Total Lost time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 1.00 | 0.85 | | |
| Flt Protected | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 | | |
| FIt Permitted | 1.00 | 1.00 | 0.46 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (perm) | 1863 | 1583 | 858 | 1863 | 1770 | 1583 | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | | |
| Adj. Flow (vph) | 428 | 141 | 40 | 674 | 282 | 66 | | |
| RTOR Reduction (vph) | 0 | 69 | 0 | 0 | 0 | 47 | | |
| Lane Group Flow (vph) | 428 | 72 | 40 | 674 | 282 | 19 | | |
| Turn Type | NA | Perm | Perm | NA | Prot | Perm | | |
| Protected Phases | 4 | | | 8 | 5 | | | |
| Permitted Phases | | 4 | 8 | | | 5 | | |
| Actuated Green, G (s) | 25.1 | 25.1 | 25.1 | 25.1 | 14.3 | 14.3 | | |
| Effective Green, g (s) | 25.1 | 25.1 | 25.1 | 25.1 | 14.3 | 14.3 | | |
| Actuated g/C Ratio | 0.51 | 0.51 | 0.51 | 0.51 | 0.29 | 0.29 | | |
| Clearance Time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | |
| Lane Grp Cap (vph) | 946 | 804 | 435 | 946 | 512 | 458 | | |
| v/s Ratio Prot | 0.23 | | | c0.36 | c0.16 | | | |
| v/s Ratio Perm | | 0.05 | 0.05 | | | 0.01 | | |
| v/c Ratio | 0.45 | 0.09 | 0.09 | 0.71 | 0.55 | 0.04 | | |
| Uniform Delay, d1 | 7.8 | 6.3 | 6.3 | 9.4 | 14.8 | 12.6 | | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Incremental Delay, d2 | 0.3 | 0.0 | 0.1 | 2.6 | 1.3 | 0.0 | | |
| Delay (s) | 8.1 | 6.3 | 6.4 | 11.9 | 16.1 | 12.7 | | |
| Level of Service | Α | Α | Α | В | В | В | | |
| Approach Delay (s) | 7.7 | | | 11.6 | 15.5 | | | |
| Approach LOS | Α | | | В | В | | | |
| Intersection Summary | | | | | | | | |
| HCM 2000 Control Delay | | | 11.1 | Н | CM 2000 | Level of Service |) | В |
| HCM 2000 Volume to Capa | city ratio | | 0.65 | | | | | |
| Actuated Cycle Length (s) | | | 49.4 | | um of lost | | | 10.0 |
| Intersection Capacity Utiliza | ition | | 55.3% | IC | CU Level | of Service | | В |
| Analysis Period (min) | | | 15 | | | | | |
| c Critical Lane Group | | | | | | | | |

6: Tract 11A Entrance/Fieldstone Pkwy & Six Mount Zion Rd

| | • | → | ← | † | ļ | 4 |
|-------------------------|------|----------|------|----------|------|------|
| Lane Group | EBL | EBT | WBT | NBT | SBT | SBR |
| Lane Group Flow (vph) | 251 | 243 | 237 | 65 | 4 | 448 |
| v/c Ratio | 0.54 | 0.21 | 0.53 | 0.25 | 0.01 | 0.44 |
| Control Delay | 22.1 | 4.9 | 22.9 | 20.4 | 20.8 | 3.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 22.1 | 4.9 | 22.9 | 20.4 | 20.8 | 3.2 |
| Queue Length 50th (ft) | 57 | 22 | 54 | 13 | 1 | 11 |
| Queue Length 95th (ft) | 155 | 64 | 150 | 51 | 9 | 55 |
| Internal Link Dist (ft) | | 738 | 646 | 282 | 897 | |
| Turn Bay Length (ft) | 200 | | | | | 200 |
| Base Capacity (vph) | 928 | 1724 | 878 | 828 | 986 | 1372 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.27 | 0.14 | 0.27 | 0.08 | 0.00 | 0.33 |
| Intersection Summary | | | | | | |

| | ۶ | → | • | • | ← | • | 4 | † | / | / | ↓ | ✓ |
|-------------------------------|------------|----------|-------|------|-------------|------------|---------|----------|----------|----------|----------|-------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ħ | f) | | | 4 | | | 4 | | | 4 | 7 |
| Volume (vph) | 231 | 211 | 13 | 10 | 205 | 3 | 40 | 10 | 10 | 1 | 3 | 412 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 5.0 |
| Lane Util. Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 0.99 | | | 1.00 | | | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.97 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 1770 | 1847 | | | 1855 | | | 1762 | | | 1840 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | | 0.98 | | | 0.80 | | | 0.93 | 1.00 |
| Satd. Flow (perm) | 1770 | 1847 | | | 1819 | | | 1454 | | | 1739 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 251 | 229 | 14 | 11 | 223 | 3 | 43 | 11 | 11 | 1 | 3 | 448 |
| RTOR Reduction (vph) | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 9 | 0 | 0 | 0 | 161 |
| Lane Group Flow (vph) | 251 | 241 | 0 | 0 | 236 | 0 | 0 | 56 | 0 | 0 | 4 | 287 |
| Turn Type | Prot | NA | | Perm | NA | | Perm | NA | | Perm | NA | pt+ov |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | 6 | 6 7 |
| Permitted Phases | | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 13.3 | 31.1 | | | 12.8 | | | 8.8 | | | 8.8 | 27.1 |
| Effective Green, g (s) | 13.3 | 31.1 | | | 12.8 | | | 8.8 | | | 8.8 | 27.1 |
| Actuated g/C Ratio | 0.27 | 0.62 | | | 0.26 | | | 0.18 | | | 0.18 | 0.54 |
| Clearance Time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | 471 | 1151 | | | 466 | | | 256 | | | 306 | 859 |
| v/s Ratio Prot | c0.14 | 0.13 | | | | | | | | | | c0.18 |
| v/s Ratio Perm | | | | | c0.13 | | | 0.04 | | | 0.00 | |
| v/c Ratio | 0.53 | 0.21 | | | 0.51 | | | 0.22 | | | 0.01 | 0.33 |
| Uniform Delay, d1 | 15.6 | 4.1 | | | 15.9 | | | 17.6 | | | 17.0 | 6.4 |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.2 | 0.1 | | | 0.9 | | | 0.4 | | | 0.0 | 0.2 |
| Delay (s) | 16.8 | 4.2 | | | 16.7 | | | 18.0 | | | 17.0 | 6.6 |
| Level of Service | В | Α | | | В | | | В | | | В | Α |
| Approach Delay (s) | | 10.6 | | | 16.7 | | | 18.0 | | | 6.7 | |
| Approach LOS | | В | | | В | | | В | | | Α | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 10.7 | Н | CM 2000 | Level of | Service | | В | | | |
| HCM 2000 Volume to Capa | city ratio | | 0.50 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 49.9 | | um of lost | | | | 15.0 | | | |
| Intersection Capacity Utiliza | tion | | 52.9% | IC | CU Level of | of Service | | | Α | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | |

| | - | • | • | • | • | ~ |
|-------------------------|------|------|------|------|------|------|
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group Flow (vph) | 879 | 378 | 91 | 503 | 114 | 33 |
| v/c Ratio | 0.76 | 0.34 | 0.39 | 0.44 | 0.37 | 0.11 |
| Control Delay | 12.1 | 1.4 | 10.6 | 6.3 | 27.6 | 11.5 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 12.1 | 1.4 | 10.6 | 6.3 | 27.6 | 11.5 |
| Queue Length 50th (ft) | 149 | 0 | 11 | 62 | 31 | 0 |
| Queue Length 95th (ft) | 336 | 22 | 43 | 137 | 101 | 24 |
| Internal Link Dist (ft) | 982 | | | 397 | 583 | |
| Turn Bay Length (ft) | | 200 | 200 | | | 200 |
| Base Capacity (vph) | 1774 | 1525 | 355 | 1774 | 610 | 567 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.50 | 0.25 | 0.26 | 0.28 | 0.19 | 0.06 |
| Intersection Summary | | | | | | |

| | - | • | • | • | 4 | ~ | | |
|-------------------------------|------------|------|-------|----------|-------------|------------------|---|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | | |
| Lane Configurations | † | 7 | ሻ | † | * | 7 | | |
| Volume (vph) | 809 | 348 | 84 | 463 | 105 | 30 | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | | |
| Total Lost time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 1.00 | 0.85 | | |
| Flt Protected | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 | | |
| Flt Permitted | 1.00 | 1.00 | 0.20 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (perm) | 1863 | 1583 | 373 | 1863 | 1770 | 1583 | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | | |
| Adj. Flow (vph) | 879 | 378 | 91 | 503 | 114 | 33 | | |
| RTOR Reduction (vph) | 0 | 139 | 0 | 0 | 0 | 27 | | |
| Lane Group Flow (vph) | 879 | 239 | 91 | 503 | 114 | 6 | | |
| Turn Type | NA | Perm | Perm | NA | Prot | Prot | | |
| Protected Phases | 4 | | | 8 | 2 | 2 | | |
| Permitted Phases | | 4 | 8 | | | | | |
| Actuated Green, G (s) | 33.7 | 33.7 | 33.7 | 33.7 | 9.6 | 9.6 | | |
| Effective Green, g (s) | 33.7 | 33.7 | 33.7 | 33.7 | 9.6 | 9.6 | | |
| Actuated g/C Ratio | 0.63 | 0.63 | 0.63 | 0.63 | 0.18 | 0.18 | | |
| Clearance Time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | |
| Lane Grp Cap (vph) | 1177 | 1000 | 235 | 1177 | 318 | 285 | | |
| v/s Ratio Prot | c0.47 | | | 0.27 | c0.06 | 0.00 | | |
| v/s Ratio Perm | | 0.15 | 0.24 | | | | | |
| v/c Ratio | 0.75 | 0.24 | 0.39 | 0.43 | 0.36 | 0.02 | | |
| Uniform Delay, d1 | 6.8 | 4.2 | 4.8 | 4.9 | 19.2 | 18.0 | | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Incremental Delay, d2 | 2.6 | 0.1 | 1.1 | 0.3 | 0.7 | 0.0 | | |
| Delay (s) | 9.5 | 4.4 | 5.8 | 5.2 | 19.8 | 18.0 | | |
| Level of Service | Α | Α | Α | Α | В | В | | |
| Approach Delay (s) | 7.9 | | | 5.3 | 19.4 | | | |
| Approach LOS | Α | | | Α | В | | | |
| Intersection Summary | | | | | | | | |
| HCM 2000 Control Delay | | | 8.0 | Н | CM 2000 | Level of Service | е | Α |
| HCM 2000 Volume to Capa | city ratio | | 0.66 | | | | | |
| Actuated Cycle Length (s) | | | 53.3 | | um of lost | ٠, | | 10.0 |
| Intersection Capacity Utiliza | ation | | 65.5% | IC | CU Level of | of Service | | С |
| Analysis Period (min) | | | 15 | | | | | |
| c Critical Lane Group | | | | | | | | |

6: Tract 11A Entrance/Fieldstone Pkwy & Six Mount Zion Rd

| | ۶ | → | ← | † | ļ | 4 |
|-------------------------|------|----------|----------|----------|------|------|
| Lane Group | EBL | EBT | WBT | NBT | SBT | SBR |
| Lane Group Flow (vph) | 441 | 470 | 340 | 30 | 23 | 259 |
| v/c Ratio | 0.59 | 0.45 | 0.70 | 0.07 | 0.05 | 0.26 |
| Control Delay | 26.8 | 8.4 | 29.4 | 20.2 | 22.0 | 2.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 26.8 | 8.4 | 29.4 | 20.2 | 22.0 | 2.0 |
| Queue Length 50th (ft) | 78 | 85 | 115 | 7 | 6 | 0 |
| Queue Length 95th (ft) | 139 | 136 | 216 | 32 | 27 | 31 |
| Internal Link Dist (ft) | | 738 | 646 | 282 | 897 | |
| Turn Bay Length (ft) | 200 | | | | | 200 |
| Base Capacity (vph) | 1255 | 1707 | 985 | 421 | 500 | 1206 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.35 | 0.28 | 0.35 | 0.07 | 0.05 | 0.21 |
| Intersection Summary | | | | | | |

| | ۶ | → | • | • | ← | • | 4 | † | / | / | ↓ | ✓ |
|-------------------------------|------------|----------|-------|------|-------------|------------|---------|----------|------|----------|----------|-------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 16.64 | † | | | 4 | | | 4 | | | 4 | 7 |
| Volume (vph) | 406 | 349 | 84 | 20 | 290 | 3 | 20 | 4 | 4 | 1 | 20 | 238 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 5.0 |
| Lane Util. Factor | 0.97 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 0.97 | | | 1.00 | | | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.96 | | | 1.00 | 1.00 |
| Satd. Flow (prot) | 3433 | 1809 | | | 1855 | | | 1765 | | | 1859 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | | 0.95 | | | 0.85 | | | 0.99 | 1.00 |
| Satd. Flow (perm) | 3433 | 1809 | | | 1770 | | | 1547 | | | 1851 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 441 | 379 | 91 | 22 | 315 | 3 | 22 | 4 | 4 | 1 | 22 | 259 |
| RTOR Reduction (vph) | 0 | 14 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 112 |
| Lane Group Flow (vph) | 441 | 456 | 0 | 0 | 339 | 0 | 0 | 27 | 0 | 0 | 23 | 147 |
| Turn Type | Prot | NA | | Perm | NA | | Perm | NA | | Perm | NA | pt+ov |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | 6 | 6 7 |
| Permitted Phases | | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 13.9 | 36.6 | | | 17.7 | | | 17.3 | | | 17.3 | 36.2 |
| Effective Green, g (s) | 13.9 | 36.6 | | | 17.7 | | | 17.3 | | | 17.3 | 36.2 |
| Actuated g/C Ratio | 0.22 | 0.57 | | | 0.28 | | | 0.27 | | | 0.27 | 0.57 |
| Clearance Time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | 746 | 1036 | | | 490 | | | 418 | | | 501 | 896 |
| v/s Ratio Prot | c0.13 | 0.25 | | | | | | | | | | c0.09 |
| v/s Ratio Perm | | | | | c0.19 | | | 0.02 | | | 0.01 | |
| v/c Ratio | 0.59 | 0.44 | | | 0.69 | | | 0.06 | | | 0.05 | 0.16 |
| Uniform Delay, d1 | 22.4 | 7.8 | | | 20.7 | | | 17.3 | | | 17.2 | 6.6 |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 1.3 | 0.3 | | | 4.2 | | | 0.3 | | | 0.0 | 0.1 |
| Delay (s) | 23.7 | 8.1 | | | 24.9 | | | 17.6 | | | 17.2 | 6.7 |
| Level of Service | С | Α | | | С | | | В | | | В | Α |
| Approach Delay (s) | | 15.7 | | | 24.9 | | | 17.6 | | | 7.6 | |
| Approach LOS | | В | | | С | | | В | | | Α | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 16.2 | Н | CM 2000 | Level of | Service | | В | | | |
| HCM 2000 Volume to Capa | city ratio | | 0.48 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 63.9 | | um of lost | | | | 15.0 | | | |
| Intersection Capacity Utiliza | ition | | 60.8% | IC | CU Level of | of Service | | | В | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | |

| | - | • | • | ← | 4 | |
|-------------------------|------|------|------|----------|------|------|
| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group Flow (vph) | 571 | 245 | 64 | 879 | 502 | 125 |
| v/c Ratio | 0.59 | 0.26 | 0.21 | 0.90 | 0.82 | 0.20 |
| Control Delay | 17.7 | 2.8 | 15.0 | 33.9 | 34.2 | 3.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 17.7 | 2.8 | 15.0 | 33.9 | 34.2 | 3.9 |
| Queue Length 50th (ft) | 173 | 0 | 15 | 350 | 214 | 0 |
| Queue Length 95th (ft) | 369 | 40 | 52 | #776 | 323 | 30 |
| Internal Link Dist (ft) | 982 | | | 397 | 583 | |
| Turn Bay Length (ft) | | 200 | 200 | | | 200 |
| Base Capacity (vph) | 973 | 943 | 306 | 973 | 924 | 886 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.59 | 0.26 | 0.21 | 0.90 | 0.54 | 0.14 |
| Intersection Summary | | | | | | |

^{# 95}th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

| | - | • | • | • | 4 | <i>></i> | | |
|-------------------------------|------------|------|-------|---------|------------|------------------|---|------|
| Movement | EBT | EBR | WBL | WBT | NBL | NBR | | |
| Lane Configurations | † | 7 | * | | * | 1 | | |
| Volume (vph) | 525 | 225 | 59 | 809 | 462 | 115 | | |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | | |
| Total Lost time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Frt | 1.00 | 0.85 | 1.00 | 1.00 | 1.00 | 0.85 | | |
| Flt Protected | 1.00 | 1.00 | 0.95 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (prot) | 1863 | 1583 | 1770 | 1863 | 1770 | 1583 | | |
| Flt Permitted | 1.00 | 1.00 | 0.32 | 1.00 | 0.95 | 1.00 | | |
| Satd. Flow (perm) | 1863 | 1583 | 587 | 1863 | 1770 | 1583 | | |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | | |
| Adj. Flow (vph) | 571 | 245 | 64 | 879 | 502 | 125 | | |
| RTOR Reduction (vph) | 0 | 117 | 0 | 0 | 0 | 82 | | |
| Lane Group Flow (vph) | 571 | 128 | 64 | 879 | 502 | 43 | | |
| Turn Type | NA | Perm | Perm | NA | Prot | Prot | | |
| Protected Phases | 4 | | | 8 | 2 | 2 | | |
| Permitted Phases | | 4 | 8 | | | | | |
| Actuated Green, G (s) | 40.4 | 40.4 | 40.4 | 40.4 | 26.8 | 26.8 | | |
| Effective Green, g (s) | 40.4 | 40.4 | 40.4 | 40.4 | 26.8 | 26.8 | | |
| Actuated g/C Ratio | 0.52 | 0.52 | 0.52 | 0.52 | 0.35 | 0.35 | | |
| Clearance Time (s) | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | |
| Vehicle Extension (s) | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | | |
| Lane Grp Cap (vph) | 974 | 828 | 307 | 974 | 614 | 549 | | |
| v/s Ratio Prot | 0.31 | | | c0.47 | c0.28 | 0.03 | | |
| v/s Ratio Perm | | 0.08 | 0.11 | | | | | |
| v/c Ratio | 0.59 | 0.15 | 0.21 | 0.90 | 0.82 | 0.08 | | |
| Uniform Delay, d1 | 12.7 | 9.5 | 9.8 | 16.6 | 23.0 | 16.9 | | |
| Progression Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | |
| Incremental Delay, d2 | 0.9 | 0.1 | 0.3 | 11.4 | 8.3 | 0.1 | | |
| Delay (s) | 13.6 | 9.6 | 10.2 | 28.0 | 31.3 | 17.0 | | |
| Level of Service | В | Α | В | С | С | В | | |
| Approach Delay (s) | 12.4 | | | 26.8 | 28.4 | | | |
| Approach LOS | В | | | С | С | | | |
| Intersection Summary | | | | | | | | |
| HCM 2000 Control Delay | | | 22.3 | Н | CM 2000 | Level of Service |) | С |
| HCM 2000 Volume to Capa | city ratio | | 0.87 | | | | | |
| Actuated Cycle Length (s) | | | 77.2 | | um of lost | ` ' | | 10.0 |
| Intersection Capacity Utiliza | tion | | 76.5% | IC | CU Level o | of Service | | D |
| Analysis Period (min) | | | 15 | | | | | |
| c Critical Lane Group | | | | | | | | |

6: Six Mount Zion Rd & Fieldstone Pkwy

| | ۶ | → | ← | † | ļ | 4 |
|-------------------------|------|----------|----------|----------|------|------|
| Lane Group | EBL | EBT | WBT | NBT | SBT | SBR |
| Lane Group Flow (vph) | 280 | 426 | 395 | 131 | 8 | 460 |
| v/c Ratio | 0.43 | 0.38 | 0.67 | 0.43 | 0.02 | 0.49 |
| Control Delay | 24.5 | 7.1 | 23.4 | 24.5 | 20.3 | 5.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 24.5 | 7.1 | 23.4 | 24.5 | 20.3 | 5.6 |
| Queue Length 50th (ft) | 39 | 53 | 105 | 33 | 2 | 24 |
| Queue Length 95th (ft) | 100 | 145 | 234 | 93 | 13 | 101 |
| Internal Link Dist (ft) | | 738 | 646 | 282 | 897 | |
| Turn Bay Length (ft) | 200 | | | | | 200 |
| Base Capacity (vph) | 855 | 1684 | 1274 | 727 | 896 | 1019 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.33 | 0.25 | 0.31 | 0.18 | 0.01 | 0.45 |
| Intersection Summary | | | | | | |

| | ۶ | → | • | • | ← | • | 4 | † | / | / | ↓ | ✓ |
|---------------------------------|-----------|----------|-------|------|-------------|------------|---------|----------|------|----------|----------|-------|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | 75 | f) | | | 4 | | | 4 | | | 4 | 7 |
| Volume (vph) | 258 | 366 | 26 | 6 | 356 | 1 | 80 | 20 | 20 | 1 | 6 | 423 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Total Lost time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | 5.0 |
| Lane Util. Factor | 0.97 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Frt | 1.00 | 0.99 | | | 1.00 | | | 0.98 | | | 1.00 | 0.85 |
| Flt Protected | 0.95 | 1.00 | | | 1.00 | | | 0.97 | | | 0.99 | 1.00 |
| Satd. Flow (prot) | 3433 | 1844 | | | 1860 | | | 1762 | | | 1851 | 1583 |
| Flt Permitted | 0.95 | 1.00 | | | 0.99 | | | 0.80 | | | 0.97 | 1.00 |
| Satd. Flow (perm) | 3433 | 1844 | | | 1845 | | | 1448 | | | 1799 | 1583 |
| Peak-hour factor, PHF | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 280 | 398 | 28 | 7 | 387 | 1 | 87 | 22 | 22 | 1 | 7 | 460 |
| RTOR Reduction (vph) | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 0 | 0 | 159 |
| Lane Group Flow (vph) | 280 | 423 | 0 | 0 | 395 | 0 | 0 | 122 | 0 | 0 | 8 | 301 |
| Turn Type | Prot | NA | | Perm | NA | | Perm | NA | | Perm | NA | pt+ov |
| Protected Phases | 7 | 4 | | | 8 | | | 2 | | | 6 | 6 7 |
| Permitted Phases | | | | 8 | | | 2 | | | 6 | | |
| Actuated Green, G (s) | 10.5 | 33.5 | | | 18.0 | | | 11.2 | | | 11.2 | 26.7 |
| Effective Green, g (s) | 10.5 | 33.5 | | | 18.0 | | | 11.2 | | | 11.2 | 26.7 |
| Actuated g/C Ratio | 0.19 | 0.61 | | | 0.33 | | | 0.20 | | | 0.20 | 0.49 |
| Clearance Time (s) | 5.0 | 5.0 | | | 5.0 | | | 5.0 | | | 5.0 | |
| Vehicle Extension (s) | 3.0 | 3.0 | | | 3.0 | | | 3.0 | | | 3.0 | |
| Lane Grp Cap (vph) | 658 | 1129 | | | 607 | | | 296 | | | 368 | 772 |
| v/s Ratio Prot | 0.08 | 0.23 | | | | | | | | | | c0.19 |
| v/s Ratio Perm | | | | | c0.21 | | | 0.08 | | | 0.00 | |
| v/c Ratio | 0.43 | 0.37 | | | 0.65 | | | 0.41 | | | 0.02 | 0.39 |
| Uniform Delay, d1 | 19.4 | 5.3 | | | 15.7 | | | 18.9 | | | 17.4 | 8.8 |
| Progression Factor | 1.00 | 1.00 | | | 1.00 | | | 1.00 | | | 1.00 | 1.00 |
| Incremental Delay, d2 | 0.4 | 0.2 | | | 2.5 | | | 0.9 | | | 0.0 | 0.3 |
| Delay (s) | 19.9 | 5.5 | | | 18.2 | | | 19.8 | | | 17.4 | 9.2 |
| Level of Service | В | Α | | | В | | | В | | | В | Α |
| Approach Delay (s) | | 11.2 | | | 18.2 | | | 19.8 | | | 9.3 | |
| Approach LOS | | В | | | В | | | В | | | Α | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2000 Control Delay | | | 13.0 | H | CM 2000 | Level of | Service | | В | | | |
| HCM 2000 Volume to Capac | ity ratio | | 0.56 | | | | | | | | | |
| Actuated Cycle Length (s) | | | 54.7 | | um of lost | ٠, | | | 15.0 | | | |
| Intersection Capacity Utilizati | ion | | 65.8% | IC | CU Level of | of Service | | | С | | | |
| Analysis Period (min) | | | 15 | | | | | | | | | |
| c Critical Lane Group | | | | | | | | | | | | |

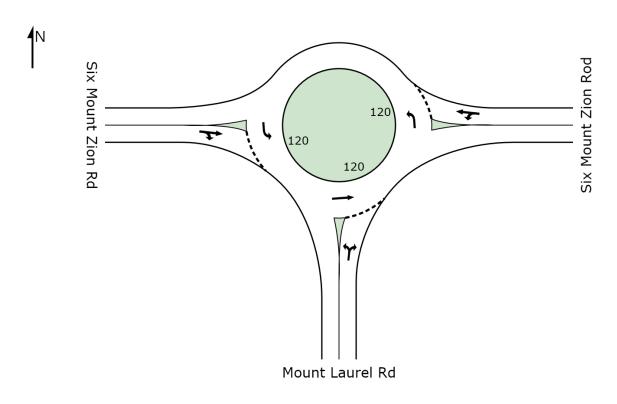
| Stonehouse Development, 2024 Supplemental Analyses – James City County, V | Virginia |
|---|----------|
| | |

03/13/2015

Appendix B SIDRA Analysis of 2024 Future Conditions

LAYOUT Site: 2024 AM – 50%

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| | | • | | | | | | | | | |
|----------|----------|------------|-----------|-----------|---------|----------|----------|----------|--------|-----------|---------|
| Moven | nent Pe | erformance | e - Vehic | cies | | | | | | | |
| Mov ID | Turn | Demand | HV [| Deg. Satn | Average | Level of | 95% Back | of Queue | Prop. | Effective | Average |
| | | Flow | | | Delay | Service | Vehicles | Distance | Queued | Stop Rate | Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: I | Mount La | aurel Rd | | | | | | | | | |
| 3 | L | 66 | 2.0 | 0.155 | 8.5 | LOS A | 0.5 | 13.3 | 0.57 | 0.89 | 25.9 |
| 18 | R | 20 | 2.0 | 0.155 | 8.5 | LOS A | 0.5 | 13.3 | 0.57 | 0.76 | 27.9 |
| Approac | ch | 86 | 2.0 | 0.155 | 8.5 | LOS A | 0.5 | 13.3 | 0.57 | 0.86 | 26.3 |
| East: Si | ix Mount | Zion Rod | | | | | | | | | |
| 1 | L | 48 | 2.0 | 0.414 | 8.0 | LOS A | 2.2 | 55.7 | 0.26 | 0.87 | 26.3 |
| 6 | T | 380 | 2.0 | 0.414 | 8.0 | LOS A | 2.2 | 55.7 | 0.26 | 0.41 | 29.3 |
| Approac | ch | 428 | 2.0 | 0.414 | 8.0 | LOS A | 2.2 | 55.7 | 0.26 | 0.47 | 28.9 |
| West: S | Six Moun | t Zion Rd | | | | | | | | | |
| 2 | Т | 679 | 2.0 | 0.837 | 22.2 | LOS C | 12.6 | 319.7 | 0.60 | 0.44 | 22.4 |
| 12 | R | 203 | 2.0 | 0.837 | 22.2 | LOS C | 12.6 | 319.7 | 0.60 | 0.49 | 22.2 |
| Approac | ch | 883 | 2.0 | 0.837 | 22.2 | LOS C | 12.6 | 319.7 | 0.60 | 0.45 | 22.4 |
| All Vehi | cles | 1397 | 2.0 | 0.837 | 17.0 | LOS C | 12.6 | 319.7 | 0.49 | 0.48 | 24.3 |

Site: 2024 AM - 50%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

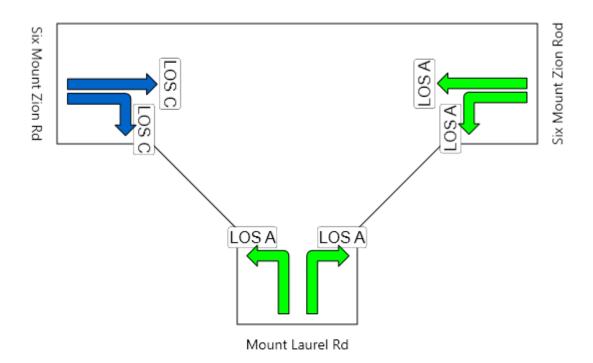
Roundabout Capacity Model: US HCM 2010.

HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 50%

| | South | East | West | Intersection |
|-----|-------|------|------|--------------|
| LOS | Α | Α | С | С |

Colour code based on Level of Service

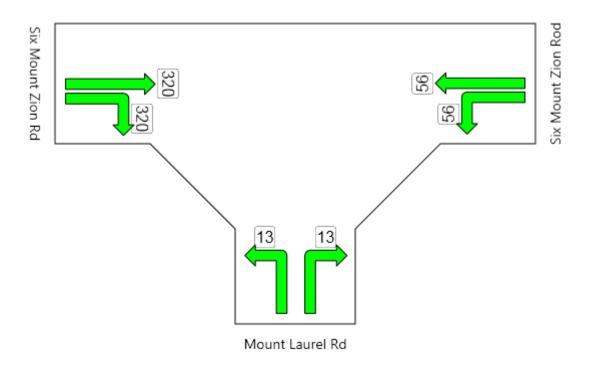
LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

QUEUE DISTANCE

Largest 95% Back of Queue for any lane used by movement (feet)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 50%

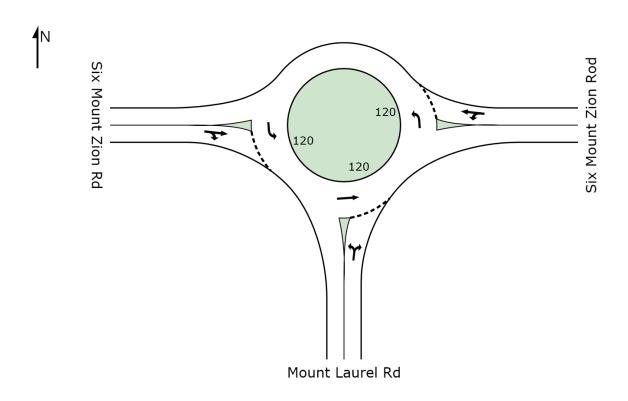
| | South | East | West | Intersection |
|----------------|-------|------|------|--------------|
| Queue Distance | 13 | 56 | 320 | 320 |

Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7] [0.7-0.8] [0.8-0.9] [0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 PM – 50%

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Moven | nent Pe | erformance | e - veni | cies | | | | | | | |
|----------|----------|------------|----------|-----------|---------|----------|----------|----------|--------|-----------|---------|
| Mov ID | Turn | Demand | HV I | Deg. Satn | Average | Level of | 95% Back | of Queue | Prop. | Effective | Average |
| | | Flow | | | Delay | Service | Vehicles | Distance | Queued | Stop Rate | Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: I | Mount La | aurel Rd | | | | | | | | | |
| 3 | L | 282 | 2.0 | 0.486 | 12.1 | LOS B | 2.5 | 63.9 | 0.63 | 0.93 | 24.3 |
| 18 | R | 66 | 2.0 | 0.486 | 12.1 | LOS B | 2.5 | 63.9 | 0.63 | 0.82 | 25.9 |
| Approac | ch | 348 | 2.0 | 0.486 | 12.1 | LOS B | 2.5 | 63.9 | 0.63 | 0.91 | 24.6 |
| East: Si | ix Mount | Zion Rod | | | | | | | | | |
| 1 | L | 40 | 2.0 | 0.859 | 28.7 | LOS D | 12.0 | 305.6 | 0.96 | 1.11 | 19.7 |
| 6 | Т | 674 | 2.0 | 0.859 | 28.7 | LOS D | 12.0 | 305.6 | 0.96 | 1.09 | 20.3 |
| Approac | ch | 714 | 2.0 | 0.859 | 28.7 | LOS D | 12.0 | 305.6 | 0.96 | 1.09 | 20.3 |
| West: S | Six Moun | t Zion Rd | | | | | | | | | |
| 2 | Т | 428 | 2.0 | 0.536 | 9.9 | LOS A | 3.6 | 90.4 | 0.24 | 0.39 | 28.1 |
| 12 | R | 141 | 2.0 | 0.536 | 9.9 | LOS A | 3.6 | 90.4 | 0.24 | 0.49 | 27.6 |
| Approac | ch | 570 | 2.0 | 0.536 | 9.9 | LOS A | 3.6 | 90.4 | 0.24 | 0.42 | 28.0 |
| All Vehi | cles | 1632 | 2.0 | 0.859 | 18.6 | LOS C | 12.0 | 305.6 | 0.64 | 0.82 | 23.4 |

Site: 2024 PM - 50%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

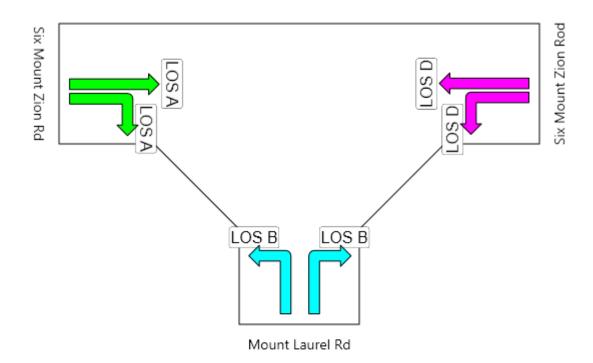
Roundabout Capacity Model: US HCM 2010.

HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 50%

| | South | East | West | Intersection |
|-----|-------|------|------|--------------|
| LOS | В | D | Α | С |

Colour code based on Level of Service

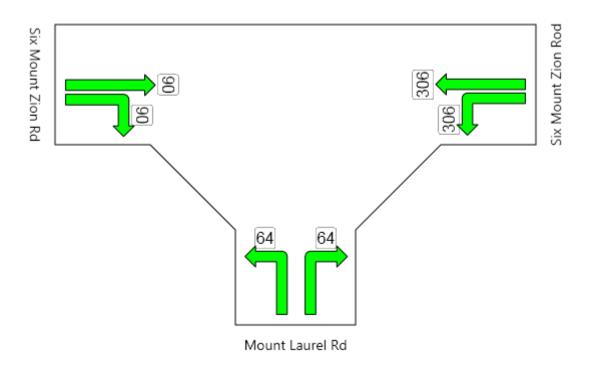
LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

QUEUE DISTANCE

Largest 95% Back of Queue for any lane used by movement (feet)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 50%

| | South | East | West | Intersection |
|----------------|-------|------|------|--------------|
| Queue Distance | 64 | 306 | 90 | 306 |

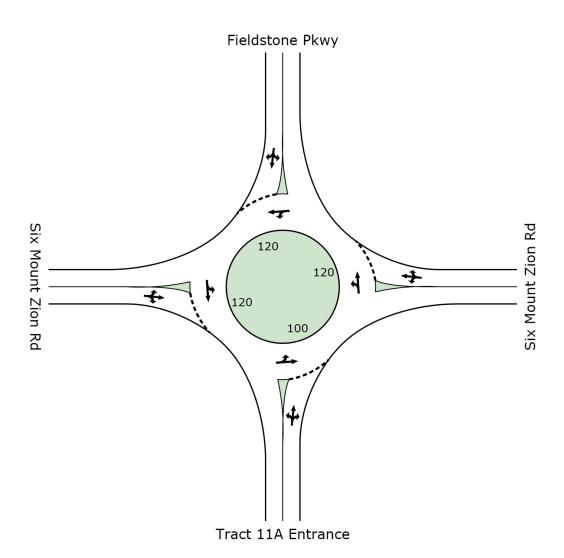
Colour code based on Queue Storage Ratio

[< 0.6] [0.6 – 0.7][0.7 – 0.8][0.8 – 0.9][0.9 – 1.0] [> 1.0] Continuous

LAYOUT Site: 2024 AM – 50%

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road





MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| | | | 37.13 | | | | | | | | |
|-------------------------|--------------------|------------|--------------|-------|---------|----------|----------|----------|--------|-----------|---------|
| Mover | nent Pe | rformance | - Vehic | les | | | | | | | |
| Mov ID | Mov ID Turn Demand | | HV Deg. Satn | | Average | Level of | 95% Back | of Queue | Prop. | Effective | Average |
| | | Flow | | | Delay | Service | Vehicles | Distance | Queued | Stop Rate | Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: | Tract 11 | A Entrance | | | | | | | | | |
| 3 | L | 11 | 3.0 | 0.027 | 6.7 | LOS A | 0.1 | 2.2 | 0.53 | 0.82 | 26.7 |
| 8 | Т | 2 | 3.0 | 0.027 | 6.7 | LOS A | 0.1 | 2.2 | 0.53 | 0.63 | 29.3 |
| 18 | R | 2 | 3.0 | 0.027 | 6.7 | LOS A | 0.1 | 2.2 | 0.53 | 0.69 | 28.9 |
| Approa | ch | 15 | 3.0 | 0.027 | 6.7 | LOS A | 0.1 | 2.2 | 0.53 | 0.78 | 27.3 |
| East: Six Mount Zion Rd | | | | | | | | | | | |
| 1 | L | 11 | 3.0 | 0.277 | 8.5 | LOS A | 1.1 | 27.1 | 0.53 | 1.00 | 26.3 |
| 6 | Т | 180 | 2.0 | 0.277 | 8.5 | LOS A | 1.1 | 27.1 | 0.53 | 0.70 | 29.0 |
| 16 | R | 3 | 2.0 | 0.277 | 8.5 | LOS A | 1.1 | 27.1 | 0.53 | 0.76 | 28.6 |
| Approach | | 195 | 2.1 | 0.277 | 8.5 | LOS A | 1.1 | 27.1 | 0.53 | 0.72 | 28.8 |
| North: Fieldstone Pkwy | | | | | | | | | | | |
| 7 | L | 1 | 2.0 | 0.276 | 6.9 | LOS A | 1.2 | 29.3 | 0.38 | 0.84 | 26.7 |
| 4 | Т | 11 | 3.0 | 0.276 | 6.9 | LOS A | 1.2 | 29.3 | 0.38 | 0.51 | 29.8 |
| 14 | R | 237 | 2.0 | 0.276 | 6.9 | LOS A | 1.2 | 29.3 | 0.38 | 0.58 | 29.2 |
| Approa | ch | 249 | 2.0 | 0.276 | 6.9 | LOS A | 1.2 | 29.3 | 0.38 | 0.58 | 29.2 |
| West: S | Six Mount | Zion Rd | | | | | | | | | |
| 5 | L | 435 | 2.0 | 0.646 | 12.4 | LOS B | 5.6 | 142.0 | 0.22 | 0.70 | 24.2 |
| 2 | Т | 218 | 2.0 | 0.646 | 12.4 | LOS B | 5.6 | 142.0 | 0.22 | 0.36 | 26.4 |
| 12 | R | 46 | 3.0 | 0.646 | 12.4 | LOS B | 5.6 | 142.0 | 0.22 | 0.43 | 26.1 |
| Approa | ch | 699 | 2.1 | 0.646 | 12.4 | LOS B | 5.6 | 142.0 | 0.22 | 0.58 | 24.9 |
| All Veh | icles | 1158 | 2.1 | 0.646 | 10.5 | LOS B | 5.6 | 142.0 | 0.31 | 0.60 | 26.3 |
| | | | | | | | | | | | |

Site: 2024 AM - 50%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

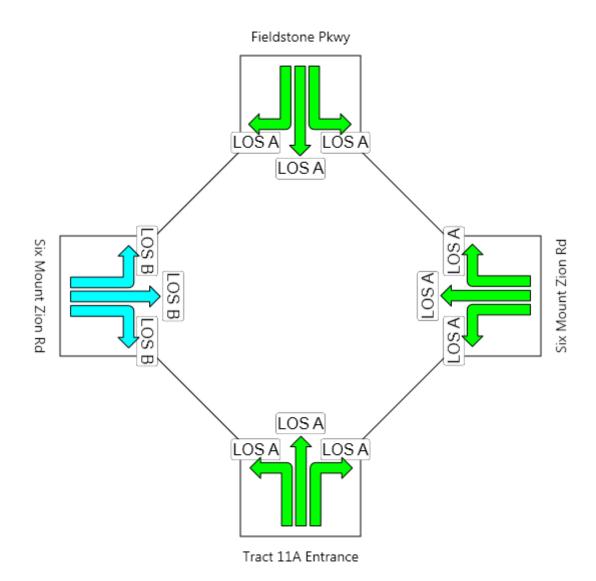
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010. HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 50%

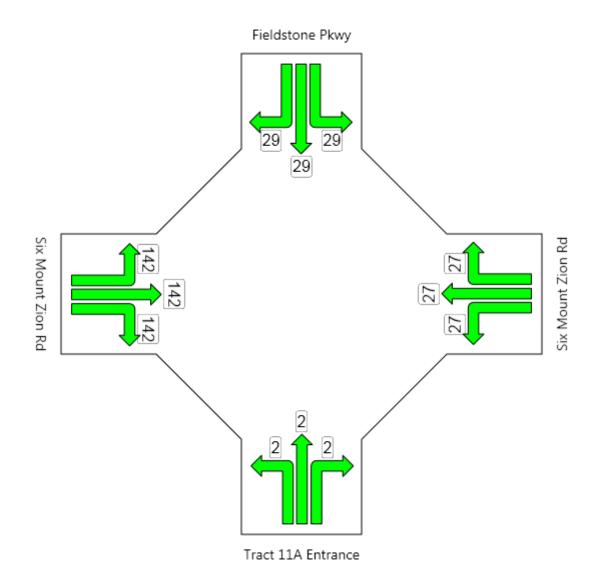
| | South | East | North | West | Intersection |
|-----|-------|------|-------|------|--------------|
| LOS | Α | Α | Α | В | В |

Colour code based on Level of Service

LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 50%

| | South | East | North | West | Intersection |
|----------------|-------|------|-------|------|--------------|
| Queue Distance | 2 | 27 | 29 | 142 | 142 |

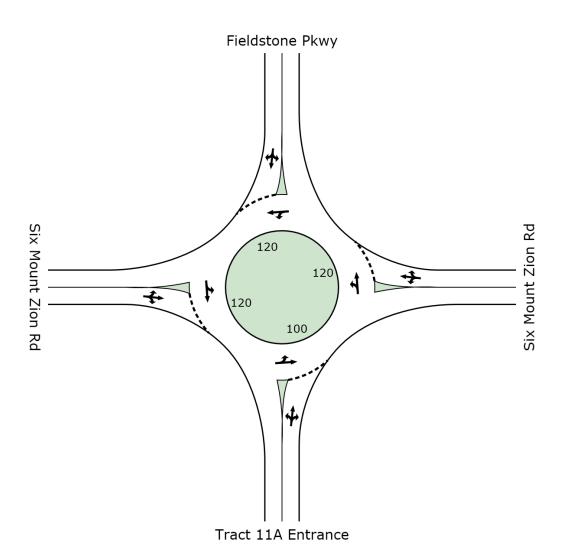
Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7][0.7-0.8][0.8-0.9][0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 PM – 50%

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road





MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Mover | ment Pe | rformance | - Vehic | les | | | | | | | |
|----------|------------|------------|---------|----------|---------|----------|----------|----------|--------|-----------|---------|
| Mov ID | | Demand | | eg. Satn | Average | Level of | 95% Back | of Queue | Prop. | Effective | Average |
| | | Flow | | | Delay | Service | Vehicles | Distance | Queued | Stop Rate | Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: | Tract 11/ | A Entrance | | | | | | | | | |
| 3 | L | 43 | 3.0 | 0.097 | 6.4 | LOS A | 0.3 | 8.3 | 0.48 | 0.84 | 26.8 |
| 8 | Т | 11 | 3.0 | 0.097 | 6.4 | LOS A | 0.3 | 8.3 | 0.48 | 0.62 | 29.6 |
| 18 | R | 11 | 3.0 | 0.097 | 6.4 | LOS A | 0.3 | 8.3 | 0.48 | 0.69 | 29.1 |
| Approa | ıch | 65 | 3.0 | 0.097 | 6.4 | LOS A | 0.3 | 8.3 | 0.48 | 0.78 | 27.5 |
| East: S | ix Mount | Zion Rd | | | | | | | | | |
| 1 | L | 3 | 3.0 | 0.280 | 7.6 | LOS A | 1.1 | 28.8 | 0.46 | 0.96 | 26.7 |
| 6 | Т | 223 | 2.0 | 0.280 | 7.6 | LOS A | 1.1 | 28.8 | 0.46 | 0.61 | 29.6 |
| 16 | R | 1 | 2.0 | 0.280 | 7.6 | LOS A | 1.1 | 28.8 | 0.46 | 0.68 | 29.1 |
| Approa | ch | 227 | 2.0 | 0.280 | 7.6 | LOS A | 1.1 | 28.8 | 0.46 | 0.61 | 29.5 |
| North: I | Fieldstone | e Pkwy | | | | | | | | | |
| 7 | L | 1 | 2.0 | 0.537 | 11.8 | LOS B | 3.2 | 80.6 | 0.58 | 0.91 | 24.7 |
| 4 | Т | 3 | 3.0 | 0.537 | 11.8 | LOS B | 3.2 | 80.6 | 0.58 | 0.68 | 26.8 |
| 14 | R | 448 | 2.0 | 0.537 | 11.8 | LOS B | 3.2 | 80.6 | 0.58 | 0.73 | 26.4 |
| Approa | ch | 452 | 2.0 | 0.537 | 11.8 | LOS B | 3.2 | 80.6 | 0.58 | 0.73 | 26.4 |
| West: S | Six Mount | Zion Rd | | | | | | | | | |
| 5 | L | 251 | 2.0 | 0.450 | 8.2 | LOS A | 2.6 | 67.1 | 0.08 | 0.79 | 25.9 |
| 2 | Т | 229 | 2.0 | 0.450 | 8.2 | LOS A | 2.6 | 67.1 | 0.08 | 0.36 | 29.0 |
| 12 | R | 14 | 3.0 | 0.450 | 8.2 | LOS A | 2.6 | 67.1 | 0.08 | 0.44 | 28.4 |
| Approa | ch | 495 | 2.0 | 0.450 | 8.2 | LOS A | 2.6 | 67.1 | 0.08 | 0.58 | 27.2 |
| All Veh | icles | 1239 | 2.1 | 0.537 | 9.3 | LOS A | 3.2 | 80.6 | 0.35 | 0.65 | 27.3 |

Site: 2024 PM - 50%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

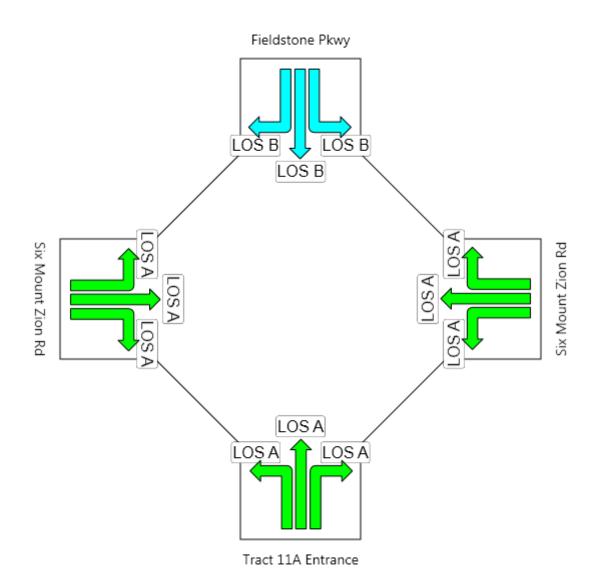
Roundabout Capacity Model: US HCM 2010.

HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 50%

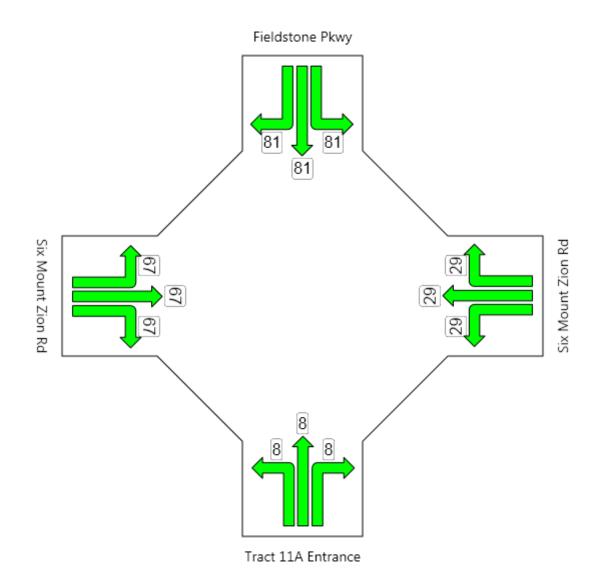
| | South | East | North | West | Intersection |
|-----|-------|------|-------|------|--------------|
| LOS | Α | Α | В | Α | Α |

| Colour cod | de based o | on Level | of Servi | ce | |
|------------|------------|----------|----------|----|--|
| | | | | | |

LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 50%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 50%

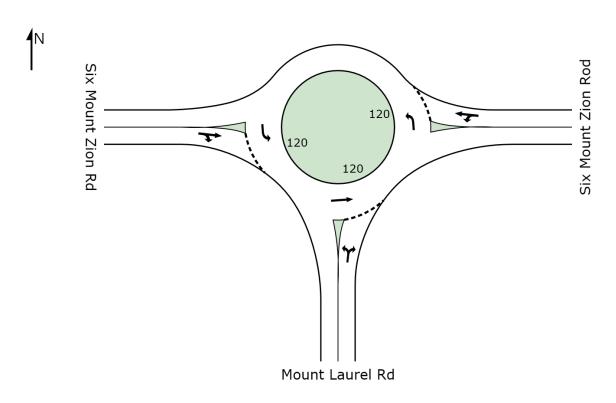
| | South | East | North | West | Intersection |
|----------------|-------|------|-------|------|--------------|
| Queue Distance | 8 | 29 | 81 | 67 | 81 |

Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7][0.7-0.8][0.8-0.9][0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 AM – 100%

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Mover | nent Pe | erformance | e - Veh | icles | | | | | | | |
|----------|-----------|----------------|---------|-----------|------------------|---------------------|----------------------|----------------------|-----------------|------------------------|------------------|
| Mov ID | Turn | Demand Flow | HV | Deg. Satn | Average Delay | Level of Service | 95% Back Vehicles | of Queue Distance | Prop. Queued | Effective Stop Rate | Average Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: | Mount La | aurel Rd | | | | | | | | | |
| 3 | L | 114 | 2.0 | 0.272 | 10.5 | LOS B | 1.0 | 24.7 | 0.62 | 0.90 | 25.0 |
| 18 | R | 33 | 2.0 | 0.272 | 10.5 | LOS B | 1.0 | 24.7 | 0.62 | 0.78 | 26.7 |
| Approa | ch | 147 | 2.0 | 0.272 | 10.5 | LOS B | 1.0 | 24.7 | 0.62 | 0.87 | 25.3 |
| East: S | ix Mount | Zion Rod | | | | | | | | | |
| 1 | L | 91 | 2.0 | 0.603 | 12.0 | LOS B | 4.2 | 106.0 | 0.46 | 0.83 | 24.7 |
| 6 | Т | 503 | 2.0 | 0.603 | 12.0 | LOS B | 4.2 | 106.0 | 0.46 | 0.50 | 26.9 |
| Approa | ch | 595 | 2.0 | 0.603 | 12.0 | LOS B | 4.2 | 106.0 | 0.46 | 0.55 | 26.5 |
| West: S | Six Mount | t Zion Rd | | | | | | | | | |
| 2 | Т | 879 | 2.0 | 1.246 | 135.1 | LOS F | 128.5 | 3263.8 | 1.00 | 2.01 | 7.9 |
| 12 | R | 378 | 2.0 | 1.246 | 135.1 | LOS F | 128.5 | 3263.8 | 1.00 | 2.01 | 7.8 |
| Approa | ch | 1258 | 2.0 | 1.246 | 135.1 | LOS F | 128.5 | 3263.8 | 1.00 | 2.01 | 7.9 |
| All Vehi | icles | 1999 | 2.0 | 1.246 | 89.3 | LOS F | 128.5 | 3263.8 | 0.81 | 1.49 | 10.7 |

Site: 2024 AM - 100%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

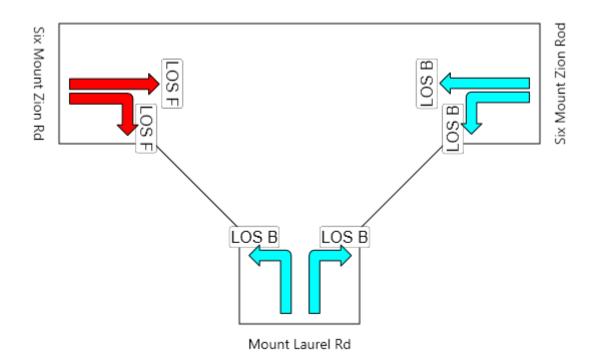
Roundabout Capacity Model: US HCM 2010.

HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 100%

| | South | East | West | Intersection |
|-----|-------|------|------|--------------|
| LOS | В | В | F | F |

Colour code based on Level of Service

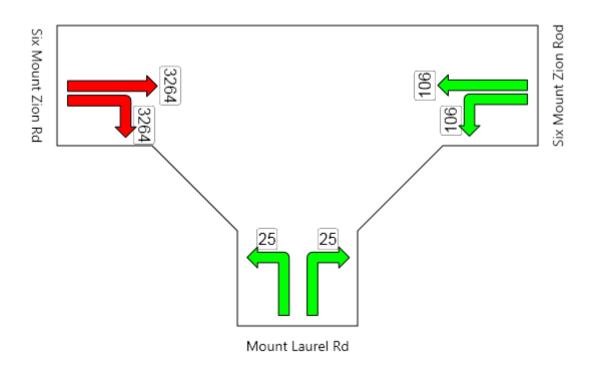
LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

QUEUE DISTANCE

Largest 95% Back of Queue for any lane used by movement (feet)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 100%

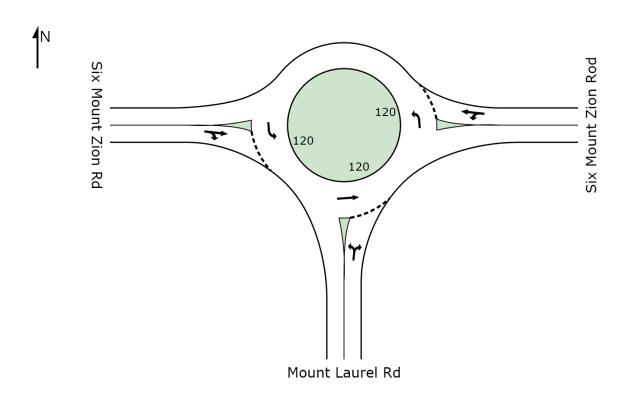
| | South | East | West | Intersection |
|----------------|-------|------|------|--------------|
| Queue Distance | 25 | 106 | 3264 | 3264 |

Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7][0.7-0.8][0.8-0.9][0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 PM – 100%

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Moven | nent Pe | erformance | - Vehic | les | | | | | | | |
|----------|----------|----------------|---------|----------|------------------|---------------------|----------------------|----------------------|-----------------|------------------------|------------------|
| Mov ID | Turn | Demand Flow | HV D | eg. Satn | Average Delay | Level of Service | 95% Back Vehicles | of Queue Distance | Prop. Queued | Effective Stop Rate | Average Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: I | Mount La | aurel Rd | | | | | | | | | |
| 3 | L | 502 | 2.0 | 1.013 | 65.4 | LOS F | 21.3 | 541.4 | 1.00 | 1.78 | 13.1 |
| 18 | R | 125 | 2.0 | 1.013 | 65.4 | LOS F | 21.3 | 541.4 | 1.00 | 1.78 | 12.8 |
| Approac | ch | 627 | 2.0 | 1.013 | 65.4 | LOS F | 21.3 | 541.4 | 1.00 | 1.78 | 13.0 |
| East: Si | ix Mount | Zion Rod | | | | | | | | | |
| 1 | L | 64 | 2.0 | 1.412 | 212.7 | LOS F | 100.6 | 2554.6 | 1.00 | 4.27 | 5.8 |
| 6 | Т | 879 | 2.0 | 1.412 | 212.7 | LOS F | 100.6 | 2554.6 | 1.00 | 4.27 | 5.5 |
| Approac | ch | 943 | 2.0 | 1.412 | 212.7 | LOS F | 100.6 | 2554.6 | 1.00 | 4.27 | 5.5 |
| West: S | ix Moun | t Zion Rd | | | | | | | | | |
| 2 | Т | 571 | 2.0 | 0.771 | 17.7 | LOS C | 9.1 | 231.6 | 0.46 | 0.42 | 24.2 |
| 12 | R | 245 | 2.0 | 0.771 | 17.7 | LOS C | 9.1 | 231.6 | 0.46 | 0.49 | 23.9 |
| Approac | ch | 815 | 2.0 | 0.771 | 17.7 | LOS C | 9.1 | 231.6 | 0.46 | 0.44 | 24.1 |
| All Vehi | cles | 2386 | 2.0 | 1.412 | 107.3 | LOS F | 100.6 | 2554.6 | 0.82 | 2.31 | 9.4 |

Site: 2024 PM - 100%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

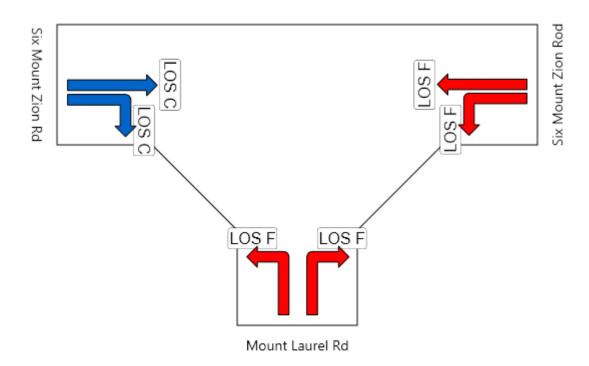
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010. HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 100%

| | South | East | West | Intersection |
|-----|-------|------|------|--------------|
| LOS | F | F | С | F |

Colour code based on Level of Service

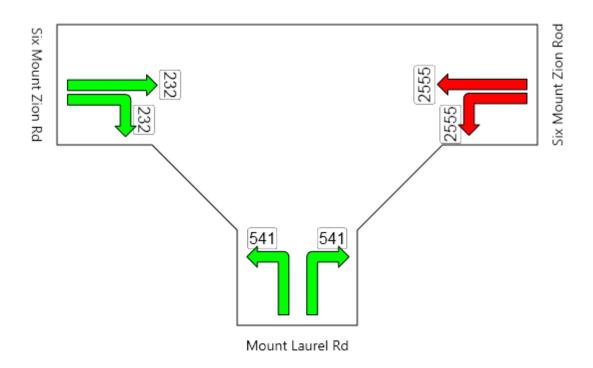
LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

QUEUE DISTANCE

Largest 95% Back of Queue for any lane used by movement (feet)

James City County
Six Mount Zion Road at Mount Laurel Road
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 100%

| | South | East | West | Intersection |
|----------------|-------|------|------|--------------|
| Queue Distance | 541 | 2555 | 232 | 2555 |

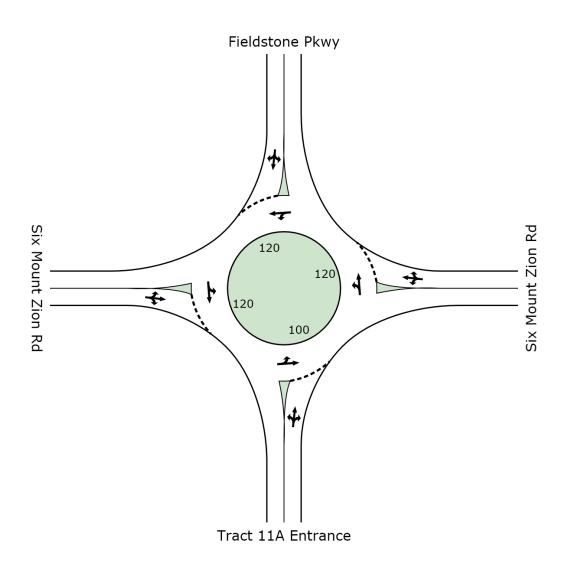
Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7] [0.7-0.8] [0.8-0.9] [0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 AM – 100%

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road





MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Movem | ent Pe | rformance | - Vehi | icles | | | | | | | |
|-----------|----------|----------------|--------|-----------|------------------|---------------------|----------------------|----------------------|-----------------|------------------------|------------------|
| | Turn | Demand Flow | | Deg. Satn | Average Delay | Level of Service | 95% Back Vehicles | of Queue Distance | Prop. Queued | Effective Stop Rate | Average Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: T | ract 11/ | A Entrance | | | | | | | | | |
| 3 | L | 22 | 3.0 | 0.064 | 8.4 | LOS A | 0.2 | 5.1 | 0.58 | 0.90 | 25.9 |
| 8 | Т | 4 | 3.0 | 0.064 | 8.4 | LOS A | 0.2 | 5.1 | 0.58 | 0.73 | 28.2 |
| 18 | R | 4 | 3.0 | 0.064 | 8.4 | LOS A | 0.2 | 5.1 | 0.58 | 0.78 | 27.8 |
| Approac | h | 30 | 3.0 | 0.064 | 8.4 | LOS A | 0.2 | 5.1 | 0.58 | 0.86 | 26.4 |
| East: Six | (Mount | Zion Rd | | | | | | | | | |
| 1 | L | 22 | 3.0 | 0.495 | 12.7 | LOS B | 2.6 | 65.3 | 0.65 | 1.04 | 24.6 |
| 6 | Т | 315 | 2.0 | 0.495 | 12.7 | LOS B | 2.6 | 65.3 | 0.65 | 0.82 | 26.6 |
| 16 | R | 3 | 2.0 | 0.495 | 12.7 | LOS B | 2.6 | 65.3 | 0.65 | 0.87 | 26.3 |
| Approac | h | 340 | 2.1 | 0.495 | 12.7 | LOS B | 2.6 | 65.3 | 0.65 | 0.84 | 26.4 |
| North: Fi | eldston | e Pkwy | | | | | | | | | |
| 7 | L | 1 | 2.0 | 0.367 | 9.2 | LOS A | 1.6 | 39.9 | 0.53 | 0.92 | 25.8 |
| 4 | Т | 22 | 3.0 | 0.367 | 9.2 | LOS A | 1.6 | 39.9 | 0.53 | 0.67 | 28.2 |
| 14 | R | 259 | 2.0 | 0.367 | 9.2 | LOS A | 1.6 | 39.9 | 0.53 | 0.72 | 27.9 |
| Approac | h | 282 | 2.1 | 0.367 | 9.2 | LOS A | 1.6 | 39.9 | 0.53 | 0.72 | 27.9 |
| West: Si | x Moun | t Zion Rd | | | | | | | | | |
| 5 | L | 441 | 2.0 | 0.863 | 24.5 | LOS C | 14.7 | 374.1 | 0.66 | 0.60 | 20.3 |
| 2 | Т | 379 | 2.0 | 0.863 | 24.5 | LOS C | 14.7 | 374.1 | 0.66 | 0.43 | 21.3 |
| 12 | R | 91 | 3.0 | 0.863 | 24.5 | LOS C | 14.7 | 374.1 | 0.66 | 0.46 | 21.1 |
| Approac | h | 912 | 2.1 | 0.863 | 24.5 | LOS C | 14.7 | 374.1 | 0.66 | 0.52 | 20.8 |
| All Vehic | les | 1564 | 2.1 | 0.863 | 18.9 | LOS C | 14.7 | 374.1 | 0.63 | 0.63 | 22.9 |

Site: 2024 AM - 100%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

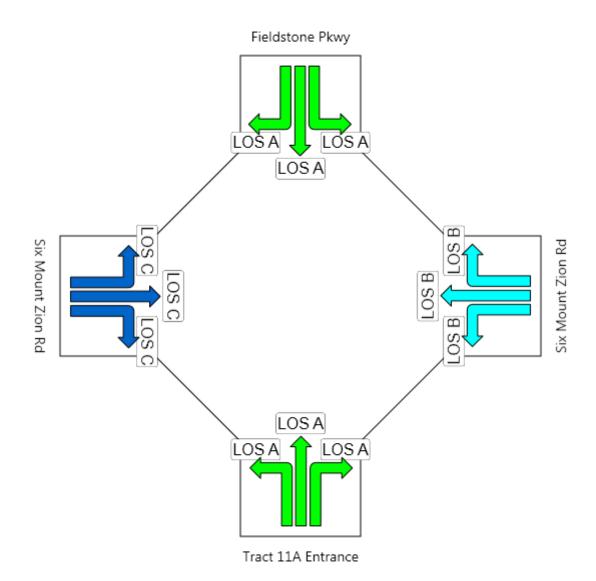
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

Roundabout Capacity Model: US HCM 2010. HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 100%

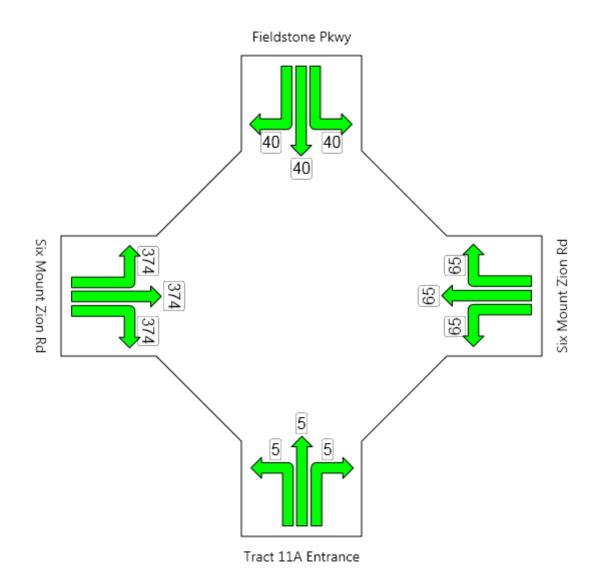
| | South | East | North | West | Intersection |
|-----|-------|------|-------|------|--------------|
| LOS | Α | В | Α | С | С |

Colour code based on Level of Service

LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future AM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 AM - 100%

| | South | East | North | West | Intersection |
|----------------|-------|------|-------|------|--------------|
| Queue Distance | 5 | 65 | 40 | 374 | 374 |

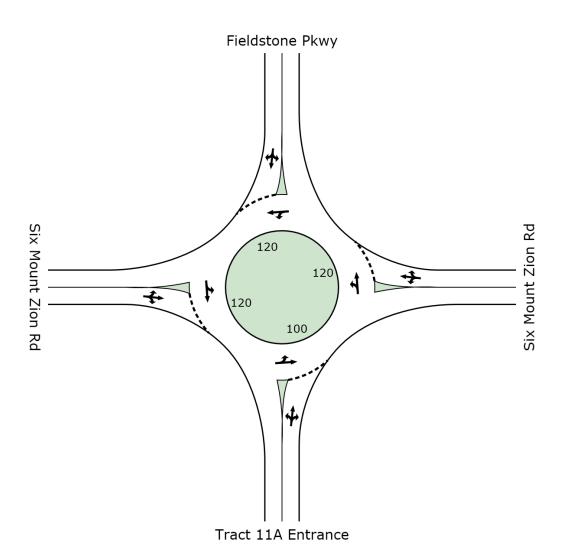
Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7][0.7-0.8][0.8-0.9][0.9-1.0] [>1.0] Continuous

LAYOUT Site: 2024 PM – 100%

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road





MOVEMENT SUMMARY

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

| Moven | nent Pe | rformance | - Vehic | les | | | | | | | |
|----------|------------|----------------|---------|----------|------------------|---------------------|----------------------|----------------------|-----------------|------------------------|------------------|
| Mov ID | | Demand Flow | | eg. Satn | Average Delay | Level of Service | 95% Back Vehicles | of Queue Distance | Prop. Queued | Effective Stop Rate | Average Speed |
| | | veh/h | % | v/c | sec | | veh | ft | | per veh | mph |
| South: | Tract 11A | Entrance | | | | | | | | | |
| 3 | L | 87 | 3.0 | 0.238 | 9.8 | LOS A | 0.8 | 21.2 | 0.60 | 0.91 | 25.3 |
| 8 | Т | 22 | 3.0 | 0.238 | 9.8 | LOS A | 0.8 | 21.2 | 0.60 | 0.74 | 27.4 |
| 18 | R | 22 | 3.0 | 0.238 | 9.8 | LOS A | 0.8 | 21.2 | 0.60 | 0.79 | 27.1 |
| Approa | ch | 130 | 3.0 | 0.238 | 9.8 | LOS A | 0.8 | 21.2 | 0.60 | 0.86 | 25.9 |
| East: Si | ix Mount | Zion Rd | | | | | | | | | |
| 1 | L | 7 | 3.0 | 0.543 | 13.2 | LOS B | 3.2 | 80.2 | 0.65 | 1.05 | 24.5 |
| 6 | Т | 397 | 2.0 | 0.543 | 13.2 | LOS B | 3.2 | 80.2 | 0.65 | 0.83 | 26.4 |
| 16 | R | 1 | 2.0 | 0.543 | 13.2 | LOS B | 3.2 | 80.2 | 0.65 | 0.87 | 26.1 |
| Approa | ch | 404 | 2.0 | 0.543 | 13.2 | LOS B | 3.2 | 80.2 | 0.65 | 0.83 | 26.3 |
| North: F | Fieldstone | e Pkwy | | | | | | | | | |
| 7 | L | 1 | 2.0 | 0.696 | 20.2 | LOS C | 5.1 | 129.8 | 0.79 | 1.09 | 21.8 |
| 4 | Т | 7 | 3.0 | 0.696 | 20.2 | LOS C | 5.1 | 129.8 | 0.79 | 0.97 | 22.9 |
| 14 | R | 460 | 2.0 | 0.696 | 20.2 | LOS C | 5.1 | 129.8 | 0.79 | 1.00 | 22.8 |
| Approa | ch | 467 | 2.0 | 0.696 | 20.2 | LOS C | 5.1 | 129.8 | 0.79 | 1.00 | 22.8 |
| West: S | Six Mount | Zion Rd | | | | | | | | | |
| 5 | L | 280 | 2.0 | 0.647 | 12.4 | LOS B | 5.7 | 144.8 | 0.17 | 0.77 | 24.2 |
| 2 | Т | 398 | 2.0 | 0.647 | 12.4 | LOS B | 5.7 | 144.8 | 0.17 | 0.36 | 26.6 |
| 12 | R | 28 | 3.0 | 0.647 | 12.4 | LOS B | 5.7 | 144.8 | 0.17 | 0.44 | 26.1 |
| Approa | ch | 707 | 2.0 | 0.647 | 12.4 | LOS B | 5.7 | 144.8 | 0.17 | 0.53 | 25.5 |
| All Vehi | icles | 1709 | 2.1 | 0.696 | 14.5 | LOS B | 5.7 | 144.8 | 0.48 | 0.75 | 24.9 |

Site: 2024 PM - 100%

Level of Service (LOS) Method: Delay & v/c (HCM 2010). Roundabout LOS Method: Same as Sign Control.

Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection). Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).

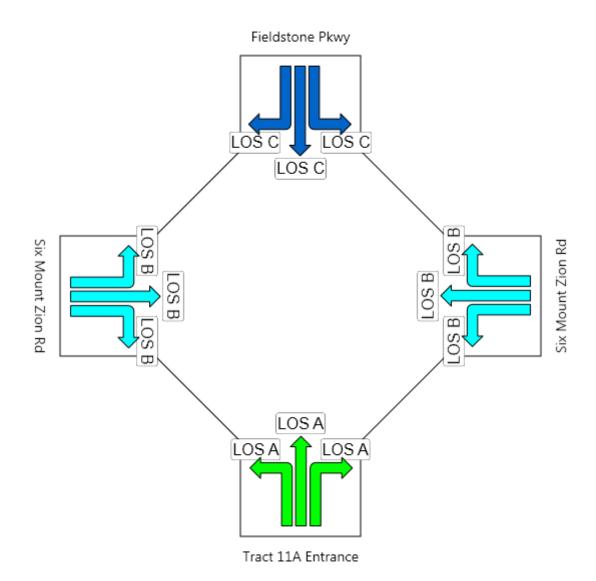
Roundabout Capacity Model: US HCM 2010.

HCM Delay Model used. Geometric Delay not included.

LEVEL OF SERVICE

Level of Service Method: Delay & v/c (HCM 2010)

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road



Site: 2024 PM - 100%

| | South | East | North | West | Intersection |
|-----|-------|------|-------|------|--------------|
| LOS | Α | В | С | В | В |

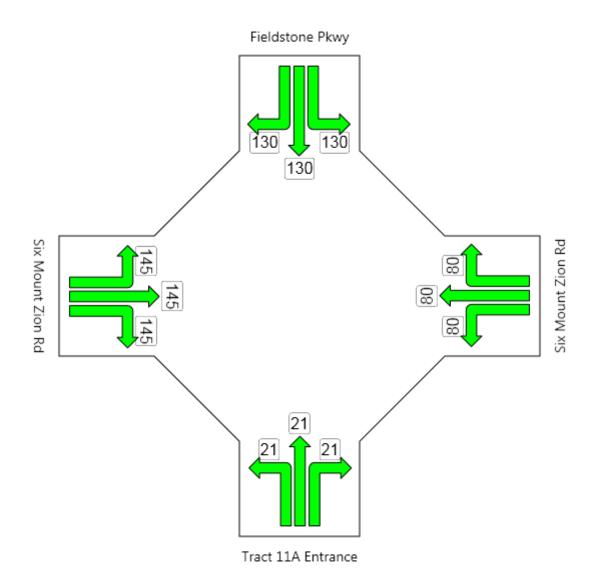
| Colour code | based on | Level of | Service |
|-------------|----------|----------|---------|

LOS A LOS B LOS C LOS D LOS E LOS F Continuous

Roundabout Level of Service Method: Same as Sign Control HCM Delay Model used. Geometric Delay not included.

Largest 95% Back of Queue for any lane used by movement (feet)

James City County
Six Mount Zion Road at Fieldstone Parkway
2024 Future PM Peak Hour – 100%
Roundabout with 1-Lane Approaches and 1-Lane Circulating Road

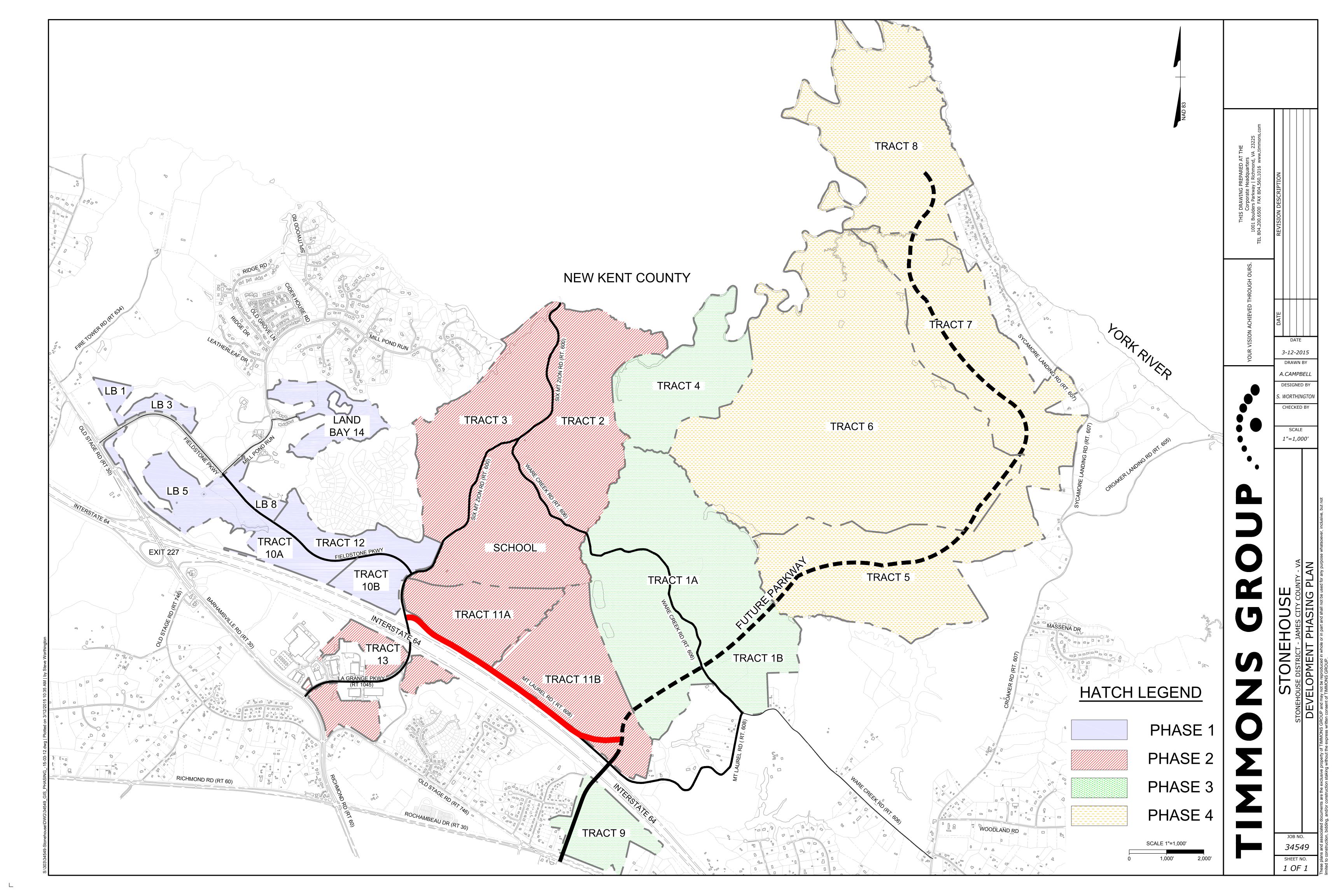


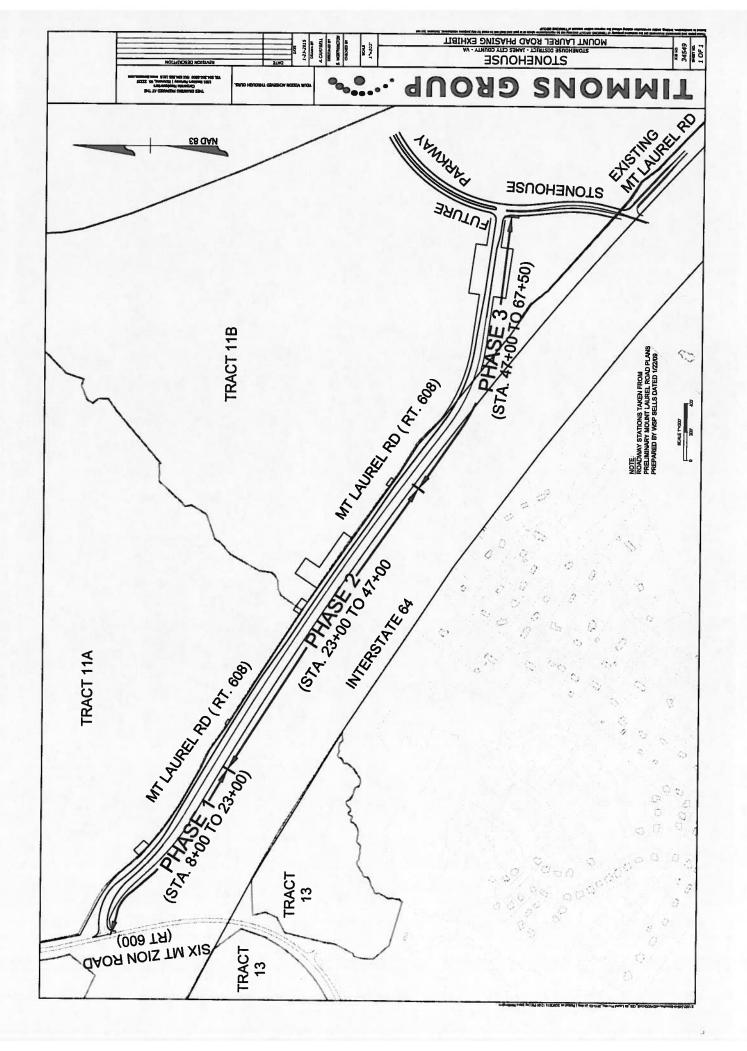
Site: 2024 PM - 100%

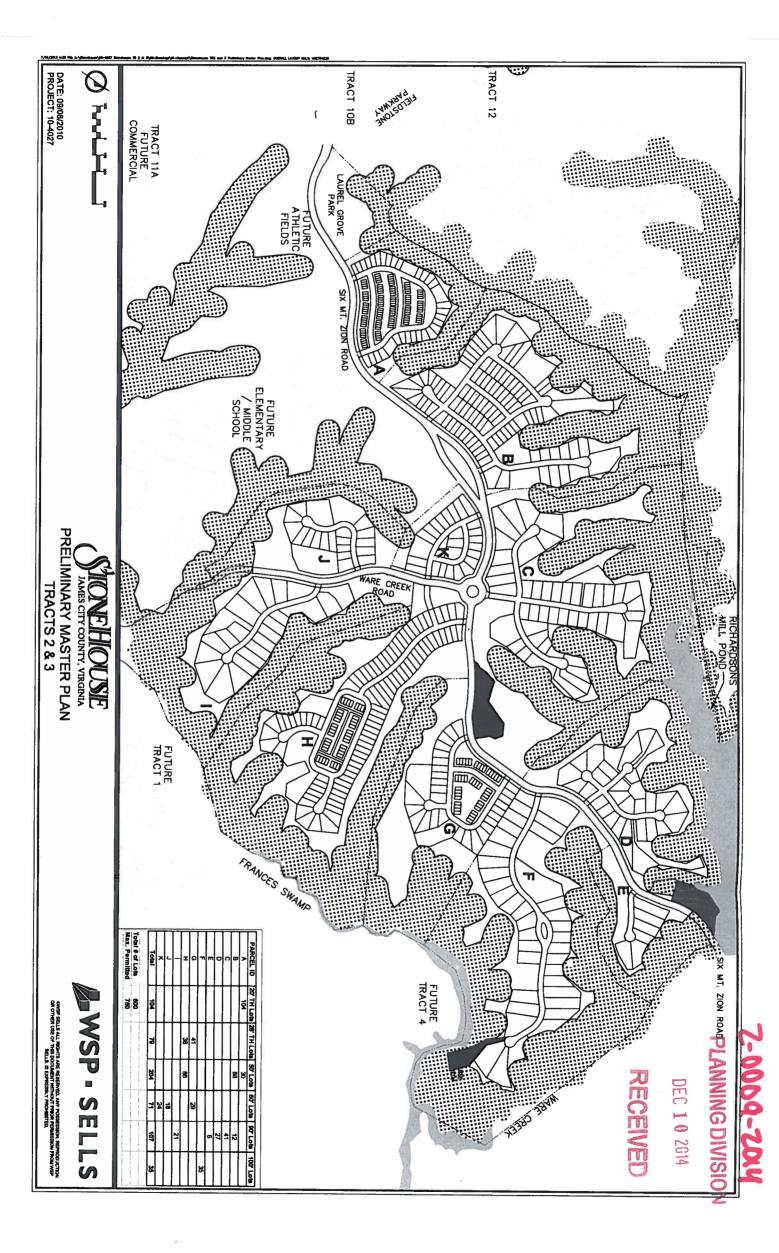
| | South | East | North | West | Intersection |
|----------------|-------|------|-------|------|--------------|
| Queue Distance | 21 | 80 | 130 | 145 | 145 |

Colour code based on Queue Storage Ratio

[<0.6] [0.6-0.7][0.7-0.8][0.8-0.9][0.9-1.0] [>1.0] Continuous







Agricultural and Forestal District 06-86-2-2014. Cranston's Pond AFD Addition - 3125 Chickahominy Road. Staff Report for the April 1, 2015 Planning Commission Public Hearing

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

<u>PUBLIC MEETINGS</u>
<u>Building F Board Room: County Government Complex</u>

AFD Advisory Committee January 16, 2015, 4:00 p.m. (deferred)

March 12, 2015, 4:00 p.m.

Planning Commission April 1, 2015, 7:00 p.m.

Board of Supervisors May 12, 2015, 6:30 p.m. (Tentative)

SUMMARY FACTS

Applicant: Susanna English

Land Owners: Susanna English

Proposal: Addition of ± 5.07 acres of land to the Cranston's Pond AFD

Location: 3125 Chickahominy Road

Tax Map/Parcel No: 2210100056

Parcel Size: ± 5.07 acres

Zoning: R-8, Rural Residential

Comprehensive Plan: Rural Lands

Primary Service Area: Outside

Staff Contact: W. Scott Whyte Phone: 253-6867

STAFF RECOMMENDATION

Staff finds the proposed addition meets the minimum size and proximity requirements for inclusion in the Cranston's Pond AFD. Staff recommends that the Planning Commission recommend approval of the proposed addition to the Board of Supervisors subject to the conditions listed in the attached ordinance, consistent with other properties in the Cranston's Pond AFD.

AFD ADVISORY COMMITTEE RECOMMENDATION

At its meeting on January 16, 2015, the AFD Committee deferred consideration of this application in order to allow the applicant additional time to resolve questions over the ownership of the land. The applicant's counsel submitted information to the County Attorney's office which satisfied questions over ownership of the subject property and at the March 12, 2015 AFD Advisory Committee meeting, the proposal was recommended for approval by a vote of 6-0.

PROJECT DESCRIPTION

Ms. Susanna English has applied to enroll ± 5.07 acres of land located at 3125 Chickahominy Road into the Cranston's Pond AFD. The parcel is heavily wooded and is not actively farmed. The property contains one single-family dwelling. The property would be eligible for land use valuation provided the proper documentation is provided to the Commissioner of Revenue's office.

The Cranston's Pond AFD consists of approximately 769.23 acres located in and around the Chickahominy Road area. The AFD contains parcels which front on Chickahominy Road. The majority of the district is forested and remains rural in nature.

SURROUNDING LAND USES AND DEVELOPMENT

The District consists primarily of forested land. Records show that approximately 75 percent of the District is used for forestry and the remainder is in marsh land. The principal land use on adjacent properties is undeveloped, forested land with single-family residences on the majority of properties.

COMPREHENSIVE PLAN

The Comprehensive Plan designates this parcel as Rural Lands. Land Use Action 6.1.1 of the 2009 Comprehensive Plan states the County shall "support both the use value assessment and Agricultural and Forestal (AFD) programs to the maximum degree allowed by the *Code of Virginia*."

ANALYSIS

The proposed addition meets the minimum area and proximity requirements for inclusion in an AFD. If the \pm -5.0 acre addition is approved, the District will have approximately 774.3 acres and would be subject to the following conditions, consistent with other properties in the District:

- 1. The subdivision of land is limited to 25 acres or more, except where the Board of Supervisors authorizes smaller lots to be created for residential use by members of the owner's immediate family, as defined in the James City County Subdivision Ordinance. Parcels of up to five acres, including necessary access roads, may be subdivided for the siting of communications towers and related equipment provided: a.) the subdivision does not result in the total acreage of the District to drop below 200 acres; and b.) the subdivision does not result in a remnant parcel of less than 25 acres.
- 2. No land outside the Primary Service Area and within the AFD may be rezoned and no application for such rezoning shall be filed earlier than six months prior to the expiration of the District. Land within the AFD may be withdrawn from the District in accordance with the Board of Supervisors' Policy Governing the Withdrawals of Property from AFDs, adopted September 28, 2010, as amended.
- 3. No special use permit shall be issued except for agricultural, forestal, or other activities and uses consistent with the State Code, Section 15.2-4301 et. seq., which are not in conflict with the policies of this District. The Board of Supervisors, at its discretion, may issue special use permits for wireless communications facilities on AFD properties which are in accordance with the County's policies and ordinances regulating such facilities.

STAFF RECOMMENDATION

Staff finds the proposed addition meets the minimum size and proximity requirements for inclusion in the Cranston's Pond AFD. Staff recommends that the Planning Commission recommend approval of the proposed addition to the Board of Supervisors subject to the conditions listed in the attached ordinance, consistent with other properties in the Cranston's Pond AFD.

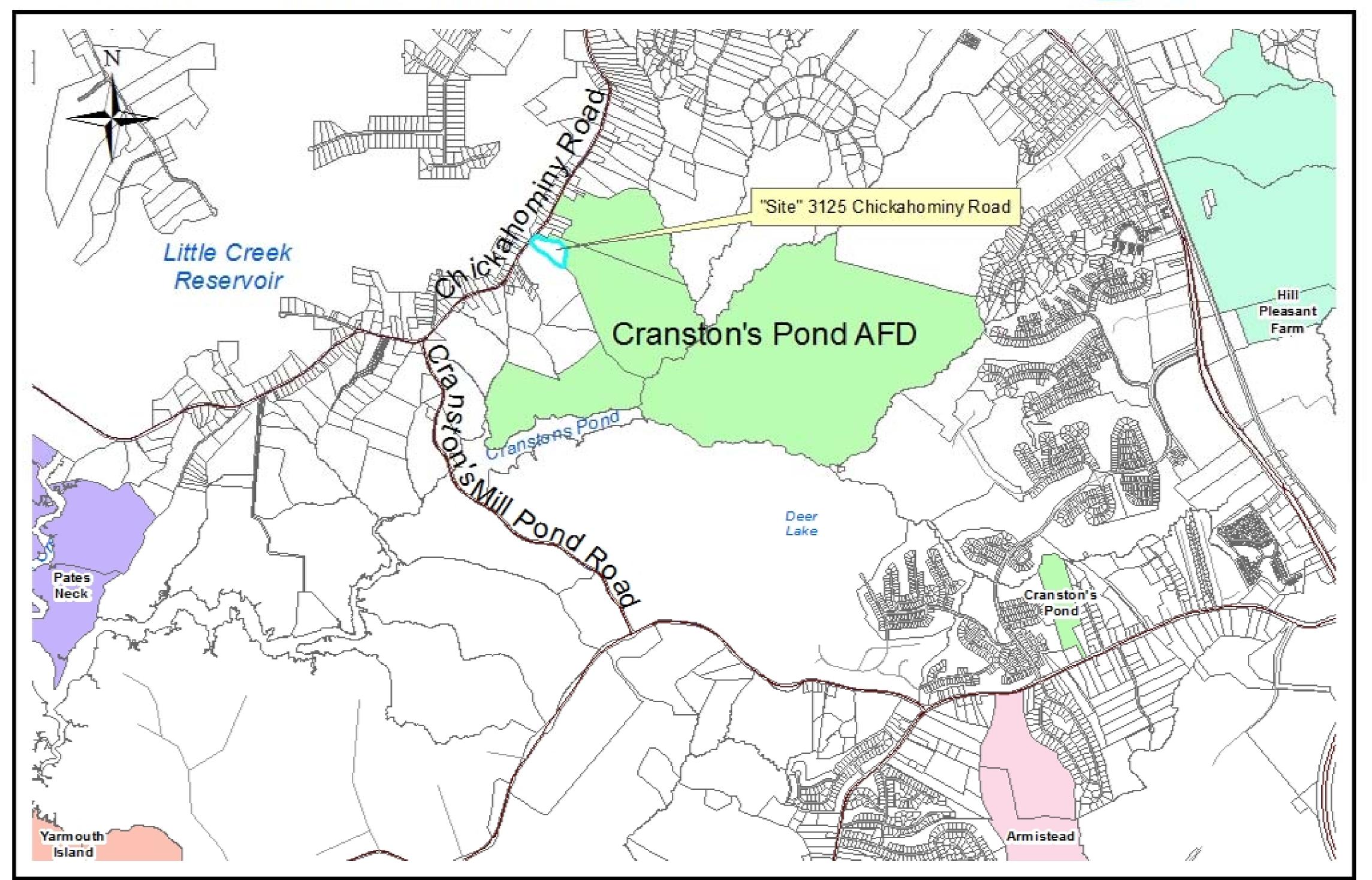
W. Scott Clift

Attachments:

- 1. Location map
- 2. Ordinance for Cranston's Pond, Adopted by the Board of Supervisors on September 9, 2014.
- 3. Minutes of the January 16, 2015, AFD Advisory Committee meeting.
- 4. Unapproved minutes of the March 12, 2015 AFD Advisory Committee meeting.

Case No. AFD-06-86-2-2014 Cranston's Pond AFD Addition





ADOPTED

SEP 09 2014

ORDINANCE NO. 168A-11

Board of Supervisors James City County, VA

AGRICULTURAL AND FORESTAL DISTRICTS 06-86

CRANSTON'S POND 2014 RENEWAL

- WHEREAS, James City County has completed a review of the Cranston's Pond Agricultural and Forestal District; and
- WHEREAS, in accordance with Section 15.2-4311 of the Code of Virginia, 1950, as amended (the "Virginia Code") property owners have been notified, public notices have been filed, public hearings have been advertised, and public hearings have been held on the continuation of the Cranston's Pond Agricultural and Forestal District; and
- WHEREAS, the Agricultural and Forestal District Advisory Committee at its meeting on July 7, 2014, voted 8-0 to recommend renewal of the district; and
- WHEREAS, the Planning Commission following its public hearing on August 6, 2014, concurred with the recommendation of staff and the AFD Advisory Committee and voted 6-0 to recommend renewal of the district with the conditions listed below.
- NOW, THEREFORE, BE IT ORDAINED by the Board of Supervisors of James City County, Virginia, that:
 - The Cranston's Pond Agricultural and Forestal District is hereby continued to October 31, 2018 in accordance with the provisions of the Virginia Agricultural and Forestal District Act, Virginia Code Section 15.2-4300 et. seq.
 - 2. That the district shall include the following parcels, provided, however, that all land within 25 feet of road rights-of-way is excluded from the district:

| <u>Owner</u> | Parcel No. | Acres |
|--------------------------------|-------------|---------------|
| Hidden Acres Farm, Inc. | 2330100001 | 416.50 |
| Bertrand E. Geddy Jr., Trustee | 2230100026 | 167.50 |
| Edward K. English | 2240100001A | 101.67 |
| Payten J. Harcum | 2220100087 | 62.55 |
| Otto C. and Thelma Ripley | 3120100003B | <u>21.01</u> |
| | TOTAL: | <u>769,23</u> |

3. That pursuant to the Virginia Code, Section 15.2-4312 and 15.2-4313, the Board of Supervisors requires that no parcel in the Cranston's Pond Agricultural and Forestal District be developed to a more intensive use without prior approval of the Board of Supervisors. Specifically, the following restrictions shall apply:

- a. The subdivision of land is limited to 25 acres or more, except where the Board of Supervisors authorizes smaller lots to be created for residential use by members of the owner's immediate family, as defined in the James City County Subdivision Ordinance. Parcels of up to five acres, including necessary access roads, may be subdivided for the siting of Wireless Communications Facilities (WCF), provided: a) the subdivision does not result in the total acreage of the District to drop below 200 acres; and b) the subdivision does not result in a remnant parcel of less than 25 acres.
- b. No land outside the Primary Service Area and within the AFD may be rezoned and no application for such rezoning shall be filed earlier than six months prior to the expiration of the District. Land within the AFD may be withdrawn from the District in accordance with the Board of Supervisors' Policy Governing the Withdrawal of Properties from AFDs, adopted September 28, 2010.
- c. No special use permit shall be issued except for agricultural, forestal, or other activities and uses consistent with Virginia Code, Section 15.2-4301 et. seq., which are not in conflict with the policies of this District. The Board of Supervisors, at its discretion, may issue special use permits for wireless communications facilities on AFD properties which are in accordance with the County's policies and ordinances regulating such facilities.

Chairman, Board of Supervisors

| ATTEST: | | AYE | NAY | ABSTAIN |
|------------------------------------|--------------------|-----|-----|-------------|
| 11.00 | KENNEDY | X | | 460 |
| $\mathcal{M}MW$ | JONES MCGLENNON | X | | |
| Bryan J Hill Clerk to the Board | ONIZUK | X | | |
| Clerk to the Board | HIPPLE | × | | |

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of September, 2014.

AFD06-86-14Cranstons-res

UNAPPROVED MINUTES OF THE AGRICULTURAL AND FORESTAL ADVISORY COMMITTEE OF THE COUNTY OF JAMES CITY, VIRGINIA, HELD ON THE 16th DAY OF JANUARY, TWO THOUSAND AND FIFTEEN, AT 4:00 P.M. AT THE HUMAN SERVICES BUILDING, 5249 OLDE TOWNE ROAD, WILLIAMSBURG, VIRGINIA.

1. Roll Call:

Members Present

Mr. Hitchens

Mr. J. Harcum

Mr. Abbott

Mr. Ford

Ms. Smith

Mr. Taylor

Ms. Garrett

Mr. Bradshaw

<u>Absent</u>

Mr. Kennedy

Mr. W. Harcum

2. New Business:

A. Approval of the July 14, 2014 Meeting Minutes

On a vote of 7-0, the minutes of the July 14, 2014 meeting were approved.

B. Case No. AFD-6-86-2-2014. Cranston's Pond, 3125 Chickahominy Road Addition

Mr. Whyte presented the staff report stating that Mrs. Susan English had applied to add a five acre parcel located at 3125 Chickahominy Road to the Cranston's Pond AFD. Mr. Whyte stated that staff recommended that the AFD Advisory Committee recommend approval of the proposed addition to the Board of Supervisors.

Mr. Bradshaw stated that Mrs. English did not submit a complete application and that ownership of the adjacent parcel that is in the Cranston's Pond AFD has not been verified. He stated that he checked the county website and that no ownership has shown up on Real Estate records at this time.

Mr. W. Harcum stated that the map provided is not correct, noting that some of the property lines are inaccurate.

Mr. Bradshaw asked if staff knew the age of the home located on the property.

Also Present

Mr. W. Scott Whyte (Planning)

Mr. Whyte stated that he did not know the age of the house.

Mr. Bradshaw stated that he had not seen the house listed in the County records.

Mr. Abbott asked if the residence was a mobile home or a house.

Mr. Whyte stated that records identify it as a single-family home.

Mr. Harcum again stated that the James City County maps are not accurate but noted that it was just a piece of paper and was not important to him. He also noted that property lines on his family's property were not correct. A one acre property that his parents own is not shown on the map.

Mr. Harcum then stated that the 5 acre parcel had been purchased by the applicant from an Estate.

Ms. Garrett asked which Estate the property had been purchased from.

Mr. Harcum replied the Grave's Estate.

Mr. Whyte stated that the location maps are created using the County GIS system and property lines are not always accurate or up-to-date. The map is provided for reference purposes only to identify the location of the subject property and the surrounding area.

Mr. Taylor responded that Kim Hazelwood in the County mapping division can make an accurate map if requested.

Mr. Bradshaw stated that one can see how inaccurate the system is if you look at Old School Road and see how the lines are not where they are supposed to be.

Mr. Ford then questioned whether the parcel met the nineteen or more minimum for forested parcels.

Mr. Bradshaw responded that the applicant would not be eligible unless she can document ownership of the adjoining property that is included in the AFD. Without showing ownership, she now only has five acres.

Mr. Whyte reminded the committee that as a stand-alone parcel, you must have at least five acres of agricultural land or twenty acres of timber land to be considered for inclusion in an AFD.

Mr. Ford agreed that the committee cannot offer a recommendation on the application until proof of ownership is submitted.

Mr. Bradshaw agreed with Mr. Ford.

Ms. Smith stated that if the applicant can prove that she inherited the adjacent parcel then she would be eligible.

Mr. Ford asked if she currently lives on the land.

Mr. Whyte stated that she does live on the land.

Mr. Harcum stated that he understood that the subject parcel was only five acres but it was originally part of a fifteen acre parcel. He assumed that she must have purchased only five acres of the fifteen acre parcel.

Ms. Garrett asked if it the fifteen acre parcel had been subdivided and Mrs. English purchased only five acres.

Mr. Harcum stated that the original estate belonged to Mr. Graves and that he and his family paid property taxes for years.

Mr. Ford made a motion to defer the application until the applicant can prove ownership of the adjacent parcel.

On a vote of 8-0, the Committee recommended deferral of the application.

The meeting was adjourned at 4:20 p.m.

| Ms. Smith, Chair | W. Scott Whyte, Sr. Landscape Planner II |
|------------------|--|

UNAPPROVED MINUTES OF THE AGRICULTURAL AND FORESTAL ADVISORY COMMITTEE OF THE COUNTY OF JAMES CITY, VIRGINIA, HELD ON THE 12th DAY OF MARCH, TWO THOUSAND AND FIFTEEN, AT 4:00 P.M. AT BUILDING A 101 MOUNTS BAY ROAD, WILLIAMSBURG, VIRGINIA.

1. Roll Call:

Members Present

Mr. Hitchens Mr. Abbott

Mr. Ford

Ms. Smith

MS. Silliui

Ms. Garrett

Mr. Bradshaw

<u>Absent</u>

Mr. Kennedy

Mr. W. Harcum

Mr. P. Harcum

Mr. W. Taylor

Also Present

Mr. W. Scott Whyte (Planning)

Mr. Chris Swynford (Attorney)

Ms. Savannah Pietrowski (Planning)

Ms. Roberta Sulouff (Planning)

2. New Business:

A. Approval of the January 16, 2015 Meeting Minutes

On a vote of 6-0, the minutes of the January 16, 2015 meeting were approved.

B. Case No. AFD-6-86-2-2014. Cranston's Pond, 3125 Chickahominy Road Addition

Mr. Whyte presented the staff report stating that Mrs. Susan English had applied to add a five acre parcel located at 3125 Chickahominy Road to the Cranston's Pond AFD. Mr. Whyte stated that staff recommended that the AFD Advisory Committee recommend approval of the proposed addition to the Board of Supervisors.

On a vote of 6-0, the Committee recommended approval of the application.

C. Case No. AFD-01-02-01-2015, Carter's Grove, Colonial Williamsburg Withdraw

Mrs. Roberta Sulouff presented the staff report......

The meeting was adjourned at 4:50 p.m.

| Ms. Smith, Chair | W. Scott Whyte, Sr. Landscape Planner II |
|------------------|--|

AGRICULTURAL & FORESTAL DISTRICT-01-02-01-2015. Carter's Grove, Colonial Williamsburg Foundation Withdrawal Staff Report for the April 1, 2015, Planning Commission Public Hearing

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

PUBLIC HEARINGS Building F Board Room; County Government Complex

AFD Advisory Committee March 12, 2015, 4:00 p.m. Planning Commission: April 1, 2015, 7:00 p.m.

Board of Supervisors: May 11, 2015, 6:30 p.m. (Tentative)

SUMMARY FACTS

Applicant: Mr. Keith Johnson, Colonial Williamsburg Foundation

Land Owner: Colonial Williamsburg Foundation

Proposal: Withdrawal of 1.56 acres from the existing Carter's Grove AFD

Location: 8766 Pocahontas Trail

Tax Map/Parcel Nos.: 5910100021

Parcel Size: ± 1.56 acres

Zoning: LB, Limited Business

Comprehensive Plan: Neighborhood Commercial

Primary Service Area: Inside PSA

STAFF RECOMMENDATION

The adopted Board of Supervisors policy governing the withdrawal of property from Agricultural and Forestal Districts (AFDs) states that "it is the policy of the Board to discourage the withdrawal of properties from AFDs during the terms of those districts" (Attachment 3). This withdrawal request was submitted less than one year since the most recent renewal of the Carter's Grove AFD in September 2014. While staff acknowledges the applicant's statements that the owner desired to avoid negatively affecting the potential transfer of the Carter's Grove property at the time of the renewal, and that the subject 1.56 acre property on the north side of Pocahontas Trail offers unique characteristics that do not serve to protect or preserve the majority of the district, staff cannot support this request for withdrawal given its inconsistency with the adopted withdrawal criteria. Staff recommends that the Planning Commission recommend denial of this withdrawal application to the Board of Supervisors.

At its March 12, 2015 meeting, the AFD Advisory Committee voted 6-0 to recommend denial of this application.

PROJECT DESCRIPTION

In September of 2014, the Board of Supervisors renewed the Carter's Grove AFD for a period of four years (corresponding staff report and adopted ordinance attached). The AFD, comprised of three parcels presently owned by two owners, was created in 2002. During the 2006 renewal, Colonial Williamsburg removed a portion of land totaling approximately 2.26 acres. That area encompassed the 1,650-foot-long entrance road to Carter's Grove Plantation which allowed flexibility for road future widening. In 2007, the Plantation mansion, its surrounding area, and the entrance road were merged into one parcel which was then excluded from the AFD. Currently, the Carter's Grove AFD consists of approximately 317.7 acres located generally between the James River, Ron Springs Road, and south of Pocahontas Trail (Route 60). The Foundation seeks to remove one ancillary parcel containing approximately 1.56 acres located on the north side of Pocahontas Trail.

Since 2002, ownership of the two southern parcels has changed hands twice. In 2007, the Foundation sold parcels 5820100002 and 5910100030 to Carter's Grove, LLC. The LLC filed for bankruptcy in 2011 and the parcels were sold at auction and are once again under the ownership of the Colonial Williamsburg Foundation as of the spring of 2014. Per a letter from the applicant, the Foundation was in the process of marketing and selling the property over the summer and early fall of 2014 while concurrently completing their AFD renewal process. The AFD was renewed on September 9, 2014 and the two southern parcels were sold on September 17, 2014.

The Foundation still owns one parcel within the AFD (Parcel 5910100021) and wishes to withdraw that parcel at this time. The parcel is approximately 1.56 acres, and is located north of the rest of the AFD, separated from the rest of the AFD by Pocahontas Trail. Per their application request, the Foundation wishes to withdraw the parcel in order to market and sell it for commercial use. The applicant feels that this would unencumber the parcel, making it more marketable to potential purchasers, as a commercial use would not be consistent with the preservation goals of the Agricultural and Forestal District.

PUBLIC IMPACTS

Surrounding Zoning and Development

The parcel is zoned LB, Limited Business, and is bordered on the northern side of Pocahontas Trail by similarly zoned property. Nearby parcels are also zoned Rural Residential (R-8, Carter's Grove Plantation parcel), General Residential (R-2), and Multi-Family Residential (R-5). The parcel is undeveloped and wooded.

Public Utilities

The parcel lies within the PSA; public water and sewer are available.

COMPREHENSIVE PLAN

Land Use Map Designation

The 2009 Comprehensive Plan designates this parcel as Neighborhood Commercial; all other parcels in the AFD are designated Park, Public, or Semi-Public Open Space.

Staff Comments: All other parcels within the Carter's Grove AFD are designated Park, Public, or Semi-Public Open Space. The 2009 Comprehensive Plan update defines these spaces as "areas that are used for recreation, historical or cultural resources or... as buffers to historic sites and sensitive areas such as reservoirs, and natural heritage resources." In contrast, recommended uses for Neighborhood Commercial areas include "individual medical offices, branch banks, small service establishments, day care centers, places of public assembly, convenience stores with limited hours of operation, small restaurants..." none

of which would be permissible within an AFD. It is, however, important to note that most AFD properties within the PSA have either residential or commercial Comprehensive Plan designations; that they are not rural or public lands does not disqualify these parcels from the AFD program, nor is it unusual within the program.

Although the current Land Use Designation for Parcel 5910100021 appears to be inconsistent with the goals of the AFD program, staff acknowledges that the parcel has been zoned for commercial use since its inclusion in the district and has been knowingly renewed as part of the AFD with the same Land Use Designation in both 2010 and 2014. Though the applicant has chosen not to renew pieces of other parcels at earlier renewals, withdrawal of this parcel has not been requested or considered during those processes.

ANALYSIS

On September 28, 2010, the Board of Supervisors adopted a policy and withdrawal criteria for AFD parcels. That policy is enclosed (Attachment 3) and the withdrawal criteria are listed below with staff comments following in italics:

The criteria for withdrawal during the terms of the districts are as follows:

A. The request is caused by a change in circumstances that could not have been anticipated at the time application was made for inclusion in the district.

Historically, a change in circumstances has been interpreted to include "death of a property owner" as stated in the State Code, but has not included new opportunities for development of a property. The withdrawal policy, as adopted by the Board of Supervisors, states that it is the policy of the Board of Supervisors to discourage the withdrawal of properties from AFDs during the terms of those districts.

B. The request would serve a public purpose, as opposed to the proprietary interest of the landowner, that could not otherwise be realized upon expiration of the AFD.

It is not clear that the withdrawal of this parcel would explicitly serve a public interest. Previous examples of withdrawals that served a public purpose included the Matoaka Elementary School. In this case, the applicant does not provide details regarding specific development plans upon withdrawal from the AFD.

C. The request would not cause damage or disruption to the existing district.

Should this withdrawal be approved, the size of the Carter's Grove AFD would be 316.14 acres and will still meet minimum acreage requirements for Agricultural and Forestal Districts. Staff finds that no damage to the District will result from this withdrawal.

D. If the request for withdrawal is in conjunction with a proposal to convert the land use of a property to a different use than is currently in place, the new land use would be in conformance with the Comprehensive Plan.

The applicant is not requesting a change in land use designation at this time. Though not necessary, in many cases involving the withdrawal of land from an AFD, applicants submit development plans which clarify future land use conformity with the Comprehensive Plan. Examples of withdrawal requests being considered in conjunction with corresponding development proposals include the cases of St. Bede Catholic Church on Ironbound Road and the Ford's Colony Continuing Care Retirement Community on News Road.

RECOMMENDATION

The adopted Board of Supervisors policy governing the withdrawal of property from Agricultural and Forestal Districts (AFDs) states that "it is the policy of the Board to discourage the withdrawal or properties from AFDs during the terms of those districts" (Attachment 3). This withdrawal request was submitted less than one year since the most recent renewal of the Carter's Grove AFD in September 2014. While staff acknowledges the applicant's statements that the owner desired to avoid negatively affecting the potential transfer of the Carter's Grove property at the time of the renewal, and that the subject 1.56 acre property on the north side of Pocahontas Trail offers unique characteristics that do not serve to protect or preserve the majority of the district, staff cannot support this request for withdrawal given its inconsistency with the adopted withdrawal criteria. Staff recommends that the Planning Commission recommend denial of this withdrawal application to the Board of Supervisors. At its March 12, 2015 meeting, the AFD Advisory Committee voted 6-0 to recommend denial of this application.

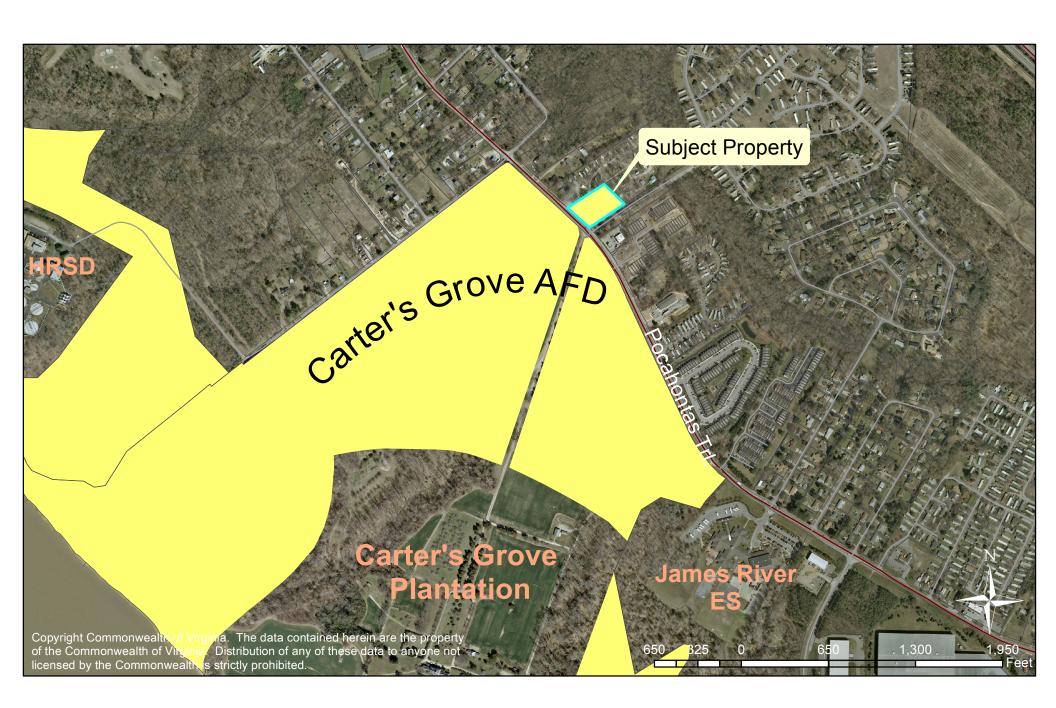
Roberta Sulouff, Planner

ATTACHMENTS:

- 1. Location Map
- 2. Applicant letter dated January 30, 2015
- 3. Policy Governing the Withdrawal of Property from Agricultural and Forestal Districts
- 4. 2014 Carter's Grove AFD Renewal (staff report and adopted ordinance)
- 5. Unapproved minutes from the March 12, 2015 AFD Advisory Committee meeting

AFD-01-02-01-2015. Carter's Grove, Colonial Williamsburg Foundation Withdrawal







The Colonial Williamsburg Foundation

"THAT THE FUTURE MAY LEARN FROM THE PAST"

January 30, 2015

Mr. Paul Holt, III, Planning Director Planning Division James City County 101-A Mounts Bay Road Williamsburg, VA 23185

Re: Withdrawal of Property from the Carter's Grove AFD (AFD-01-02)

Dear Mr. Holt:

The Colonial Williamsburg Foundation seeks to withdraw its 1.56 acre undeveloped parcel at 8766 Pocahontas Trail (parcel ID # 5910100021) from the Carter's Grove AFD. In accordance with James City County's Policy Governing the Withdrawal of Property from Agricultural and Forestal Districts, I submit this letter in support of this request.

The Carter's Grove AFD renewed in 2014 and is not due to be considered again until before it expires on October 31, 2018. Last summer, when the AFD was being considered for renewal, Colonial Williamsburg was actively marketing Carter's Grove Plantation. At that time, we decided not to make any changes to the district because we did not want to do anything that might negatively affect its transfer to a new owner. In the end, we sold Carter's Grove on September 17, 2014. The AFD was renewed a week earlier at the September 9, 2014 Board of Supervisor's Meeting, so we missed our opportunity to remove Parcel 5910100021 from the district while it was under review.

Parcel 5910100021 is zoned LB and is separated from the rest of the Carter's Grove AFD land by Route 60. Colonial Williamsburg wants to unencumber the parcel so that it can be marketed and sold for commercial use. Please contact me if you have any questions or need any additional information.

Sincerely

Keith Johnson

Director, Property Management

(757) 220-7353

kjohnson@cwf.org

RESOLUTION

POLICY GOVERNING THE WITHDRAWALS OF PROPERTY FROM AGRICULTURAL

AND FORESTAL DISTRICTS (AFDs)

- WHEREAS, the Board of Supervisors has determined that Agricultural and Forestal Districts (AFDs) are a valuable tool to help protect the agricultural and forestal lands and industry in James City County; and
- WHEREAS, premature withdrawals of land from the Districts is contrary to the intent of the Board in allowing the establishment of these Districts.
- NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby establishes the following policy relating to the withdrawal of lands from AFDs during the terms of those Districts. This policy in no way supersedes the provisions for withdrawal by right under Sections 15.2-4311 or 15.2-4314D of the Code of Virginia.
 - It is the policy of the Board of Supervisors to discourage the withdrawal of properties from AFDs during the terms of those districts.
 - The criteria for withdrawal during the terms of the districts are as follows:

In order to establish "good and reasonable cause," a landowner requesting to withdraw property from an AFD must submit written information to demonstrate compliance with the following criteria:

- A. The request is caused by a change in circumstances that could not have been anticipated at the time application was made for inclusion in the district.
- The request would serve a public purpose, as opposed to the proprietary interest of the landowner that could not otherwise be realized upon expiration of the AFD.
- C. The request would not cause damage or disruption to the existing district.
- D. If the request for withdrawal is in conjunction with a proposal to convert the land use of a property to a different use than is currently in place on the property, the new land use would be in conformance with the Comprehensive Plan.

The Board shall weigh each of the above criteria in its deliberation, but may also use whatever other criteria as it deems appropriate for the individual case.

ATTEST:

Robert C. Middaugh Clerk to the Board

James G. Kennedy

Chairman, Board of Supervisors

SUPERVISOR VOTE AYE MCGLENNON GOODSON AYE AYE **ICENHOUR** AYE JONES KENNEDY AYE

Adopted by the Board of Supervisors of James City County, Virginia, this 28th day of September, 2010.

AFDsPolWdraw_res

ADOPTED

SEP 09 2014

ORDINANCE NO. 197A-3

Board of Supervisors James City County, VA

AGRICULTURAL AND FORESTAL DISTRICT-01-02

CARTER'S GROVE 2014 RENEWAL

- WHEREAS, James City County has completed a review of the Carter's Grove Agricultural and Forestal District; and
- WHEREAS, in accordance with Section 15.2-4311 of the Code of Virginia, 1950, as amended (the "Virginia Code") property owners have been notified, public notices have been filed, public hearings have been advertised, and public hearings have been held on the continuation of the Croaker Agricultural and Forestal District; and
- WHEREAS, the Agricultural and Forestal District Advisory Committee at its meeting on July 7, 2014, voted 8-0 to recommend renewal of the district; and
- WHEREAS, the Planning Commission following its public hearing on August 6, 2014, concurred with the recommendation of staff and the AFD Advisory Committee and voted 6-0 to recommend renewal of the district with the conditions listed below.
- NOW, THEREFORE, BE IT ORDAINED, by the Board of Supervisors of James City County, Virginia, that:
 - The Carter's Grove Agricultural and Forestal District is hereby continued to October 31, 2018, in accordance with the provisions of the Virginia Agricultural and Forestal District Act, Virginia Code Section 15.2-4300 et. seq.
 - 2. That the district shall include the following parcels, provided, however, that all land within 25 feet of road rights-of-way is excluded from the district:

| Owner | Parcel No. | Acres |
|----------------------------------|------------|--------|
| Carter's Grove, LLC | 5820100002 | 76.10 |
| Carter's Grove, LLC | 5910100030 | 240.04 |
| Colonial Williamsburg Foundation | 5910100021 | _1.56 |
| | Total: | 317.70 |

- 3. That pursuant to the Virginia Code, Section 15.2-4312 and 15.2-4313, the Board of Supervisors requires that no parcel in the Carter's Grove Agricultural and Forestal District be developed to a more intensive use without prior approval of the Board of Supervisors. Specifically, the following restrictions shall apply:
 - a. The subdivision of land is limited to 25 acres or more, except where the Board of Supervisors authorizes smaller lots to be created for residential use by members of the owner's immediate family, as defined in the James City County Subdivision

Ordinance. Parcels of up to five acres, including necessary access roads, may be subdivided for the siting of Wireless Communications Facilities (WCF), provided: a) the subdivision does not result in the total acreage of the District to drop below 200 acres; and b) the subdivision does not result in a remnant parcel of less than 25 acres.

- b. No land outside the Primary Service Area and within the AFD may be rezoned and no application for such rezoning shall be filed earlier than six months prior to the expiration of the District. Land within the AFD may be withdrawn from the District in accordance with the Board of Supervisors' Policy Governing the Withdrawal of Properties from AFDs, adopted September 28, 2010.
- c. No special use permit shall be issued except for agricultural, forestal, or other activities and uses consistent with Virginia Code, Section 15.2-4301 et. seq., which are not in conflict with the policies of this District. The Board of Supervisors, at its discretion, may issue special use permits for wireless communications facilities on AFD properties which are in accordance with the County's policies and ordinances regulating such facilities.

Mary K. Jones
Chairman, Board of Supervisors

| ATTEST: | | <u>AYE</u> | NAY | ABSTAIN |
|--------------------|--------------------|---------------|-----|----------------|
| | KENNEDY | _X | | |
| \M(101) | JONES MCGLENNON | _X | | |
| Bryan J. Will | ONIZUK | -X | | |
| Clerk to the Board | HIPPLE | × | | |
| Clerk to the Board | HIPPLE | | | |

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of September, 2014.

AFD01-02-1-14CartersGrove-res

Agricultural and Forestal District-01-02-1-2014. Carter's Grove AFD Renewal Staff Report for the September 9, 2014, Board of Supervisors Public Hearing

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

PUBLIC HEARINGS

Building F Board Room; County Government Complex

AFD Advisory Committee:

July 7, 2014, 4:00 p.m. (Human Services Building)

Planning Commission:

August 6, 2014, 7:00 p.m.

Board of Supervisors:

September 9, 2014, 7:00 p.m.

SUMMARY FACTS

| Owners: | Parcel Number | Acres |
|----------------------------------|---------------|-------------|
| Carter's Grove, LLC | 5820100002 | 76.10 |
| Carter's Grove, LLC | 5910100030 | 240.04 |
| Colonial Williamsburg Foundation | 5910100021 | <u>1.56</u> |

TOTAL ACRES......317.70

Zoning:

R-8, Rural Residential, R-2, General Residential and LB, Limited Business

Comprehensive Plan:

Park, Public, Semi-Public Open Space; Federal, State, County Land;

Conservation Area; and Neighborhood Commercial

Primary Service Area:

Inside

Staff Contact:

Luke Vinciguerra

Phone: 253-6783

STAFF RECOMMENDATION

Staff finds this Agricultural and Forestal District (AFD) consistent with the surrounding zoning and consistent with the goals of the Comprehensive Plan. Staff recommends the Board of Supervisors renew the Carter's Grove AFD for a period of four years, subject to the conditions listed in the attached resolution.

PLANNING COMMISSION RECOMMENDATION

At its August 6, 2014, meeting, the Planning Commission recommended the continuation of the District by a vote of 6-0 (Richardson absent).

AFD ADVISORY COMMITTEE RECOMMENDATION

At its July 7, 2014, meeting, the AFD Advisory Committee voted 8-0 to recommend the continuation of the District to the Planning Commission and Board of Supervisors.

Proposed Changes Made Since the Planning Commission Meeting

None.

SUMMARY

As required by State Code, the County must review all established AFDs prior to their expiration. During this review, districts must be continued, modified, or terminated. This report will review AFD-1-02, Carter's Grove, which is scheduled to expire October 31, 2014.

Staff is attempting to synchronize the expiration dates of all districts. As part of the 2014 renewal process, staff is recommending a term of four years, making the expiration date October 31, 2018.

DISTRICT HISTORY

The Carter's Grove AFD District was created by the Board of Supervisors on October 8, 2002, for a term of four years. During the 2006 renewal, Colonial Williamsburg removed a portion of land totaling approximately 2.26 acres. The area encompasses the 1,650-foot-long entrance road to Carter's Grove Plantation and would allow the flexibility for future widening. In 2007, the parcel that the mansion is located on was combined with the surrounding parcel. The entire area of the previously delineated parcel, along with the aforementioned entrance road, is not included in the Carter's Grove AFD.

The District includes land on the above properties as previously described with the exception of all land within 25 feet of arterial road rights-of-way, land within the Colonial Pipeline and HRSD easements, and land within ten feet adjacent to both sides of the HRSD easement. That property has been excluded from the District to allow for possible road and/or drainage improvements and expansion.

The Carter's Grove AFD consists of approximately 317.7 acres located generally between the James River, Ron Springs Road, and south of Pocahontas Trail (Route 60). One parcel containing 1.5 acres is located north of Pocahontas Trail. The main two parcels surround the Carter's Grove Plantation and the Hampton Roads Sanitation District (HRSD) sewer station and are west of the James River Commerce Center.

<u>ANALYSIS</u>

The property included in this District is wooded or cleared pasture and does not include the Carter's Grove Plantation House and Visitor Center. The District also has direct frontage on the James River and contains some marshland that drains directly into the James River.

The entire District lies within the Primary Service Area and property within the District is zoned R-2, General Residential, R-8, Rural Residential, and LB, Limited Business. The majority of the property is designated Park, Public, Semi-Public Open Space; Federal, State, County Land; or as a Conservation Area on the 2009 James City County Comprehensive Plan Land Use Map. One parcel is designated Neighborhood Commercial. The locations of parcels within the District provide natural buffers surrounding the HRSD sewer station and the Carter's Grove Plantation historical site and help to preserve the natural, wooded, and rural character of that area of the County. The continuation of this AFD will help to ensure that some property in the predominantly urban southern end of the County remains in forestal and/or agricultural uses for the duration of the District.

REQUEST NOT TO CONTINUE IN THE AFD

No property owner has requested to not continue their participation in the AFD.

ADDITIONS

No property owner has requested land be added to the District during this renewal period.

CHANGE IN CONDITIONS

Staff is recommending a revision to Condition No. 2 to correct language that references the Board of Supervisor's policy pertaining to Withdrawal of Lands from Agricultural and Forestal Districts to refer to the most recent policy adopted in 2010. The proposed change is as follows:

"No land outside the Primary Service Area (PSA) and within the Agricultural and Forestal District may be rezoned and no application for such rezoning shall be filed earlier than six months prior to the expiration of the District. Land outside the PSA, and within the Agricultural and Forestal District, may be withdrawn from the District in accordance with the Board of Supervisors' policy pertaining to Withdrawal of Lands from Agricultural and Forestal Districts Outside the Primary Service Area, adopted September 24, 1996, as amended. Land inside the PSA, and within the Agricultural and Forestal District, may be withdrawn from the District in accordance with the Board of Supervisors' policy pertaining to Withdrawal of Lands from Agricultural and Forestal Districts Within the Primary Service Area, adopted September 24, 1996, as amended."

No land outside the Primary Service Area and within the AFD may be rezoned and no application for such rezoning shall be filed earlier than six months prior to the expiration of the District. Land within the AFD may be withdrawn from the District in accordance with the Board of Supervisors' Policy Governing the Withdrawals of Property from AFDs, adopted September 28, 2010, as amended.

STAFF RECOMMENDATION:

Staff finds this AFD consistent with the surrounding zoning and consistent with the goals of the Comprehensive Plan. At its August 6, 2014, meeting, the Planning Commission voted to recommend the continuation of the District by a vote of 6-0 (Richardson absent). At its July 7, 2014, meeting, the AFD Advisory Committee voted to recommend the continuation of the District to the Planning Commission and Board of Supervisors by a vote of 8-0. Staff recommends the Board of Supervisors renew the Carter's Grove AFD for a period of four years, subject to the conditions listed in the attached resolution.

Luke Vinciguerra

CONCUR:

LV/gb AFD01-02-1-14CartersGrove

ATTACHMENTS:

- 1. Ordinance
- 2. Location Map
- 3. Existing ordinance and conditions, dated September 28, 2010
- 4. Approved minutes of the July 7, 2014, AFD Advisory Committee meeting (under separate cover)
- 5. Unapproved minutes of the August 6, 2014, Planning Commission meeting (under separate cover)

UNAPPROVED MINUTES OF THE AGRICULTURAL AND FORESTAL ADVISORY COMMITTEE OF THE COUNTY OF JAMES CITY, VIRGINIA, HELD ON THE 12th DAY OF MARCH, TWO THOUSAND AND FIFTEEN, AT 4:00 P.M. AT THE BUILDING A CONFERENCE ROOM, 101 MOUNTS BAY ROAD, WILLIAMSBURG, VIRGINIA.

1. Roll Call:

Members Present

Mr. Hitchens

Mr. Abbott

Mr. Ford

Ms. Smith

Ms. Garrett

Mr. Bradshaw

Absent

Mr. Kennedy

Mr. W. Harcum

Mr. P. Harcum

Mr. W. Taylor

Also Present

Mr. W. Scott Whyte

Ms. Roberta Sulouff

Mr. Jason Purse

2. <u>New Business</u>:

A. Approval of the January 16, 2015 Meeting Minutes

On a vote of 6-0, the minutes of the January 16, 2015 meeting were approved.

C. Case No. AFD-01-02-01-2015, Carter's Grove, Colonial Williamsburg Withdrawal

Mrs. Roberta Sulouff presented the staff report stating that the Colonial Williamsburg Foundation has requested to withdraw a 1.56 acre parcel located at 8766 Pocahontas Trail from the Carter's Grove AFD. Mrs. Sulouff stated that staff recommended that the AFD Advisory Committee recommend denial of the withdrawal request to the Board of Supervisors.

Mr. Ford stated that being in an AFD does not prohibit the parcel from being sold, but the buyer should understand that the parcel is within the AFD.

Mr. Mark Duncan, speaking on behalf of the applicant, Mr. Keith Johnson, stated that there were unforeseeable circumstances involved with the sale of Carter's Grove which prevented the subject property from non being renewed when the District was last considered by the Board of Supervisors in 2014. He stated that Colonial Williamsburg sold the Carter's Grove parcel only one week after the AFD renewal date and that this parcel was not included as part of the sale. He further stated that the 1.56 acres would not affect the size of the AFD and that this parcel

accounts for only one half of one percent of the total District. He stated that no tax relief is associated with this parcel, and that by selling this parcel for a commercial use it would benefit the county with a higher tax rate. He also pointed out that the parcel is located across the street from the existing AFD.

Mr. Abbott stated that there is no tax benefit to the applicant and no real benefit to the County to keep it in the AFD.

Mr. Bradshaw stated that the application does not meet the criteria for withdrawal and that the circumstances were not unforeseen because there is plenty of notice for the withdrawal date and that Colonial Williamsburg should have anticipated these circumstances.

Mr. Abbott asked staff why the notice for renewals went out months before the renewal date.

Mr. Purse explained that staff initiates the renewal process three months ahead of the deadline to allow sufficient time to give property owners notice and to schedule and the Advisory Committee meeting and Planning Commission and Board of Supervisors public hearings prior to the expiration date for the District.

Mr. Abbott asked what the benefit to the County would be for keeping the parcel in the AFD.

Mr. Bradshaw replied that isn't a benefit but these circumstances were not unforeseen and should have been anticipated.

Mr. Purse stated that state code only allows a withdrawal if a property owner is deceased.

Mr. Bradshaw explained that a higher tax rate is not a public benefit and that the committee does not have the authority to withdraw the parcel without the proper criteria.

Mr. Ford stated that if the committee allows a withdrawal for the stated reasons, a precedent will be set that may come back to haunt the county in the future and that being in an AFD does not prohibit a sale.

Mr. Ford made a motion to recommend denial of the withdrawal request.

Mr. Hitchens seconded the motion.

The committee voted 6-0 to recommend denial of the withdrawal request.

The meeting was adjourned at 4:50 p.m.

| Ms. Smith, Chair | W. Scott Whyte, Sr. Landscape Planner II |
|------------------|--|

Case Nos. Z-0008-2014/MP-0004-2014. The Village at Candle Station Staff Report for the April 1, 2015, Planning Commission Public Hearing

This staff report is prepared by the James City County Planning Division to provide information to the Planning Commission and Board of Supervisors to assist them in making a recommendation on this application. It may be useful to members of the general public interested in this application.

PUBLIC HEARINGS Building F Board Room; County Government Complex

Planning Commission: April 1, 2015, 7:00 p.m. (Deferred by the applicant)

Planning Commission: May 6, 2015, 7:00 p.m.

Board of Supervisors: June 9, 2015, 7:00 p.m. (Tentative)

SUMMARY FACTS

Applicant: Mr. Timothy O. Trant, II, of Kaufman & Canoles, P.C.

Land Owners: Candle Factory, LLC; John and Judith Barnett; and NVR, Inc.

Proposal: A request to rezone \pm 64.45 acres of land from MU, Mixed Use with proffers

to PUD, Planned Unit Development with amended proffers. The request also proposes to amend the adopted master plan by replacing the proposed 90,000 square-foot assisted living facility and 30,000 square-foot office with thirty-three new single family detached units and up to 60,000 square-feet of

warehouse storage units.

Location: 4100, 4102, 4104, 4106, 4108, 4110, 4112, 4114, 4116, 4118, 4120,

4122 Votive Drive; 4000, 4002, 4004, 4006, 4008, 4010, 4012, 4014, 4016, 4018, 4020, 4022 Luminary Drive; 7551, 7567 and a portion of

7559 Richmond Road

Tax Map/Parcel: 2321100034-2321100045; 2321100046-2321100057; 2321100001D,

2321100001E, 2321100001A; and 2321100003B (no Real Estate address

available)

Parcel Size: ± 64.45 acres

Existing Zoning: MU, Mixed Use with proffers

Comprehensive Plan: Low Density Residential, Mixed Use, and Conservation Area

Primary Service Area: Inside

STAFF RECOMMENDATION

The applicant has requested deferral of this application until the May 6^{th} meeting to resolve outstanding issues. Staff concurs with this request.

Staff Contact: Jose Ribeiro, Senior Planner II Phone: 253-6890

ATTACHMENT:

Applicant's deferral request

Gentlemen,

Thank you for your time yesterday. We request to be placed on the agenda for the DRC meeting next week to discuss the drive way access for the single-family detached section of the plan. We also request deferral of consideration of our application by the Planning Commission until its May 6th meeting. Thank you for working with us on this and we look forward to seeing you next week.

Take care,

Tim

Timothy O. Trant II **Kaufman & Canoles, P.C.**11815 Fountain Way, Suite 400

Newport News, VA 23606

4801 Courthouse Street, Suite 300 Williamsburg, VA 23188

O (757) 259.3823 M (757) 880.0767 totrant@kaufcan.com www.kaufCAN.com

MEMORANDUM

DATE:

April 1, 2015

TO:

The Planning Commission

FROM:

Christopher Johnson, Principal Planner

SUBJECT:

Case No. Z-0001-2015. Toano Trace Proffer Amendment

On February 3, 1992, the Board of Supervisors rezoned approximately 28.33 acres of County-owned land located on the east side of Chickahominy Road south of the intersection with Richmond Road from A-1, General Agricultural, to R-3, General Residential, with proffers. On February 18, 1992, the Board of Supervisors consolidated the R-2 and R-3 zoning districts into a single district. As a result all properties within the Toano Trace neighborhood were rezoned to its current zoning R-2, General Residential.

The Toano Trace project was developed by the James City County Office of Housing and Community Development with Community Development Block Grant funding through the Virginia Housing Development Authority's (VHDA) Home Mortgage Loan Program. The remainder of the County-owned land was later developed as Toano Middle School. The project was approved as a residential cluster development of single-family dwellings and two-family dwellings with a maximum of sixty dwelling units at a gross density of 2.1 units per acre. Community recreation facilities and garages and other storage structures attached to the dwelling units were also permitted within the development; however, the 1992 adopted proffers stated that no detached accessory structures shall be permitted.

The Toano Trace Homeowners Association Board of Directors has submitted a request to amend the adopted proffers to eliminate the restriction on detached accessory structures. Over the past two decades, some of the sixty residential properties within the Toano Trace neighborhood have constructed small detached storage structures, such as sheds. They were placed on the property as structures below 256 square feet in size which do not include electrical or plumbing do not require the issuance of a building permit or the review of the Zoning Division. Given the relatively small size of the residential properties within the neighborhood as a cluster development, staff presumes that the original proffer prohibiting detached accessory structures was intended to avoid construction of larger detached garage units or detached accessory apartments and avoid potential conflicts with zoning regulations such as side and rear yard setbacks. Approval of the proposed amendment would bring any detached accessory storage structures into conformance with the zoning of the property.

RECOMMENDATION

Section 15.2-2302 of the Code of Virginia (1950), as amended, allows the Board of Supervisors to waive the requirement for a public hearing where such amendments do not affect conditions of use or density. As the proposed amendment does impact use of the properties within the neighborhood, the County Attorney has determined that the proposed amendment requires a public hearing before the Planning Commission and Board of Supervisors.

Case No. Z-0001-2015. Toano Trace Proffer Amendment April 1, 2015 Page 2

The Toano Trace Homeowners Association has requested this proffer amendment and staff finds that such a request would not negatively impact this existing neighborhood. Staff also finds that such a limiting proffer is not typical of similarly zoned R-2 zoned properties.

Staff, therefore, recommends that the Planning Commission recommend approval of the proposed proffer amendment to the Board of Supervisors to eliminate the restriction on detached accessory structures and limit the restriction only to detached garages and accessory apartments in consideration of the small lot sizes.

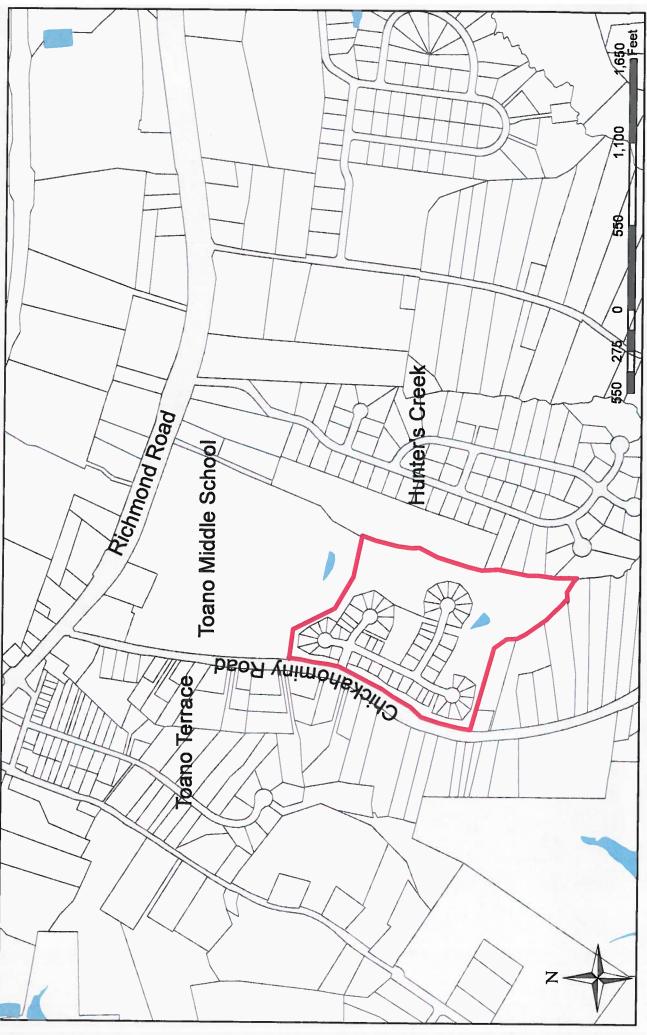
Christopher Johnson

Attachments:

- 1. Location Map
- 2. Letter from the Toano Trace HOA Board of Directors dated February 10, 2015
- 3. Adopted Proffers dated January 29, 1992
- 4. Draft Proffers dated March 19, 2015

Toano Trace Proffer Amendment JCC Case No. Z-0001-2015







Meowners Association

C/O Brooks Real Estate, Inc 312-B Lightfoot Road

FEB 13 2015

County Attornay

February 10, 2015

Williamsburg, VA 23188

PLANNING DIVISION

FEB 1 9 2015

RECEIVED

Mr. Adam Kinsman, County Attorney P.O. Box 8784 Williamsburg, VA 23187

Re:

James City County Proffer-Z-7-91
Toano Trace Homeowners Association

Dear Mr. Kinsman

This request is written on behalf of the owner membership of the Toano Trace Homeowners Association, Inc., the Board of Directors would like to request that the above referenced proffer be amended. More specifically:

- 2. The use of the property shall be limited to:
 - a. Single-family dwellings, two-family dwellings. The total number of individual dwelling units shall not exceed 60.
 - b. Community recreation facilities.
 - c. Garages and other storage structures that are attached to dwellings. No detached accessory structures shall be permitted.

The Board of Directors on behalf of the community as a whole is requesting that the last part of this proffer be amended and restated as follows:

- 2. The use of the property shall be limited to:
 - a. Single-family dwellings, two-family dwellings. The total number of individual dwelling units shall not exceed 60.
 - b. Community recreation facilities.
 - c. Garages and other storage structures that are attached to dwellings.
 - d. Detached accessory structures.

These homes are situated on very small lots (less than an acre), they are owned by middle working class citizens, and these small storage facilities are exclusively for the individual homeowners use.

It is the hope of the Board of Directors for Toano Trace Homeowners Association, Inc., that the existing proffer can be amended to allow detached accessory structures in this community.

If you need further assistance or require additional information please contact our community Manager, Melissa Sabb at 757-229-1057.

The undersigned below, representing the majority of the board of Directors for Toano Trace Homeowners Association, Inc. remain,

Sincerely Yours,

Ermadine Bullard, President

Toano Trace Homeowners Association, Inc.

Derek Retan, Vice President

Toano Trace Homeowners Association, Inc.

Carolyn Retan, Treasurer

Toano Trace Homeowners Association, Inc.

Karyn Lee-Gray, Member-at-Large

Toano Trace Homeowners Association, Inc.

Cc: Christopher Johnson, Principal Planner

PROFFER AGREEMENT

RE: TOQNO TRACE

WHEREAS, James City County ("the Owner"), plans to develop certain real property in James City County, Virginia, more particularly described as follows:

All that certain percei of land in Stonehouse District, James City County, Virginia containing 28.33 acres more or least being that same property shown as parcel "B" on that certain plat entitled "SUBDIVISION OF 62.39 ACRES STANDING IN THE NAME OF THE COUNTY OF JAMES CITY, JAMES CITY COUNTY, VIRGINIA", prepared by Lynn D. Evans, Certified Land Surveyor of The DeYoung-Johnson Group, Inc., dated December 18, 1991, which plat is recorded in the Clerks Office of the Circuit Court for the City of Williamsburg and the County of James City Plat Book 55, Page 47.

- WHEREAS, the Owner has applied for a rezoning of the above described property ("Property") from the Agricultural District, A-1 ("Exteting Zoning") to the General Residential District, R-3, of the James City County Code, ("Proposed Zoning"); and
- WHEREAS, James City County, Virginia ("County") may be unwilling to rezone the Property, because the Proposed Zoning regulations may be deemed inadequate for the orderly development of the Property, because competing and incompatible uses may conflict; and
- WHEREAS, more flexible and adaptable zoning methods are deemed advisable to parmit the use of the Property; and
- WHEREAS, the Owner is desirous of offering certain conditions for the protection of the community that are not applicable to land similarly zoned in addition to the regulations provided for in the Proposed Zoning regulations.
- NOW, THEREFORE, THIS AGREEMENT WITNESSETH, that for and in consideration of the County rezoning the Property from the Existing Zoning to the Proposed Zoning and pursuant to Section 15.1-491.1 of the Code of Virginia, 1950, as amended, and Section 20-18 of the Zoning Ordinance of James City County, Virginia, the Owner agrees that in addition to the regulations provided in the Proposed Zoning, it shall meet and comply with all of the following conditions in the development of the Property:
 - The Property shall be developed as a cluster subdivision in accordance with James City County Code Chapter 20, Zoning Article IX, Residential Cluster Development, as amended and in effect on the date the master plan is submitted to the County.
 - The use of the Property shall be limited to:
 - Single-family dwellings, two-family dwellings. The total number of individual dwelling units shall not exceed 60.
 - b. Community recreation facilities.
 - c. Garages and other storage structures that are attached to dwellings. No detached accessory structures shall be permitted.

- The aubdivision plan shall be in general conformance with the conceptual plan submitted as part of the rezoning application as determined by the Director of Planning.
- 4. All Individual dwelling units shall be said at or below the Virginia Housing Development Authority's Home Mortgage Loan Program price limit, as adjusted (\$81,500 as of October, 1991). Fifty percent of the individual dwelling units will be said at or below 80 percent of the VHDA price limit, as adjusted (\$85,200 as of October, 1991).
- 6. The footprint of single-family or two-family structures shall not exceed 1,700 square feet. Dacks shall not be included in the footprint area of two-family structures. Clearing, in addition to building footprints, shall be limited to 3,000 square feat for each single-family or two-family structure. Clearing for driveways shall be minimized and not included in the 3,000-square foot limit.
- The subdivision plan shall provide for a single entrance to the Property along State Route 631. The Property shall not have any private driveways entering State Route 631 (Chickshominy Road).
- 7. Except for walking traits and drainage facilities approved by the Planning Commission, areas shown as "Designated Open Space" on the conceptual plan submitted as part of this application shall be left in their natural vegetated state or landscaped in accordance with plans approved by the Development Review Committee. If grading, as approved by the Development Review Committee, of any part of such areas requires the removal of natural vegetation, such vegetation shall be replaced with appropriate screen planting approved by the Development Review Committee. Such designated open space areas shall be conveyed to the homeowners' association subject to a conservation easement to James City County. The homeowners' association shall be responsible for all maintenance and trash removal in such areas. Until conveyance of such areas to the association, the owner shall be responsible for such maintenance.
- 8. The subdivision plan shall provide a variable width (minimum 50-foot) scenic buffer adjacent to the right-of-way line of State Route 631. This buffer area shall be included as part of the designated open space referred to in Proffer 7.
- All streets and roads shall be built to specifications of the Virginia Department of Transportation (VDOT) and shall be dedicated to the County.
- 10. A VDOT standard sidewalk shall be installed on the north side of the entrance road and northward along Chickahominy Road connecting to the middle school sidewalk as shown on the conceptual plan submitted as part of this application.

- 11. An unpayed wailding trail 6 feet wide shall be installed to improve pedestrian access to the recreation area and also along Chickshominy Road south of the entrance road as shown on the conceptual plan submitted as part of this application.
- 12. The Owner shall provide appropriate documentation acceptable to the County Attorney demonstrating that a Homeowners' Association ("Association") has been legally established with authority to impose, raise and collect assessments against the owners of lots according to law. The Association shall have the children to place a lieu on supported within the Property for unneighboring the property for the p ability to place a lien on every lot within the Property for unpaid assessments levied against that lot.
- The owner shall install all road improvements to Chickehominy Road that may be required by VDOT to serve this development.

IN WITNESS WHEREOF, the Proffers were executed on the date first above-written.

County of James City, Virginia

David B. Norman, Administrator

COMMONWEALTH OF VIRGINIA AT LARGE, TO-WIT:

The foregoing proffers were acknowledged before me this 29 day 1992, by David B. Norman County Administrator of James City County.

My commission expires: Much 23, 1992

7037a

AMENDED AND RESTATED PROFFERS

THESE AMENDED AND RESTATED PROFFERS are made this 19th day of March, 2015, by TOANO TRACE HOMEOWNERS ASSOCIATION, INC., a Virginia non-stock corporation, successor to the County of James City, Virginia (together with its successors and assigns, the "Owner" or "Grantor") for the benefit of JAMES CITY COUNTY, VIRGINIA ("Grantee").

RECITALS

WHEREAS, on January 29, 1992 the County of James City, Virginia (the "County") executed certain proffers as part of an application to rezone and subdivide property to develop affordable housing (the "Existing Proffers") (Exhibit 1); and

WHEREAS, pursuant to the Existing Proffers the Toano Trace Homeowners Association, Inc., was established as the homeowners association of the new subdivision; and

WHEREAS, the County conveyed all property designated as "Recreation Lot" and "Open Space/Conservation Easement" to the Owner by deed recorded as Instrument Number 004457, which can be found in James City County Circuit Court Deed Book 676, Page 149.

WHEREAS, Owner is the owner of a tract or parcel of land located in James City County, Virginia, with an address of 3319 Pinecrest Cir., Toano, VA 23168, being Tax Parcel 2220700001C, and a second address of 7639 Crestview Dr., Toano, VA 23168, being Tax Parcel 2220700001B (together the "Property"); and

WHEREAS, the Property and all residential lots within the Toano Trace subdivision are subject to the Existing Proffers; and

WHEREAS, Owner has applied to amend and restate paragraph "2" of Existing Proffers; and

WHEREAS, Owner desires to amend and restate the Existing Proffers in order to allow detached accessory structures, which are prohibited in paragraph 2 of the Existing Proffers.

NOW, THEREFORE, for and in consideration of the approval of the requested amendment, and pursuant to Sections 15.2-2302 and 15.2-2303 of the Code of Virginia, 1950, as amended, and the County Zoning Ordinance, Owner agrees that it shall meet and comply with all of the following conditions in development and use of the Property.

AMENDED PROFFER NO. 2

- 2. The use of the Property shall be limited to:
 - a. Single-family dwellings, two-family dwellings. The total number of individual dwelling units shall not exceed 60.
 - b. Community recreation facilities.
 - c. Garages that are attached to dwellings and other storage structures as are generally allowed in the R-2, General Residential zoning district. No detached garages or detached accessory apartments shall be permitted.

ALL OTHER PROFFERS, RECITALS, AND CONDITIONS SHALL REMAIN THE SAME.

WITNESS the following signatures:

TOANO TRACE HOMEOWNERS ASSOCIATION, INC.

By: Jonadine Bullark, Fresident
[Title]

STATE OF VIRGINIA
City/County of long Coty County to wit:

The foregoing instrument was acknowledged this 19 day of March, 2015, by Association, Inc.

Notary Public

My commission expires: My Commission Expires August 31, 2016

My registration number: 7516360



MEMORANDUM

DATE: April 1, 2015

TO: Planning Commission

FROM: Tammy Mayer Rosario, Principal Planner

SUBJECT: Consideration of the James City County Comprehensive Plan, Toward 2035: Leading the

Way

Over the past 15 months, various members of the community have come together to share their vision for James City County and to fashion it in to a document of goals, strategies and actions for implementation. The culmination of this work is the draft James City County Comprehensive Plan, *Toward 2035: Leading the Way*, which is presented today for the Planning Commission's consideration and recommendation to the Board of Supervisors.

WORK-TO-DATE

In accordance with the endorsed methodology for the Comprehensive Plan update, the 2035 Comprehensive Plan reflects contributions from the citizens of James City County, many community organizations, the business community, the Community Participation Team (CPT), the Planning Commission Working Group (PCWG) and County staff. Toward this end, the CPT spent the first six months of the process conducting a widespread public information campaign and hosting multiple input opportunities to reach a broad spectrum of the community. In addition to the County's statistically valid, representative survey of 600+ households, the CPT gathered input from an online form and questionnaire, phone hotline, mail-in cards, high school presentations, CPT Forums, Community Workshops and a virtual Community Workshop. The CPT reviewed all comments, presenting them in both raw and summarized form on the County's website and to the PCWG and Board of Supervisors.

This public input, as well as information gleaned from the Historic Triangle coordinated Comprehensive Plan review, served as a launching point for the PCWG's efforts over the next seven months to examine all sections of the Comprehensive Plan. Public comment periods, as well as stakeholder and applicant presentations, also helped to inform the PCWG's deliberations. In keeping with feedback given at the start of the streamlined review process, the group relied heavily upon the previous plan; however, each section of the plan was revised with current facts and figures, pertinent information to meet State requirements, and updated goals, strategies and actions. The Economic Development, Transportation and Land Use sections received special focus, resulting in new implementation items, updated corridor visions and project lists, and extensive review of 10 land use designation change applications.

The PCWG communicated and discussed details of the proposed revisions with the Board of Supervisors at two work sessions on October 28, 2014, and January 27, 2015. These revisions were incorporated into the draft Comprehensive Plan (attachment 1), Land Use Application Voting Sheet (attachment 2) and Land Use Map (attachment 3), which the PCWG unanimously recommended for approval on February 19, 2015.

DISCUSSION ITEMS

At the January work session and also at the PCWG's February meeting, members noted several items that needed follow-up discussion or action, including questions on several land use applications, the Virginia

Department of Transportation's (VDOT) review of the plan and the inclusion of an Executive Summary. Staff responses to these issues are noted below.

I. Land Use Applications

• LU-0003-2014, 499 Jolly Pond Road (Colonial Heritage) – The 282-acre area to the west of Deer Lake has not yet been dedicated as conservation area. A SUP condition for the 50-lot rural cluster requires this dedication prior to land disturbing for the development, which has not yet occurred. The conservation easement needs to be dedicated to James City County or an agency acceptable to the County.

There was also discussion at the joint work session about limiting the number of potential units if the property is redesignated to Low Density Residential. The Low Density Residential designation lists one to four dwelling units per acre as the density recommendation. There are no mechanisms in the current Comprehensive Plan to offer more detailed recommendations for a specific development, nor are there mechanisms available outside of an easement or proffer to set a development cap. If redesignated, any potential future rezoning request would be judged against the criteria listed in the Land Use Chart for Low Density Residential development.

- LU-0006-2014, 9400 Barnes Road (Hazelwood Property) A question was asked about the possibility of including all or a portion of Upper County Park in the Primary Service Area (PSA). Parks and Recreation staff indicated that the well that is currently being used is functioning adequately. While they indicated that inclusion in the PSA could provide flexibility, they did not indicate a pressing need for other water/sewer infrastructure in the next few years. In addition, should this be considered, Planning staff would note that including all or a portion of Upper County in the PSA would likely necessitate reexamination of other parcels in the vicinity of Upper County in order ensure a logical line placement. Overall, in keeping with the Planning Commission's recommendation of deferral of a change in the PSA for the Hazelwood property, staff recommends deferring consideration of any change for Upper County Park pending further information about the Virginia Department of Environmental Quality (DEQ) water withdrawal permit and until such time that this matter can be reviewed comprehensively in lieu of a parcel-specific consideration.
- LU-0007-2014, 8515 Pocahontas Trail (Kingsmill and Woods Course) Staff has addressed questions regarding Kingsmill in a separate transmission to the Planning Commission. These questions do not directly pertain to this land use application.
- LU-0009-2014, 5961 Pocahontas Trail (BASF Property) Staff has continued to stay informed of developments related to remediation of the property with the DEQ and on the status of the proposed Dominion Surry-Skiffes Creek power line. Staff offer the following updates on these items:
 - DEQ received some preliminary testing results related to the Human Health Risk Assessment in January and February and they are currently under review. DEQ's review looks at both zinc and chlorinated solvents. Based on a preliminary review of the results, DEQ noted there may still some areas of concern that BASF will either have to eliminate or demonstrate effective mitigation of the areas; however, the final review is not anticipated to be complete until mid-April and DEQ has not received

the entire Human Risk Assessment. DEQ indicated that there are different levels of treatment necessary depending on the proposed uses. Industrial treatment standards are lowest, but higher treatment standards are necessary for hotel and residential uses.

2. The Virginia Supreme Court has not issued a ruling on the County's case regarding the Dominion power line project. The Court is next scheduled to meet in April and may issue a ruling by April 17. If a ruling is not issued at this time, the next regularly scheduled meeting will be in June.

Staff also reached out again via email and phone to the property owners of two small parcels surrounded by the BASF property (referred to as the Trusswood or Colonial Penniman properties in previous discussions) to gauge interest in participating in the requested designation change. The owners did not respond to the inquiry either in the affirmative or the negative so re-designation of the property is not reflected on the draft Land Use Map. Finally, at the Joint Work Session, there was a question regarding the amount of industrially-designated land in the lower part of the County compared to the amount of industrially-designated land in the County as a whole. Staff was able to develop these figures, but notes that the area boundary for the lower part of the County is close, but not identical, to the boundary for the Roberts District (see attachment 4). Roughly 23% of the lower County is designated as General Industry or Limited Industry on the 2009 Comprehensive Plan. Overall, 3.9% of the County is designated as General Industry or Limited Industry.

II. VDOT Review

Pursuant to State code, staff forwarded the draft Comprehensive Plan and Land Use Map to VDOT following the PCWG's approval. On March 17, VDOT responded with a list of comments and suggestions, listed below, which staff believes can be handled via an errata sheet to the Board of Supervisors.

- 1. On page T-5, under Connectivity, reference the edition year of the SSAR 2011.
- 2. Correct the reference to Appendix A on page T-8 to specifically reference the maps from the James City County/Williamsubrg/York County Comprehensive Transportation Study.
- 3. On Map T-1, Merrimac Trail should be classified as a Minor Arterial rather than a Principal Arterial.
- 4. There appears to be a typographical error on page T-11 in the first sentence of the paragraph starting with "Roadway Improvements..."
- 5. Show Table T-3 on page T-15 as two tables, one showing only SYIP projects and the other showing other programmed projects. Please verify costs.
- 6. Include the VTrans 2035 Recommendations.
- 7. Add a title on top of page T-17 that introduces the section as "Future Planning."
- 8. On page T-23 under Bike Lanes, note that the delineation of bike lanes within the limits of a required paved shoulder is not permitted.
- 9. On page T-26, update various references to the Statewide Park and Ride Lot Inventory and Usage Study (study name, lot name and location for Jamestown Center, vehicle spaces for all lots, and study recommendation to install signage at Jamestown Center).

III. Executive Summary

Following the final PCWG meeting, staff completed updates to the Executive Summary for the draft Comprehensive Plan. A copy of this section is attached for your consideration.

RECOMMENDATION

Pending final decisions on the above discussion items, staff recommends adoption of the James City County Comprehensive Plan, *Toward 2035: Leading the Way,* and Land Use Map. Staff notes that the following cases have been requested for separate votes: LU-0003-2014, 499 Jolly Pond Road (Colonial Heritage), LU-0007-2014, 8515 Pocahontas Trail (Kingsmill and Woods Course), and LU-0009-2014, 5961 Pocahontas Trail (BASF Property).

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Attachments:

- 1. Draft Comprehensive Plan (under separate cover)
- 2. Land Use Application Voting Sheet
- 3. Land Use Map http://www.jamescitycountyva.gov/pdf/planning/2035DraftComPlan/CompPlan32x422035DRAF TSizeC.pdf
- 4. Lower County Area Map
- 5. Executive Summary

2035 COMPREHENSIVE PLAN LAND USE APPLICATIONS VOTING SHEET

Date: <u>1/15/15</u>

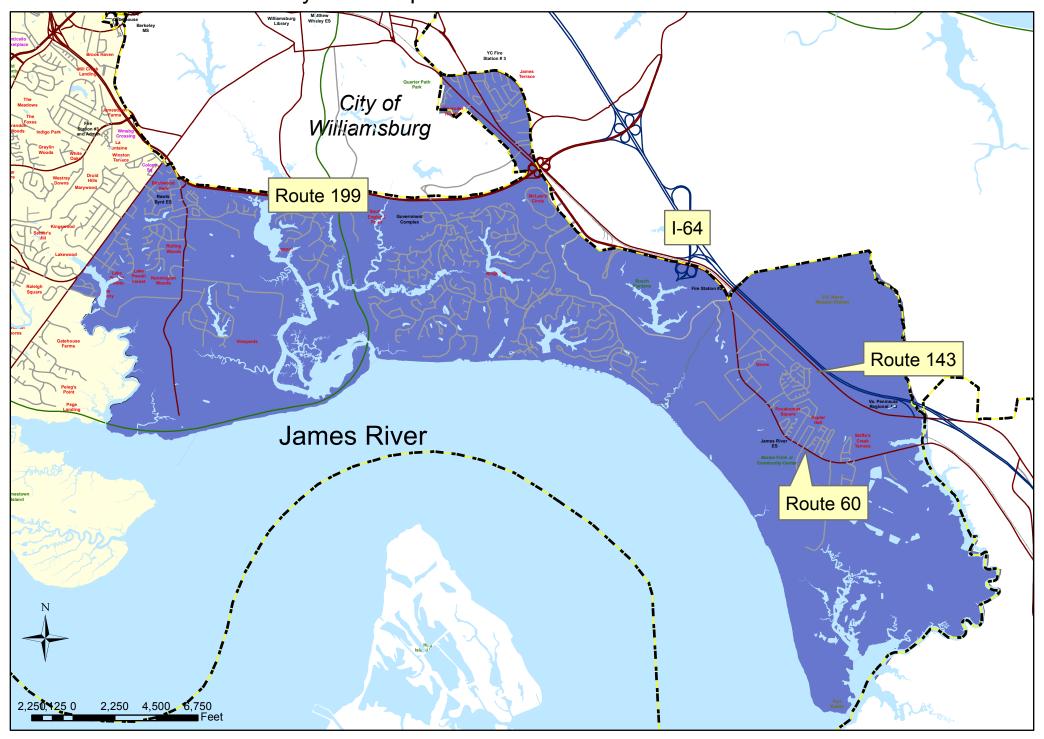
| Date. 1/13/13 | | | | | PCWG | | | | | | | |
|--|--|--|--|--|-----------------|------------------|-------------|-----------------|------------------------------|--------------|------------|--|
| Case Number/ Name | | Owner Requested Changes | Staff Recommendation | Motion | Elizabeth Friel | Heath Richardson | John wright | George Drummond | Kobin Biedsoe Chris Basic | Tim O'Connor | Rich Krapf | PCWG Feedback |
| LU-0001-2014, | 13401000016D, 1340100015, 1340100013 | - | Denial: leave parcel Low Density Residential | Approval: change Massie property and two adjacent properties (7819 and 7901 Croaker Road) to Mixed Use. | Υ | Y | Y | | YY | | | Ensure notification of adjacent property owners and public hearing signage for the two additional properties. Include language in the designation description about commercial uses of a Neighborhood Commercial scale, combined entrance off of Croaker Rd., interconnections among the three properties, buffering to residential area and aesthetics due to the proximity to the library. |
| LU-0002-2014, 8491 Richmond Rd. | 1210100032 | Mixed Use; PSA Expansion | Modified approval: change parcel to Rural Economy Support and expand PSA to include entire parcel | Deferral: pending discussions between JCSA and the Virginia Department of Environmental Quality | Υ | Y | Υ . | γ , | YY | N | Υ | Request to further consider designating the property Economic Opportunity and for staff and the applicant to continue discussions. Also consider keeping option open as to whether the Rural Economy Support designation needs to be inside the PSA. |
| LU-0003-2014, 499 Jolly Pond Rd. | 2240100007 | Low Density Residential; PSA Expansion (portion of parcel) | Denial : leave parcel Rural Lands, outside PSA | Approval: expand PSA to include a portion of the property and change the designation to Low Density Residential | N | N | Υ . | Υ, | YY | Υ | N | |
| LU-0004-2014, 4450 Powhatan Pkwy. | 3830100001 | Moderate Density Residential | Denial: leave parcel Low Density Residential | Denial: leave parcel Low Density Residential | Υ | Y | Υ . | Y | YY | Υ | Y | |
| LU-0005-2014, 133 Powhatan Springs Rd. | 4620100009B | Limited Industrial | | Modified Approval: change to Mixed Use as part of the Five Forks Mixed Use Area | Υ | Y | Y | Y | YY | Υ | Υ | |
| | 0440100014, 0440100015, 0440100013, 0440100012, | | Modified Approval: * change parcels south of interchange to Economic Opportunity; | Northern properties - Approval: change all parcels to Mixed Use | Υ | Y | Y | Υ, | YY | Υ | Υ | Description language for this Mixed Use Area could include some |
| LU-0006-2014, | 0440100003, | Economic Opportunity, Community Commercial; PSA Expansion | * leave 044010008, 044010009, and portion of 0430100017 Mixed Use; * change Low Density Residential portions of 0440100002, 044010003 and 0430100017 to Mixed Use; * bring entirety of 0430100017 into PSA | <u>Southern properties</u> - Approval: change all properties to Economic Opportunity, Deferral of the PSA expansion: pending discussions between JCSA and the Virginia Department of Environmental Quality | Ν | Y | Y | Υ, | YY | Υ | Y | residential for the southern properties up to a certain percentage of the overall development but it should be integrated into the rest of the site development as part of the master plan and should include a timing mechanism to balance residential and commercial/industrial development. |
| | 5230100111, 5230100011A, 5230100011B | Low Density Residential | * change 8515 Pocahontas Trl. to Low Density Residential; * change 101 Busch Service Rd. to Park, Public or Semi-Public | Modified approval: * change 8515 Pocahontas Trl. to Low Density Residential; * change 101 Busch Service Rd. to Park, Public or Semi-Public Open Space; * leave 8581 Pocahontas Trl. Limited Industrial | Υ | Y | Υ | Y | YY | Abstain | Υ | |

2035 COMPREHENSIVE PLAN LAND USE APPLICATIONS VOTING SHEET

Date: 1/15/15

| Date: | <u></u> | _ | 1 | | | | | | | | | |
|--|---|----------------------------|---|---|-----------------|------------------|-------------|-----------------|---------------|-------------|----------------------------|---|
| | | | | | PCWG | | | | | | | |
| Case Number/ Name | Tax Parcels | Owner Requested Changes | Staff Recommendation | Motion | Elizabeth Friel | Heath Richardson | John wright | George Drummond | Robin Bledsoe | Chris Basic | Tim O'Connor Rich Krapf | PCWG Feedback |
| LU-0009-2014, 8961 Pocahontas Trl. (BASF Property) | 5940100003, 5940100005, 5940100006 | Mixed Use | Denial : leave parcels General Industry and Mixed Use | Approval: Change to Mixed Use and develop specific language for a new Mixed Use area | Y | Absent | Y | Y | Y | N | N N | Mixed Use description should mirror the language for GreenMount Mixed Use Area. Want to still allow for industrial and office uses in addition to resort and related commercial. Permanent residential should not be a recommended use. Emphasize importance of environmental protections, shoreline stabilization and public access to waterways. Interested in including Colonial Penniman, LLC properties if designation is changed. |
| LU-0010-2014, Group 1 Housekeeping Items - Federal, State and County Land | 1230100027, | n/a (staff initiated) | Approval : change 3 parcels to be entirely Federal, State and County Land | Approval: change 3 parcels to be entirely Federal, State and County Land | Y | Absent | Absent | Absent | Y | Y | Y | |
| LU-0011-2014, Group 2 Housekeeping Items - New Town Area | Ford's Colony Southport Properties, New Town WindsorMeade Properties | n/a (staff initiated) | Approval: * change Southport properties to Low Density Residential; * change WindsorMeade properties to Mixed Use | Approval: change Southport properties to Low Density Residential; * change WindsorMeade properties to Mixed Use | Υ | Absent | Absent | Absent | Υ | Y | Y | |

Attachment 4: Lower County Area Map



Executive Summary

The Purpose of the Comprehensive Plan

Since 1980 every Virginia locality has been required by State law to have a Comprehensive Plan. The purpose of the Comprehensive Plan is to guide growth and development over a 20-year time period by providing the long-range vision, goals, and strategies of the community. James City County's current plan, *Toward 2035: Leading the Way*, serves as a guide to landowners, developers, businesses, citizens, and County officials about future land use decisions. By considering the types and locations of development and services needed or desired for a 20-year time period, decision makers are better able to evaluate individual proposals in the context of long-term goals.

Snapshot: Where We Have Been and Where We Are Today

James City County adopted its first Comprehensive Plan in 1975, which established the foundation for managing growth in the County. Since that time, the population has increased from approximately 20,000 persons to a current population of 70,711, experiencing a growth rate of 1 to 2% a year since 2010. In December 2014, State demographers ranked the County as the 17th fastest growing locality in Virginia.

Increases and changes in residential and commercial development since the 2009 Comprehensive Plan have been evident in development projects throughout the County. For example, the County has seen much growth in small residential developments (the Villages at Candle Station and Windsor Ridge), rather than in large Master Planned communities that represented the majority of growth reflected in the 2003 and 2009 Comprehensive Plans. Additionally, though many lots in large, Master Planned communities have been approved, a large number of those lots have not yet been built upon and thus represent potential growth in coming years (Colonial Heritage, Ford's Colony, and the Settlement at Powhatan Creek). With respect to commercial and industrial development, the emphasis has remained on tourism, health care, retail, and manufacturing with the top private employers being SeaWorld Parks and Entertainment, Kingsmill Resort, Riverside Regional Medical Center, Walmart, and Anheuser-Busch InBev. The industrial sector has continued to grow in areas like Jacob's Industrial Park, while commercial development has continued in the Settlers Market section of New Town and Courthouse Commons.

Quality jobs, quality housing, and quality amenities all contribute to growth and result from it. All attract new residents and residents expect quality services. Overall, the results of the 2014 Virginia Tech Citizen Survey (Citizen Survey), a statistically valid, representative survey of 606 total households in the County, indicate that 80% of respondents rate services provided by the County as either "good" or "excellent" compared to 77% in 2007. Survey

respondents gave particularly high marks on questions dealing with public safety; library services; parks and recreation facilities, programs and services; and school facilities. Since adopting the 2009 Comprehensive Plan, the County has seen the completion of Lois S. Hornsby Middle School, J. Blaine Blayton Elementary School, and the new Law Enforcement Center, as well as the renovation of Mid-County Park and the creation of the JCC Alert system. All of these are responses to higher demands for facilities and services, and contribute to keeping James City County an attractive place to live, work, and play.

Vision of Where We Are Headed

Citizen Commentary

Feedback during the Comprehensive Plan update also indicates some areas of concern in relation to growth management, including both the **impacts of growth** and the **quality of growth**. The term "growth management" encompasses varying policies and tools to address the timing, character, and location of development so that growth occurs in an orderly and efficient manner. It answers the questions of where, how, and when growth should occur.

With respect to the **impacts of growth**, citizens are generally concerned about the pace of population growth and the effects that growth can have on traffic, water availability, open space, housing, the environment, community character, public facilities and services, demands on County tax dollars, and overall quality of life within the County.

Development, in this case, is separated into two types - residential and commercial - and citizens had different concerns tied to each. While 73% of survey respondents expressed that they "somewhat" or "strongly agreed" the pace of residential development was too fast and 93% felt that the amount of residential development was "about right" or "too high," they simultaneously recognized the need for increased housing affordability and diversity in other questions. Sentiments were more mixed in regard to commercial and industrial development: 85% of respondents felt that the amount of commercial development in the County was either "about right" or "too high," whereas 57% of respondents felt that the same regarding industrial development. Through a series of open-ended questions in the survey and at public input meetings, citizens expressed specific desires to introduce new industrial businesses, to strengthen the tourism sector through sports and agricultural tourism and revitalized restaurant areas, to incentivize redevelopment of existing commercial areas and to have a planned approach to new retail/commercial development.

The **quality of growth** is another area of concern that is directly linked to growth management. These comments deal with balancing the small town rural character of the County with the need to grow and diversify the economic base. For example, 78% of Citizen Survey respondents felt that preservation of farmland was more important than new development; however, 86% of respondents also thought that the concept of living, working, and playing in areas of close proximity was either "somewhat" or "very important." Throughout public input meetings, participants also identified the importance of retaining and enhancing those qualities that make James City County unique, such as its natural beauty, history and access to parks and amenities. Additionally, citizens suggested the County utilize available tools to manage growth and to provide adequate services to meet growing demands.

From these collective comments, an important question becomes how James City County can retain and build on what citizens like about the County and also address the concerns which were raised about growth. *Toward 2035: Leading the Way* explores this question by examining the context within which growth management choices will be made, that is, what our possible future community might look like in terms of its demographics. We then consider the types of growth management strategies that are available and how they might be used in the County.

Population Projections

In order to explore what our community may look like in the future, the Demographics section includes County-wide population projections to 2040 generated by several agencies, including the Weldon Cooper Center for Public Service, the Hampton Roads Planning District Commission and Planning Division staff. Based on a current population estimate referenced above and using methods described further in the Demographics section, staff projects that the population of the County will reach between 104,200 and 136,736 by 2040. While all the populations in each age group are expected to increase during that time, the most dramatic shift is expected in the 65+ age group, growing from 21% of the County's population in 2010 to 34% in 2040. Such population increases result in the need for expanded or additional facilities and services, tailored to meet the diverse needs of the different generations they will serve.

Creating projections is an important planning tool, but it is important to realize that any given projection may or may not be realized based upon the validity of the assumptions and methodology, the impacts of local policy and regulatory decisions made along the way, consequences of changes to State and County codes, and market conditions. In all cases, projections are a best guess of what the County's population *might be* at any point in time, with decreasing accuracy in the outer years.

Growth Management Strategies

Past and Present

Recognizing the potential for significant growth in our community, it is important to know what growth management tools are (and are not) available, and to evaluate which of the available tools would best achieve the community's goals and vision. The Land Use section of the Comprehensive Plan identifies growth management tools available to Virginia localities, and notes that the County has traditionally been a leader in using those available tools to meet the specific needs of our community. It is important to note that growth management tools address not only how much development occurs, but also about ways that communities can influence where new development is located; when new development occurs (timing); whether a particular new development is capable of being supported by water supply, public facilities and services, environmental resources, and the transportation system; and how development fits with existing community character. That section also notes that measures such as population and building caps are not currently supported under Virginia law. Primarily, the available tools provide information and guidelines to County leaders to help them make decisions on development proposals.

The following are some of the tools that the County currently uses to manage growth:

Location of Growth

- The **Primary Service Area** (**PSA**) defines areas where public water, sewer and high levels of other public services exist or are expected to exist over the next 20 years and serves as a boundary within which most growth is targeted to occur. Promoting efficiency in the delivery of public facilities and services through land use planning and timing development is an important concept. The PSA concept encourages efficient use of public facilities and services, avoids overburdening such facilities and services, helps ensure facilities and services are available where and when needed, increases public benefit per dollar spent, promotes public health and safety through improved emergency response time, and minimizes well and septic failures within the PSA.
- Land use designations and the Comprehensive Plan's Land Use Map denote what are seen to be the most appropriate future uses and can indicate development intensity for a specific area. Higher intensity land use designations, which allow higher densities and can have greater impacts on roadways and water, are proposed within the PSA, while lower intensity designations exist outside the PSA.
- The **Zoning Ordinance and Subdivision Ordinance** more specifically define the type of development currently allowed on a parcel and outline specific design and development guidelines for these uses. The ordinances address current standards including those for development use, density, lot size, and setbacks. Both ordinances will be updated to include revised standards and implement many actions identified in the Comprehensive Plan.

Timing and Impacts of Growth

- Legislative cases include rezonings and special use permits (SUPs) and require consideration by the Planning Commission and approval by the Board of Supervisors. These bodies have the discretion to decide whether the proposed development is consistent with the Comprehensive Plan land use designation and whether it offers sufficient public benefit to the County.
- **Impact studies** are submitted for legislative cases and assess the anticipated impacts of a proposed development on traffic, schools, the environment, water and sewer, cultural resources, and the County's tax base and employment.
- **Proffers** are often offered by developers for legislative cases and may include cash contributions for water, Fire/EMS, libraries, parks and recreation, roads, and schools to offset the impacts of the development. They may also include project phasing.
- Adequate public facilities tests help determine whether there is enough capacity in public facilities to handle the additional demands generated by a new development. The County currently has such a policy to determine impacts to public schools.
- Watershed planning, Community Character Corridors (CCCs), and Community Character Areas (CCAs) are tools used during all case reviews to protect the quality of sensitive streams and wetlands, the appearance of certain designated roadways, and sense of place in specific areas throughout the County.

Moving Forward

Toward 2035: Leading the Way, seeks to strengthen, and refine the above growth management strategies through targeted goals, strategies, and actions (GSAs). The primary location of proposed growth management strategies is in the Land Use section, but GSAs that influence growth within the County are included in every topical area. The following highlights a few of the timing, impact, and quality growth strategies included in Toward 2035: Leading the Way (more detail can be found in the sections referenced at the end of each bullet point):

- Cumulative impact analyses (Land Use)
- Adequate public facilities policies (Land Use and Public Facilities)
- Redevelopment, infill and adaptive reuse (Land Use, Community Character and Economic Development)
- Coordination with neighboring localities (Land Use, Housing, Transportation, Economic Development)
- Mixed commercial and residential uses (Housing, Economic Development, and Land Use, Transportation)
- Community Character Area designations, such as Five Forks (Community Character and Land Use Map)
- Partnerships, pattern books and design guidelines to preserve and enhance community character areas (Community Character)
- Preservation of existing vegetation (Community Character)
- Balance growth with the provision of public facilities (Public Facilities, Parks and Recreation, and Land Use)
- Rural economic development (Land Use and Economic Development)
- Prioritization of road improvement projects (Transportation)
- Zoning Ordinance amendments to make all districts more consistent with land use designation descriptions and standards (Land Use)

Responses to Other Significant Citizen Concerns

Through various input opportunities and Community Workshops, citizens commented on several other areas of the Comprehensive Plan, noting that these areas also needed to be strengthened or reshaped. Some aspects of these topics are new to this update; however, many are concerns that have been on citizens' minds since earlier Comprehensive Plan updates and have become heightened given recent development trends.

- Economic Development. Economic development comments included looking for ways to diversify the economic tax base by means of strengthening the tourism sector, careful planning of commercial and industrial areas, continuing support for business development, addressing workforce needs such as housing and transportation, preserving agriculture and rural aspects of James City County, pursuing new industry opportunities in the technology and medical fields and incentivizing redevelopment.
 - Economic diversification through sports tourism, high-tech, corporate or medical research businesses (Economic Development)

- Traditional and emerging economic opportunities, including agri-business and ecotourism, in the Rural Lands (Land Use and Economic Development)
- Regional partnerships to encourage entrepreneurship and develop transportation systems (Economic Development)
- Business Climate Task Force recommendation update (Economic Development)
- **Transportation.** Citizen comments related to transportation included improving existing roads, providing greater linkages among and opportunities for different transportation modes, and prioritizing congestion relief, maintenance and public transit.
 - Public road interconnections and access management (Transportation)
 - Guiding principles for roads needing future capacity improvements (Transportation)
 - Use of public input in prioritizing road improvement projects (Transportation)
 - Mooretown Road Corridor Study (Transportation)
 - Integrated residential and commercial development (Land Use, Housing, Economic Development)
 - Corridor visions and rural roadway character (Transportation and Community Character)
- **Housing.** Affordable and diverse housing options, particularly for workforce, young professionals, the disabled and the elderly, along with a desire for neighborhoods reflecting a mix of housing options and consumer services were the focus of most housing-related citizen comments.
 - Re-examination of the Housing Opportunities Policy and ordinances related to infill housing (Housing)
 - Zoning Ordinance amendments to allow greater diversity in housing types (Housing)
 - Affordable senior care from independent living to Continuing Care Retirement Centers (Population Needs and Housing)
 - Housing Needs Study (Housing)
- Parks and Recreation. Public comments reflected appreciation for the parks and recreation system and its contribution to the community's quality of life; a high importance for bike paths and walking trails, additional community programs and facilities, and public access to waterways for recreation; and suggestions for more activities for kids, teens, and seniors.
 - Implementation of the 2009 James City County Parks and Recreation Master Plan. (Parks and Recreation)
 - Update to the Greenway Master Plan and Strategic Action Plan (Parks and Recreation)
- **Population Needs.** Population needs comments included the need to focus on the special needs of both the growing senior and youth populations. Citizens noted the need for better modes of transportation as well as concerns about school crowding and resources.
 - Public transportation and mobile service stops (Transportation and Population Needs)
 - Community Action Plan on Aging (Population Needs and Housing)
 - Adequate and safe facilities and programs for seniors and youth (Population Needs, Public Facilities, and Parks and Recreation)
- Water. As in 2009, public comments primarily focused on the need to ensure the availability of drinking water for current and future populations and to provide public access to clean water for swimming, boating, and passive enjoyment.
 - Water management (Public Facilities)
 - Water quality improvement strategies (Environment)

- Virginia Stormwater Management Program (Environment)
- Blueways planning (Parks and Recreation)
- **Environment.** Environmental comments focused on preserving open space, farm lands, and trees, protecting water quality and effectively managing stormwater, and preserving agricultural character and economy.
 - Surface water quality and monitoring (Environment)
 - Early submission of environmental inventories (Environment)

It is clear by looking at the strategies developed to respond to all of these concerns, that balancing the related, yet sometimes competing, needs for the population, economic development, public facilities, parks and recreation, environment, housing, transportation, community character, and land use is critical to effective growth management. This difficult balance guides the overall approach of *Toward 2035: Leading the Way*.

Vision: Leading the Way

Central to guiding the Comprehensive Plan update process was the development of an overall vision for the County. A resounding message heard through various studies and forums was that James City County is a special place to live, work, and visit. County citizens have a well-defined vision to help retain these unique community qualities and, as part of the 2003 Comprehensive Plan update, a group of citizens drafted the first Vision Statement for the plan. This served as a building block for the Vision Statement found on page one of *Toward 2035: Leading the Way*, which can be summarized as follows:

We will sustain the quality of life and economic vitality in James City County while preserving our special natural and cultural heritage. We will accomplish this by promoting smart growth principles, adopting supporting strategies, providing a variety of housing options, supporting economic development, and providing diverse recreational, cultural, and education opportunities for all ages.

Planning for our future is effective only in as far as it demonstrates the ability to meet present needs without compromising those of future generations - primarily in terms of the County's economic, social, and environmental well-being. There are other definitions of effectiveness, of course, but the concept of sound planning revolves around the symbiotic relationship between these three arenas.

County staff, along with elected and appointed officials, has been monitoring growth in the County for decades and has worked diligently to balance new economic activity with a high quality of life for all residents. As the Comprehensive Plan update process began, the notion of preserving the County's assets and resources for future generations while providing for the needs of current residents became a guiding principle. This concept of striving to meet the needs of and improve opportunities for both current and future residents defines the vision and theme of *Toward 2035: Leading the Way*. Each of the sections of this document discusses an important aspect of community life, highlights the connection between that section and the County Vision Statement in a "Spotlight on Successes and Opportunities," and concludes with the GSAs for that section. Below are excerpts from the Spotlight on Success and Opportunities section and the goal from each section of the Comprehensive Plan:

- Population Needs: Leading the way toward the future means meeting the needs of all of
 our citizens, especially youth and seniors, while creating a safe and healthy environment
 in order to provide the framework for their future well-being. The County's goal is to
 ensure that all citizens, especially youth and seniors, have safe, affordable, and
 convenient access to programs, services, and activities.
- **Economic Development**: Leading the way toward the future of our economy requires strategies that help it become adaptive, resilient, diverse, and vibrant, providing high quality jobs and stability for County residents. The County's goal is to build a diverse, balanced local economy that supports basic needs of all segments of the community and contributes positively to the quality of life.
- Housing: Looking toward 2035, meeting the housing needs of the community means creating quality and diverse communities that effectively link people to jobs, health providers, amenities, and public facilities and that address issues of affordability and changing demographics. The County's goal is to achieve high quality in design and construction of all residential development and neighborhoods and to provide a widerange of choice in housing type, density, price range, and accessibility.
- **Environment:** In many ways, a healthy environment is the cornerstone to building success stories in other areas of the community related to our quality of life; therefore, protecting our healthy and beautiful environment is an essential part of leading the way to the future. The County's goal is to continue to maintain and improve the high level of environmental quality in James City County and to protect and conserve sensitive lands and waterways for future generations.
- Community Character: Upholding our unique character through careful and deliberate design is essential to attracting and retaining a viable and diverse economic base, which ensures that future generations will want to live in, work in, and visit this area. The County's goal is to acknowledge the responsibility to be good stewards of the land by preserving and enhancing the scenic, cultural, rural, farm, forestal, natural, and historic qualities that are essential to the County's rural and small town character, economic vitality, and overall quality of life.
- Parks and Recreation: Leading the way toward the future must include ensuring access and availability of parks and recreation resources. Availability of parks and recreation resources spurs economic growth, enhances the social fabric, preserves connections to nature, protects environmental resources, and creates a sense of ownership and belonging for residents. The County's goal is to provide a range of recreational facilities and activities that are affordable, accessible, appropriate, and adequate in number, size, type, and location to accommodate the needs of all County residents and that promote personal growth, social development, and healthy lifestyles.
- **Public Facilities:** In light of the County's projected growth and changing demographics through 2035, future public facilities and services need to be efficiently designed, located, and utilized along while remaining adequately funded and paced with growth. By minimizing impacts and investing in quality, secure facilities, the County can ensure that they will add value to the community for years to come.

The County's goal is to commit to and provide a high level and quality of public facilities and services.

- Transportation: Our transportation system must provide for the efficient movement of goods and people using a well-connected system of roadways, sidewalks, bikeways, multi-use paths, and transit. As the County looks to 2035, it will be important to reevaluate transportation priorities at regular intervals to ensure that the County's transportation system meets the needs of its growing population and economy. The County's goal is to provide citizens, businesses, and visitors of James City County with an efficient, safe, and attractive multimodal transportation system that reinforces or is consistent with the goals and land use patterns of the Comprehensive Plan.
- Land Use: Building a strong community for the future requires land use planning practices that will preserve natural resources, plan for adequate transportation and housing infrastructure, create a sense of place and community, and maintain an economic base that remains vital during a variety of climates. Achieve a pattern of land use and development that reinforces and improves the quality of life for citizens and assists in achieving the goals of the Comprehensive Plan in Population Needs, Economic Development, Environment, Housing, Public Facilities, Transportation, Parks and Recreation, and Community Character.

The goals for each section are linked to the overarching theme of looking toward the future, but are also connected to and dependent on the goals of the other sections as well. It is important to recognize these overlapping goals as priorities determined for the County as we lead the way toward 2035.

Process, Implementation, and Evaluation of the Comprehensive Plan

This update relies on established mechanisms of internal tracking, agency reporting, and continued transparency as we work towards implementing the vision and goals of this Plan. The strategies and actions contained in this Comprehensive Plan are intended, in some cases, to serve as the interim steps necessary for the County to achieve the stated vision and goals. In other cases, they serve as benchmarks against which to measure proposals that may come before County officials. In addition to the Comprehensive Plan, there are several other documents in place that help provide the County with direction, including the County budget, departmental master plans and strategic plans, the Capital Improvement Program (CIP), the Zoning Ordinance, and the Subdivision Ordinance. It should be noted that financial

constraints or scarcity of human and other resources can delay or change the implementation of stated actions.

In order for the Comprehensive Plan to have value and remain useful through its planning horizon, it is important to monitor progress in achieving adopted GSAs to recognize those that have been completed, identify areas where additional resources are needed, and to reassess for changing conditions. The Planning Commission will evaluate the progress of implementation efforts and prepare an annual report to the Board of Supervisors that will identify actions that have been completed. The evaluation process will not only measure progress and identify areas that need attention, but also serve as a catalyst to engage the community in dialogue about the future of James City County.

DATE: April 1, 2015

TO: The Planning Commission

FROM: Christy H. Parrish, Proffer Administrator

SUBJECT: Initiation of Consideration of Amendments to the Zoning Ordinance Division 3. Floodplain

Area Regulations

The Federal Emergency Management Agency (FEMA) conducted a coastal analysis and mapping study for communities along the mid-Atlantic coast. As a part of this study, FEMA updated the coastal flood maps for James City County. Once the maps are finalized (anticipated date of June 16, 2015), James City County will have six months to update the zoning ordinance to reflect the new study and maps to comply with the National Flood Insurance Program.

Staff recommends the Planning Commission adopt the attached resolution to initiate consideration of such amendments to the Zoning Ordinance and refer this matter to the Policy Committee.

Christy H. Parrish

Attachment:

INITIATION OF CONSIDERATION OF AMENDMENTS TO THE ZONING ORDINANCE

DIVISION 3. FLOODPLAIN AREA REGULATIONS

- WHEREAS, Virginia Code § 15.2-2286 and County Code § 24-13 permit the Planning Commission of James City County, Virginia (the "Commission") to prepare and recommend to the Board of Supervisors various land development plans and ordinances, specifically including a Zoning Ordinance and necessary revisions thereto as the Commission finds to be prudent; and
- WHEREAS, the Federal Emergency Management Agency (FEMA) conducted a coastal analysis and mapping study for communities along the mid-Atlantic coast and updated the coastal flood maps for James City County; and
- WHEREAS, once the FEMA maps are finalized (anticipated date of June 16, 2015), James City County will have six months to amend the Zoning Ordinance to reflect the new study and maps to comply with the National Flood Insurance Program; and
- WHEREAS, the Commission is of the opinion that the public necessity, convenience, general welfare, or good zoning practice warrant the consideration of amendments to the Zoning Ordinance.
- NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of James City County, Virginia, does hereby, by motion pursuant to Virginia Code § 15.2-2286(7), initiate review of the Zoning Ordinance to amend Article 1. In General, Section 24-2 Definitions, and Article VI. Overlay Districts, Division 3, Floodplain Area Regulations to incorporate the new Federal Emergency Management Agency Flood Insurance Rate Maps and Study and to ensure compliance with the National Flood Insurance Program. The Planning Commission shall hold at least one public hearing on the consideration of amendments of said Ordinance and shall forward its recommendation thereon to the Board of Supervisors in accordance with law.

| | Robin Bledsoe |
|-------------------|----------------------------|
| | Chair, Planning Commission |
| ATTEST: | |
| | |
| Paul D. Holt, III | |
| Secretary | |

Adopted by the Planning Commission of James City County, Virginia, this 1st day of April 2015.

DATE:

April 1, 2015

TO:

The Planning Commission

FROM:

Jason Purse, Zoning Administrator

SUBJECT:

Initiation of a Consideration of Amendments to the Zoning Ordinance to incorporate

State Code Changes (Consistency with A-1)- Division 10, General Business, B-1;

Division 11, Limited Business/Industrial, M-1

As a part of the proposed changes to the A-1 ordinance, staff anticipates some changes to the names of uses that also appear in the B-1 and M-1 zoning districts. Most of the changes pertain to micro-breweries and distilleries. Staff does not anticipate making changes beyond these consistency amendments at this time.

Staff recommends the Planning Commission adopt the attached resolution to initiate consideration of such amendments to the Zoning Ordinance and to refer this matter to the Policy Committee.

Jason Purse

Attachment:

<u>INITIATION OF AMENDMENTS TO THE ZONING ORDINANCE</u> <u>TO INCORPORATE STATE CODE CHANGES (CONSISTENCY WITH A-1) - DIVISION 10,</u> GENERAL BUSINESS; DIVISION 11, LIMITED BUSINESS/INDUSTRIAL, M-1

WHEREAS, Virginia Code § 15.2-2286 and James City County Code § 24-13 permit the Planning Commission of James City County, Virginia (the "Commission") to prepare and recommend to the Board of Supervisors various land development plans and ordinances, specifically including a Zoning Ordinance and necessary revisions thereto as the Commission finds to be prudent; and

WHEREAS; the Virginia General Assembly enacted legislation during the 2014 and 2015 Legislative Sessions that affected local zoning laws; and

WHEREAS; in order to make the Zoning Ordinance more conducive to proper development, public review and comment of draft amendments is required, pursuant to Virginia Code §15.2-2285; and

WHEREAS; the Commission is of the opinion that the public necessity, convenience, general welfare, or good zoning practice warrant the consideration of amendments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of James City County, Virginia does hereby, by motion pursuant to Virginia Code § 15.2-2286(7), initiate review of the Zoning Ordinance to consider amending Article I. In General, Section 24-2. Definitions; and Article V. Division 10, Section 24-390. Use list; and Division 11, Section 24-411, Use list, to consider the possibility of adding, renaming and considering the by-right status of uses. The Planning Commission shall hold at least one public hearing on the consideration of amendments of said Ordinance and shall forward its recommendation thereon to the Board of Supervisors in accordance with law.

Robin Bledsoe Chair, Planning Commission

| ATTEST: | |
|-------------------|---|
| Paul D. Holt, III | - |
| Secretary | |

Adopted by the Planning Commission of James City County, Virginia, this 1st Day of April 2015.

DATE:

April 1, 2015

TO:

The Planning Commission

FROM:

Jason Purse, Zoning Administrator

SUBJECT:

Initiation of a Consideration of Amendments to the Zoning Ordinance to incorporate

State Code Changes- Division 2. General Agricultural District, A-1

During the 2014 Legislative session, amendments to the State Code were passed that need to be incorporated into the Zoning Ordinance. The proposed changes deal with the definition of agriculture and agri-tourism, changes to other definitions of uses in A-1, as well as identifying which uses are permitted by-right versus with a special use permit. Staff will be prepared to provide the new State Code language and proposed ordinance amendments at the April Policy Committee meeting.

Staff recommends the Planning Commission adopt the attached resolution to initiate consideration of such amendments to the Zoning Ordinance and to refer this matter to the Policy Committee.

Jason Purse

Attachment:

INITIATION OF AMENDMENTS TO THE ZONING ORDINANCE TO INCORPORATE STATE CODE CHANGES-DIVISION 2. GENERAL AGRICULTURAL, A-1

WHEREAS, Virginia Code § 15.2-2286 and County Code § 24-13 permit the Planning Commission of James City County, Virginia (the "Commission") to prepare and recommend to the Board of Supervisors various land development plans and ordinances, specifically including a Zoning Ordinance and necessary revisions thereto as the Commission finds to be prudent; and

WHEREAS; the Virginia General Assembly enacted legislation during the 2014 and 2015 Legislative Sessions that affected local zoning laws; and

WHEREAS; in order to make the Zoning Ordinance more conducive to proper development, public review and comment of draft amendments is required, pursuant to Virginia Code §15.2-2285; and

WHEREAS; the Planning Commission is of the opinion that the public necessity, convenience, general welfare, or good zoning practice warrant the consideration of amendments.

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of James City County, Virginia does hereby, by motion pursuant to Virginia Code § 15.2-2286(7), initiate review of the Zoning Ordinance to amend Article I, In General, Section 24-2, Definitions; Article II, Special Regulations; Article V, Division 2, General Agricultural District, Section 24-212, Permitted uses; Section 24-213, Uses permitted by special use permit; Section 24-214, Area requirements; and Section 24-215, Setback requirements to consider the possibility of adding, renaming, and considering the by-right status of certain uses. The Planning Commission shall hold at least one public hearing on the consideration of amendments of said Ordinance and shall forward its recommendation thereon to the Board of Supervisors in accordance with law.

| Robin | Bledsoe |
|--------|---------------------|
| Chair, | Planning Commission |

| ATTEST: |
|-----------------------------|
| Paul D. Holt, III Secretary |

Adopted by the Planning Commission of James City County, Virginia, this 1st day of April 2015.

DATE:

April 1, 2015

TO:

The Planning Commission

FROM:

Christopher Johnson, Principal Planner

SUBJECT:

Initiation of a Consideration of Amendments to the Zoning Ordinance – Article I. In General. Administrative fees, Certificate of occupancy, Amendments and variation of

conditions and Submittal requirements

Due to some recent changes in the Code of Virginia and in how the County processes legislative applications, staff is proposing three minor changes to the Zoning Ordinance.

First, the Code of Virginia was changed in 2009 to allow proffer amendments that do not affect conditions of use or density to bypass a public hearing process otherwise required by Section 24-13 of the County Code before consideration of adoption by the Board of Supervisors. Since that time, staff has processed proffer amendment requests that do not affect use or density by relying on County Administration and the County Attorney to poll the Board of Supervisors informally prior to processing the request as a rezoning application. In order to provide a measure of clarity to the process for such requests, staff is proposing a series of amendments to the County Code to add an administrative fee and outlining the submittal requirements and administrative procedures for the processing of a written proffer amendment request that does not need a public hearing as determined by the Board of Supervisors.

Second, beginning in December 2014, all documents and materials included on a Board of Supervisors agenda have been required to be submitted in an electronic format. In order to provide a measure of clarity to the process for the public, staff is proposing a series of amendments to the submittal requirements section of the County Code to clarify formatting expectations for all materials which are intended to be included on a Planning Commission or Board of Supervisors meeting agenda.

Third, in order to provide the development community with an increased level of efficiency during the development review and permitting process, staff is proposing an amendment to the County Code section dealing with the issuance of certificates of occupancy to account for the increase in requests to construct structures in phases. Such flexibility does not currently exist in the Ordinance.

Staff will be prepared to discuss the proposed ordinance amendments at the April Policy Committee meeting.

Staff recommends the Planning Commission adopt the attached resolution to initiate consideration of such amendments to the Zoning Ordinance and refer this matter to the Policy Committee.

Christopher Johnson

Attachment:

INITIATION OF AMENDMENTS TO THE ZONING ORDINANCE ARTICLE I. IN GENERAL – ADMINISTRATIVE FEES, CERTIFICATE OF OCCUPANCY, AMENDMENTS AND VARIATIONS OF CONDITIONS AND SUBMITTAL REQUIREMENTS

- WHEREAS, Virginia Code § 15.2-2286 and County Code § 24-13 permit the Planning Commission of James City County, Virginia (the "Commission") to prepare and recommend to the Board of Supervisors various land development plans and ordinances, specifically including a Zoning Ordinance and necessary revisions thereto as the Commission finds to be prudent; and
- WHEREAS, in order to make the Zoning Ordinance more conducive to proper development, public review and comment of draft amendments is required, pursuant to Virginia Code § 15.2-2285; and
- WHEREAS, the Planning Commission is of the opinion that the public necessity, convenience, general welfare, or good zoning practice warrant the consideration of amendments.
- NOW, THEREFORE, BE IT RESOLVED that the Planning Commission of James City County, Virginia does hereby, by motion pursuant to Virginia Code § 15.2-2286(7), initiate review of the Zoning Ordinance to amend Article I. In General, Section 24-7. Administrative fees; Section 24-8. Certificate of occupancy; Section 24-20. Amendments and variations of conditions and Section 24-23. Submittal requirements, to consider the possibility of adding or amending new or existing language which would help clarify the fees, permitting, procedures and submittal requirements of the Zoning Ordinance. The Planning Commission shall hold at least one public hearing on the consideration of amendments of said Ordinance and shall forward its recommendation thereon to the Board of Supervisors in accordance with law.

Robin Bledsoe Chair, Planning Commission

ATTEST:

Paul D. Holt, III Secretary

Adopted by the Planning Commission of James City County, Virginia, this 1st day of April 2015

New Cases for April

| Case Type | Case Number | Case Title | Address | Description | Planner | District |
|-----------------|-------------|---|----------------------|--|---------------------|---------------|
| | | Olde Towne Shopping Center Parking Verification | | Parking Verification associated with change of use from beauty | | |
| Conceptual Plan | C-0010-2015 | (Vapezone LLC) | 4854 LONGHILL ROAD | salon to e-cigarette retailer | Roberta Sulouff | 04-Jamestown |
| | | | | Conversion of a storage area into an exercise room in the | | |
| | | Fords Colony Maintenance Facility, Storage Bay | | Community Services Bldg. located within the Project Maintenance | | |
| | C-0011-2015 | Conversion | 4624 CENTERVILLE RD | Area on Manchester Dr. | Scott Whyte | 02-Powhatan |
| | | | | Proposed improvements to an existing driveway for a single- | | |
| | C-0012-2015 | 1358 Jamestown Rd., Driveway Addition | 1358 JAMESTOWN ROAD | family residence | Jose Ribeiro | 05-Roberts |
| | | | | Parking verification for addition of U-Haul vehicles at the existing | | |
| | C-0013-2015 | Climatrol Self Storage Parking Verification (Uhaul) | 9297 POCAHONTAS TR | Climatrol site | Leanne Pollock | 05-Roberts |
| | C-0014-2015 | Moses Lane Duplexes | 1308 MOSES LANE | Proposal to construct five duplex units. | Savannah Pietrowski | 05-Roberts |
| | C-0015-2015 | 7782 Richmond Road, Office and Warehouse | 7782 RICHMOND ROAD | Proposed office/warehouse building and associated parking | Leanne Pollock | 01-Stonehouse |
| | S-0008-2015 | Colonial Heritage, Ph. 6, Sec. 2 | 499 JOLLY POND ROAD | Addition of 97 single-family dwelling units to Land Bay 7C | Roberta Sulouff | 01-Stonehouse |
| Subdivision | | | | Boundary line extinguishment between 7691 Richmond Rd. and | | |
| | S-0009-2015 | Crawford Property BLE, Richmond Road | 7691 RICHMOND ROAD | 3645 Toano Woods Rd. | Chris Johnson | 01-Stonehouse |
| | | | | Boundary line extinguishment to create a single 15.9-acre | | |
| | S-0010-2015 | Berger Property BLE, Hicks Island Road | 8828 HICKS ISLAND RD | property and new property line along Hicks Island Road. | Leanne Pollock | 02-Powhatan |
| | S-0011-2015 | Liberty Ridge, Section 1-B, Lots 79-86, 111 & 112 | 5365 CENTERVILLE RD | Eleven new single-family lots on 35.9 acres | Jose Ribeiro | 02-Powhatan |

New Cases for April

| ase Type | Case Number | Case Title | Address | Description | Planner | District |
|-----------|---------------|---|-----------------------|---|---------------------|---------------|
| .,,,,, | - Case Hamber | Busch Gardens, 2015 Food and Wine Event, Scotland | 7.144.1.655 | Addition of a food kiosk and concrete slab in the Scotland area of | · rame | 2.5000 |
| | SP-0012-2015 | Food Cart SP Amendment | 7851 POCAHONTAS TR | Busch Gardens | Savannah Pietrowski | 05-Roberts |
| | | Busch Gardens, 2015 Food and Wine Event, New France | | Addition of a food kiosk and concrete slab in the new France area | | |
| | SP-0013-2015 | Food Cart SP Amendment | 7851 POCAHONTAS TR | of Busch Gardens | Savannah Pietrowski | 05-Roberts |
| | | Busch Gardens, 2015 Food and Wine Event, Italy Food | | Addition of a food kiosk and concrete slab in the Festa Italia area | | |
| | SP-0014-2015 | Cart SP Amendment | 7851 POCAHONTAS TR | of Busch Gardens | Savannah Pietrowski | 05-Roberts |
| | | New Town Sec. 12 (Founder's Village) Pocket Park, SP | | | | |
| | SP-0015-2015 | Amendment | 3950 WINDSORMEADE WAY | Relocation of pocket parks within the development | Leanne Pollock | 04-Jamestown |
| | | | | Construction of a monopole, microwave radio tower at the | | |
| | SP-0016-2015 | Human Services Building Microwave Monopole Tower | 5249 OLDE TOWNE ROAD | Human Services Building subject to conditions of SUP-0012-2013 | Roberta Sulouff | 02-Powhatan |
| | | | | Construction of approx. 9,000 s.f. of office space and approx. | | |
| | SP-0017-2015 | Jacobs Industrial Park, Parcel 1 | 200 INDUSTRIAL BLVD | 22,000 s.f. of warehouse and associated parking | Jose Ribeiro | 00-Unknown |
| | | Jacobs Industrial Center, Signature Stone Gas Storage, SP | | Addition of a 500 gallon propane tank at the Signature Stone | | |
| | SP-0018-2015 | Amendment | 256 INDUSTRIAL BLVD | facility | Jose Ribeiro | 01-Stonehouse |
| | | White Hall Clubhouse, Water Line Connection, SP | | Amendment to SP-0056-2007 to add a water line and backflow | | |
| Site Plan | SP-0019-2015 | Amend. #3 | 3401 ROCHAMBEAU DR | preventer | Roberta Sulouff | 01-Stonehouse |
| | | | | Removal of LID dry swale and level spreader and installation of a | | |
| | SP-0020-2015 | Liberty Crossing, Stormwater Amendments | 6601 RICHMOND ROAD | yard drain system. | Savannah Pietrowski | 01-Stonehouse |
| | SP-0021-2015 | Diascund Rd. Greenhouses | 9043 DIASCUND ROAD | Construction of two 10 x 12 greenhouses. | Savannah Pietrowski | 02-Powhatan |
| | | | | Renovation of the concrete basin and storm sewer components | | |
| | SP-0022-2015 | Busch Gardens Flume Basin Renovation | 7851 POCAHONTAS TR | adjacent to "Le Scoot" attraction at Busch Gardens | Roberta Sulouff | 05-Roberts |
| | | St. Bede Catholic Church, Education and Administration | | Addition of administration and parish hall buildings and a parking | | |
| | SP-0023-2015 | Additions | 3686 IRONBOUND ROAD | lot per the adopted Master Plan | Roberta Sulouff | 04-Jamestown |
| | | | | Placement of benches at existing WATA bus stop locations in the | | |
| | SP-0024-2015 | Leadership Historic Triangle, Adopt a Bench | Various | County | Leanne Pollock | Multiple |
| | | Sprint Industrial Blvd., Tower Microwave Addition, SP | | | | |
| | SP-0025-2015 | Amend. | 185 INDUSTRIAL BLVD | Addition of a 38" Back-Haul Microwave Dish on existing tower | Jose Ribeiro | 01-Stonehous |
| | | | | Addition of street trees along Casey Blvd. and Settlers Market | | |
| | | | | Blvd. and revisions to landscaping plans for Zoe's Kitchen and Pier | | |
| | SP-0026-2015 | New Town Sec. 9 (Settlers Market) Pier 1 SP Amend. 2 | 4540 CASEY BLVD | One dumpster and parking lot areas. | Leanne Pollock | 04-Jamestown |
| | SP-0027-2015 | Wellington Clubhouse, Storage Shed SP Amend. | 3927 BOURNEMOUTH BEND | Construction of a 12 x 32 shed and an 8 x 9 cabana | Jose Ribeiro | 01-Stonehouse |

PLANNING DIRECTOR'S REPORT April 2015

This report summarizes the status of selected Planning Division activities during the past month.

- <u>New Town.</u> The Design Review Board did not meet in March and has not reviewed any plans electronically since the last meeting.
- Mooretown Road Corridor Study. The County's consultant, VHB, held a public meeting on March 12th at Toano Middle School to present a potential alignment for the Mooretown Road Extension. Attendees had an opportunity to comment on the alignment and the overall project following the presentation, prior to VHB's preparation of the final study recommendations document.
- <u>Comprehensive Plan.</u> Upon the Planning Commission Working Group's recommendation of approval of the draft plan at its meeting in February, staff forwarded the draft plan to the Virginia Department of Transportation for review. Staff also posted the draft plan to the County's website and made hard copies available at the both public libraries and the Planning Division office.
- Historical Commission. On March 18, the Historical Commission dedicated two new historic highway markers. The first marker commemorates the 3,000 French troops from the West Indies who landed at Jamestown and camped in the vicinity on their way to the siege at Yorktown. Following the allied victory, French soldiers of the Royal Deux-Ponts Regiment established winter quarters near Jamestown from October 1781 to July 1782 before returning to New England with French General Rochambeau and General George Washington. The second marker celebrates the Marquis de Lafayette's Farewell Tour of all 24 states in 1824 and 1825. Near Jamestown, during the Virginia Campaign, General Lafayette led American troops at the Battle of Green Spring July 6, 1781. Beyond military exploits, his intense lobbying for the American cause in France in 1779 and 1780 was a major factor in the French decision to send troops and a portion of the French fleet here both in 1780 and 1781. There would not have been a victory at Yorktown without this support.
- <u>Capital Improvements Program.</u> The Commission's recommendations regarding the FY16-FY20 CIP will be forwarded to the Board of Supervisors as a Reading File item for their meeting on April 14.
- Monthly Case Report. For a list of all cases received in the last month, please see the attached documents.
- Board Action Results:
 - o SUP-0013-2014, Grove Barbershop (Deferred)