

A G E N D A
JAMES CITY COUNTY BOARD OF SUPERVISORS
REGULAR MEETING
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
February 12, 2019
5:00 PM

A. CALL TO ORDER

B. ROLL CALL

C. MOMENT OF SILENCE

D. PLEDGE OF ALLEGIANCE

E. PRESENTATIONS

1. Introduction of New Police Officers
2. Retiree Recognition - Battalion Chief Chris Thomas, Fire Department

F. PUBLIC COMMENT

G. CONSENT CALENDAR

1. Minutes Adoption
2. Grant Award- Virginia E-911 Services Board PSAP Education
3. Grant Award - Commonwealth Attorney - Virginia Domestic Violence Victim Fund - \$56,824
4. Contract Award- Emergency Management Plans and Exercises
5. Contract Award – JCC Croaker Library HVAC and Boiler Replacement-\$150,190
6. James City County Recreation Center Renovations
7. Contract Award Recommendation- Accounting/Budget/Purchasing Software System

H. PUBLIC HEARING(S)

1. REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

I. BOARD CONSIDERATION(S)

J. BOARD REQUESTS AND DIRECTIVES

K. REPORTS OF THE COUNTY ADMINISTRATOR

L. CLOSED SESSION

1. Williamsburg/James City County Community Action Agency Board Replacement

M. ADJOURNMENT

1. Adjourn until 4 p.m. on February 26, 2019 for the Work Session

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Bradley Rinehimer, Chief of Police

SUBJECT: Introduction of New Police Officers

- Officer Shane Boone
- Officer Benny Machado
- Officer Bryan Ortery, Jr.

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 11:15 AM

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Ryan T. Ashe, Fire Chief

SUBJECT: Retiree Recognition - Battalion Chief Chris Thomas, Fire Department

REVIEWERS:

Department	Reviewer	Action	Date
Fire	Ashe, Ryan	Approved	1/25/2019 - 11:25 AM
Publication Management	Daniel, Martha	Approved	1/25/2019 - 11:35 AM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:41 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:16 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:55 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:55 PM

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Teresa J. Fellows, Deputy Clerk

SUBJECT: Minutes Adoption

- January 2, 2019 Organizational Meeting
- January 8, 2019 Regular Meeting
- January 22, 2019 Board Retreat
- January 22, 2019 Work Session
- January 31, 2019 VACo Day at the Capital

ATTACHMENTS:

	Description	Type
📎	010219 Minutes	Minutes
📎	010819 Minutes	Minutes
📎	012219 Retreat Minutes	Minutes
📎	012219 Work Session Minutes	Minutes
📎	013119 VACo Day Minutes	Minutes

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 3:36 PM

MINUTES
JAMES CITY COUNTY BOARD OF SUPERVISORS
ORGANIZATIONAL MEETING
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
January 2, 2019
4:00 PM

A. CALL TO ORDER

B. ROLL CALL

John J. McGlennon, Roberts District
P. Sue Sadler, Stonehouse District
Michael J. Hipple, Vice Chairman, Powhatan District
Ruth M. Larson, Berkeley District
James O. Icenhour, Jr., Chairman, Jamestown District

Scott A. Stevens, County Administrator
Adam R. Kinsman, County Attorney

C. ORGANIZATIONAL MEETING

1. Organizational Meeting

Ms. Larson welcomed the Board and asked for nominations for election of the new Chairman and Vice Chairman.

A motion to nominate James Icenhour, Jr. as Chairman was made by Sue Sadler, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Sadler, Hipple, Icenhour, Jr., Larson

With the approval of Mr. Icenhour as Chairman, Ms. Larson passed the gavel to the new Chairman.

Mr. Icenhour sought nominations for Vice Chairman.

A motion to nominate Michael Hipple was made by Ruth Larson, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Sadler, Hipple, Larson, Icenhour, Jr.

As there were no other nominations, Mr. Icenhour noted discussion of the Board meeting calendar was the next agenda item. He further noted Mr. Stevens had information regarding Public Hearings for presentation to the Board.

Mr. Stevens addressed the Board noting a recent hacking of the local newspaper which involved notice of upcoming public hearing ads for January 8, 2019. With the posting of the notices unavailable to the public, Mr. Stevens explained the public hearings could not take place. He noted the items included two development cases, Ordinance changes and the pre-budget public hearing. Mr. Stevens recommended

the two development cases and the budget item be moved to the January 22 work session meeting with the Ordinance items moved to the March meeting.

Discussion ensued.

Mr. Icenhour asked about a potential Board Retreat and possible dates for the calendar.

Mr. McGlennon asked about the January 22 work session and budget issues.

Discussion ensued.

Mr. Icenhour noted the calendar would be revised to include a Retreat at 2 p.m. followed by the Work Session on January 22, 2019 in the Work Session Room. He also asked that each Board member supply Mr. Stevens with a list of topics for discussion.

A motion to Approve the Organizational Meeting Resolution included in the Packet with the Changes made to the Calendar was made by Michael Hipple, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Sadler, Hipple, Larson, Icenhour, Jr.

A motion Affirming an Amendment to the 2018 Calendar to Include the December 31, 2018 as a Paid Holiday was made by Michael Hipple, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Sadler, Hipple, Larson, Icenhour, Jr.

Mr. Stevens addressed budget public meetings and noted the schedule could be amended to add those as needed.

Mr. McGlennon noted he planned to organize several meetings in the spring regarding recycling and other issues.

Discussion ensued.

2. Supervisor Seats for Boards and Commissions

Mr. Icenhour asked if there was a preference for open or closed session for the discussion on the seats for respective Boards and Commissions.

Discussion ensued.

A motion to Enter a Closed Session was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Icenhour Jr., Sadler, Hipple, Larson

At approximately 4:12 p.m., the Board of Supervisors entered into Closed Session.

At approximately 4:32 p.m., the Board of Supervisors re-entered Open Session.

A motion to Certify the Closed Session was made by John McGlennon, the motion

result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Icenhour Jr., Sadler, Hipple, Larson

A motion to Appoint Members to the following Boards and Commissions was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: McGlennon, Icenhour Jr., Sadler, Hipple, Larson

Board/Commission Committee/Board Member 2019:

<i>Community Action Agency Board of Directors</i>	Cathy Richardson, Amanda Wheeler, Lt. Jeff Hicklin (staff) and Diane Finney (staff) - expires 9/25/2022 Sue Sadler (BOS) - expires 9/25/2022
<i>Hampton Roads Military and Federal Facilities Alliance (HRMFFA)</i>	Michael Hipple
<i>Hampton Roads Planning District Commission (HRPDC)</i>	Michael Hipple
<i>Hampton Roads Transportation Planning Organization (HRTPO)</i>	Michael Hipple
<i>Hampton Roads Transportation Accountability Commission (HRTAC)</i>	Michael Hipple
<i>School Liaison</i>	Ruth Larson and Jim Icenhour
<i>Historic Triangle Collaborative</i>	Jim Icenhour
<i>Agricultural and Forestal District (AFD) Advisory Committee</i>	Sue Sadler
<i>Economic Development Authority</i>	Sue Sadler
<i>Williamsburg Tourism Council</i>	Ruth Larson
<i>Community Services Coalition Board of Directors</i>	Barbara Watson as BOS Representative until 01/01/2020
<i>Greater Peninsula Workforce Development Consortium</i>	John McGlennon
<i>Peninsula Council for Workforce Development</i>	John McGlennon
<i>Virginia Peninsula Regional Jail Authority</i>	Ruth Larson
<i>Historic Virginia Land Conservancy</i>	John McGlennon
<i>Greater Williamsburg Area Chamber and Tourism Alliance</i>	Ruth Larson

3. Seating Assignments

The Board members drew numbers for their 2019 seating assignments.

4. Public Speaker Policy

Mr. Kinsman addressed clarification on the public speaker policy and definition of the term “group”. He presented three suggestions defining “group” for Board consideration.

Discussion ensued.

The Board generally agreed to utilize the following definition of a group for the purpose of the Public Speaker Policies: Four or more people physically assembled at the meeting, three (or more) of whom yield their time to a common speaker. This definition is easily verifiable. It allows one person to speak for 15 minutes instead of four people speaking for a total of 20.

D. BOARD CONSIDERATION(S)

None.

E. CLOSED SESSION

None.

F. BOARD REQUESTS AND DIRECTIVES

Mr. McGlennon asked for consideration of a resolution of support for the ratification of the Equal Right Amendment and discussion. He noted the support could be done via resolution or amendment to the legislative agenda.

Discussion ensued.

Mr. Icenhour noted this discussion would be added as a Board consideration at the January 8 meeting.

Mr. Hipple requested support for a legislative change regarding alpacas as livestock in the Virginia Code.

Discussion ensued.

Mr. Icenhour noted this discussion would be added as a Board consideration at the January 8 meeting.

G. ADJOURNMENT

1. Adjourn until 5 p.m. on January 8, 2019, for the Regular Meeting

A motion to Adjourn was made by Michael Hipple, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

At approximately 5:11 p.m., Mr. Icenhour adjourned the Board of Supervisors.

MINUTES
JAMES CITY COUNTY BOARD OF SUPERVISORS
REGULAR MEETING
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
January 8, 2019
5:00 PM

A. CALL TO ORDER

B. ROLL CALL

Michael J. Hipple, Vice Chairman, Powhatan District
Ruth M. Larson, Berkeley District
P. Sue Sadler, Stonehouse District
John J. McGlennon, Roberts District
James O. Icenhour, Jr., Chairman, Jamestown District

Scott A. Stevens, County Administrator
Adam R. Kinsman, County Attorney

C. MOMENT OF SILENCE

D. PLEDGE OF ALLEGIANCE

1. Participants from The ArC of Greater Williamsburg's Day Support Program

Laura Palmer, Drew Dayton, Devin Tyree and Sam Collins led the Board and citizens in the Pledge of Allegiance.

E. PRESENTATIONS

1. Retiree Recognition - Captain Jeff Hall, Fire Department

Mr. Icenhour noted Mr. Stevens would do the honors.

Mr. Stevens added that Captain Hall was the first recipient in a new retiree recognition process. He noted this marked a beginning in more recognition of County employees and their service.

Fire Chief Ryan Ashe addressed the Board noting the honor of recognizing Captain Jeff Hall and his achievements and support. He highlighted Captain Hall's service record with the County over 35 years. Captain Ashe thanked him for his commitment and service.

Captain Hall thanked everyone and received a standing ovation.

2. The ArC of Greater Williamsburg

Mr. Icenhour introduced Ms. Pam McGregor of The ArC of Greater Williamsburg.

Ms. McGregor thanked the Board for the honor of The ArC's clients to participate in the evening's program. She explained that The ArC had served the adults with disabilities in the

community since 1976. Ms. McGregor highlighted programs, particularly the Day Support Program, and thanked the County for its support. She thanked the Board, Parks & Recreation and County citizens for opportunities and continued support.

F. PUBLIC COMMENT

Mr. Icenhour opened the floor to Public Comment and noted the first speaker, Ms. Rosanne Reddin, was not in attendance, but would move her name to the last speaker position pending her arrival.

1. Mr. Jack Fowler, 109 Wilderness Lane, addressed the Board on various topics ranging from Rochambeau Drive, kudos to Christy Parrish in Zoning and past County Administrators. He noted the poor road conditions on Rochambeau Drive and legal issues that needed to be addressed.

Mr. Icenhour reminded speakers of time limitations and protocol for Public Comment speaking.

2. Ms. Mary Schilling, 500 Frances Thacker, addressed the Board on behalf of the League of Women Voters of the Williamsburg Area in support of the Equal Rights Amendment (ERA). She specifically addressed the James City County Legislative Agenda amendment and cited historical references to the ERA. Ms. Schilling further cited the importance of action of the County and municipalities across the Commonwealth for the ratification.

Mr. Icenhour addressed Ms. Reddin upon her arrival, noting she would be the last speaker.

3. Ms. Christine Payne, 2689 Jockeys Neck Trail, addressed the Board on behalf of the Peninsula Progressive Network and the four generations of females in her own family for support of the ERA ratification to the County's Legislative Agenda packet for the General Assembly. She spoke on the benefits of gender equality and asked the Board for its support.

4. Ms. Jeannette Potter, 4796 Regents Park, addressed the Board to support Virginia's ratification of the ERA. She noted Virginia's history regarding gender equality.

5. Ms. Anne Brennan, 159 Lakewood Drive, addressed the Board in support of the ERA ratification and the Board's support on its proclamation. She stressed the importance of women's rights.

6. Mr. Jay Everson, 103 Branscome Boulevard, addressed the Board regarding the Legislative Agenda. He stated the ERA ratification issue did not have anything to do with James City County as it already existed in the Constitution in the Commonwealth of Virginia. He cited historical reference to legislative action in the United States in 1980s. Mr. Everson said this was a moot point for the Board to send the Agenda amendment forward as it already existed for the County's citizens.

7. Dr. Mark Downey, 121 Horseshoe Drive, addressed the Board regarding the ERA ratification.

8. Mr. Chris Henderson, 101 Keystone, addressed the Board with wishes for a Happy New Year. He noted the timing of Board meetings burdens all citizen participation. He encouraged the Board to consider maximum and robust participation by modifying both the time and structure of its meetings to accommodate more citizens' involvement. Mr. Henderson referenced the passing of Mr. Phil Richardson, a County resident, and his impact on various County projects. Mr. Henderson asked the Board to amend its Legislative Agenda to support

naming the bridge on Olde Towne Road over Route 199 in Mr. Richardson's honor. Mr. Henderson also noted he was not in support of the Legislative Agenda amendment for the ERA. He further noted he was in support of the ERA but noted the decision would be made by others at a "higher pay grade" and asked the Board "exercise restraint in that area."

9. Ms. Barbara Henry, 141 Devon Road, addressed the Board with a request to vote against the ERA resolution as it was a matter of state and federal consideration.

10. Mr. Joseph Swanenburg, 3026 The Point Drive, addressed the Board requesting consideration of voting against the ERA resolution. He noted the Board was charged with County issues and this resolution was an issue for state and federal legislators. He cited possible impact on churches and their tax-exempt status.

11. Ms. Rosanne Reddin, 4700 Presidents Court, addressed the Board requesting a negative vote on the ERA resolution.

G. CONSENT CALENDAR

A motion to Approve was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

1. Minutes Adoption - December 11, 2018 Regular Meeting

Mr. McGlennon noted a minor amendment under the December 11, 2018 Minutes section of Board Requests and Directives that the second line be changed to Mainland Farm not Mayfield Farms.

Ms. Larson asked if the Assistant Fire Marshal appointee was present.

Mr. Icenhour confirmed the appointee was not present.

2. Appointment of Assistant Fire Marshal and Authorization of Fire Prevention Powers

3. Grant Award - Commonwealth Attorney - V-STOP Grant Program Fund - \$59,779

H. PUBLIC HEARING(S)

None.

I. BOARD CONSIDERATION(S)

1. Amendment to the Legislative Agenda to Support Ratification of the Equal Rights Amendment

A motion to Approve was made by John McGlennon, the motion result was Passed.

AYES: 3 NAYS: 2 ABSTAIN: 0 ABSENT: 0

Ayes: Icenhour Jr, Larson, McGlennon

Nays: Hipple, Sadler

Mr. Kinsman addressed the Board noting if an amendment was adopted, the resolution was in the Agenda Packet.

Mr. McGlennon made the motion based on the significance of Virginia's endorsement. He noted a change toward a higher standard under the law. He also stressed non-support of the

ratification did not equate to non-support of equality. Mr. McGlennon thanked citizens for their viewpoints and perspectives. He also thanked his fellow Board members for their consideration.

Mr. Hipple noted the Board “was not in its lane” and that this legislation should be addressed by the General Assembly. He further noted he wanted to focus on daily needs of the County’s citizens.

Ms. Larson noted equality issues were at the core of her decision. She encouraged speakers on the subject to reach out to the General Assembly. Ms. Larson noted the significance of the opportunity to discuss the change while recognizing the change would not take place on the County level.

Ms. Sadler thanked everyone who contacted Board members regarding the ratification amendment. She noted that personally she felt the decision was not a Board responsibility and encouraged citizens to contact their state and federal legislators. Ms. Sadler added that if “I had felt I did not have equal rights, I would never have been able to run for office and win.” She noted if the resolution was on the Board’s Legislative Agenda, it indicated that the Board as a whole endorsed it and she was not in support of that decision. Ms. Sadler stressed individually addressing this ratification rather than as a Board decision and noted mutual respect for each other.

Mr. Icenhour echoed his fellow Board members’ sentiments regarding respect and the ability to work together despite differences. He noted this was not “an issue of one side wins and the other side loses” as this opportunity allowed people to express their opinions and that made it “a win for everyone.” Mr. Icenhour stressed contacting legislators at the next level. He also noted his support of the amendment.

2. Amendment to the Legislative Agenda to Support the Addition of Alpacas within the State Code Definition of Livestock

A motion to Approve was made by Michael Hipple, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

Mr. Adam Kinsman, County Attorney, addressed the Board regarding the Virginia Code and its definition of livestock, which he noted did not include alpacas. At the request of Supervisor Hipple, Mr. Kinsman drafted a resolution to amend the Legislative Agenda to support the addition of alpacas to the State Code’s definition of livestock.

Ms. Larson questioned if other animals had been addressed or would this be handled on a case-by-case basis.

Mr. Kinsman noted it would be on a case-by-case basis.

Mr. Hipple noted this request resulted from a court case which focused on his brother’s alpacas being attacked by dogs and Mr. Hipple had witnessed the vicious attack. He added his request stemmed from a technicality in court regarding livestock on a farm and the definition of livestock per the Virginia Code. Mr. Hipple noted that technicality returned the dogs to their owner and this situation could happen again.

Ms. Sadler thanked Mr. Hipple for addressing this as alpacas are on other farms in the County.

J. BOARD REQUESTS AND DIRECTIVES

Mr. Hipple noted there was a pause in transportation matters as the Virginia Department of Transportation (VDOT) continued work on the Hampton Roads Bridge Tunnel. He further noted updates on contracts and the Phase III work.

Ms. Larson noted contact with a citizen who questioned spotty cell phone coverage in the Neck-O-Land Road area and safety concerns it presented with citizens having fewer landlines. She asked Mr. McGlennon about following up with the citizen regarding a cell phone tower update for that area. Ms. Larson noted that VDOT had used social media for citizens to call about potholes. She urged citizens to contact VDOT about area potholes. Ms. Larson noted a public forum on January 24 at Jamestown High School featuring Mr. Stevens, Mr. Jason Purse, Assistant County Administrator, Mr. Rossie Carroll, VDOT Williamsburg Residency Administrator and herself to discuss the intersection of Route 5 and Centerville Road as well as the intersection of Greensprings Road and Route 5. She further noted she had received numerous calls on the traffic concerns of these areas.

Ms. Sadler asked Mr. Stevens to follow up with staff on the drainage issues on Rochambeau Drive as mentioned by Mr. Fowler during Public Comments.

Mr. Stevens confirmed yes.

Ms. Sadler thanked Mr. Heath Richardson for his time on the Planning Commission as the Stonehouse representative. She also thanked him for his professional and thoughtful manner as a leader.

Mr. McGlennon thanked Ms. Larson for her representation on December 21 at the National Homeless Person Memorial Day ceremony. He thanked Ms. Larson for her role as Chairman of the Board last year. He extended congratulations to the new leadership team of Mr. Icenhour and Mr. Hipple. Mr. McGlennon also noted he, Mr. Stevens and Ms. Larson had attended the Virginia Municipal League (VML) Virginia Association of Counties (VACo) Finance Forum with state expenditure and budget information. He addressed Moses Lane and the housing development in that area. Mr. McGlennon requested staff evaluate the street for inclusion into the state system, or if already in the system, what road improvements could be made.

Mr. Icenhour extended his thanks to Mr. Heath Richardson for his service to the community. He asked Mr. Stevens to look into naming the bridge in honor of Mr. Phil Richardson as noted earlier during Public Comment. Mr. Icenhour extended his appreciation to Mr. Richardson's family for his contributions to the community. Mr. Icenhour noted the constant issue of citizen participation as noted by Mr. Henderson and asked the Board to review ways to increase citizen participation. Mr. Icenhour addressed the list of items to be discussed at the retreat and if there were any additional items.

Ms. Larson asked about the location of the bridge for clarification. She also asked for an update from Mr. Stevens about restructuring of the Communications department.

Mr. Stevens noted he would provide an update at the retreat.

Discussion ensued.

K. REPORTS OF THE COUNTY ADMINISTRATOR

Mr. Stevens updated the Board regarding the Christmas tree and leaf disposal schedule. He

noted the Police Citizen Academy was accepting applications. Mr. Stevens announced Mr. Jason Purse, Assistant County Administrator, and his wife welcomed a baby boy, Calvin Maxwell Purse, and Mr. Stevens extended his congratulations.

Ms. Larson encouraged people to listen to the County's weekly podcasts. She noted this week's podcast featured Mr. Stevens and the issues of debris collection, budget and more.

L. CLOSED SESSION

1. Consideration of a personnel matter, the appointment of individuals to County Boards and/or Commissions pursuant to Section 2.2-3711(A)(1) of the Code of Virginia and pertaining to the Planning Commission

A motion to Appoint Individuals to Boards and Commissions was made by Sue Sadler, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

Mr. Icenhour asked the Board for consensus to discuss the appointment to the Planning Commission in Open Session.

The Board concurred.

Ms. Sadler nominated Ms. Odessa Dowdy, a Stonehouse District resident, for a one-year term to the Planning Commission.

M. ADJOURNMENT

1. Adjourn until 2 p.m. on January 22, 2019, for the Board Retreat in the Work Session Room at the James City County Government Center

A motion to Adjourn was made by Ruth Larson, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

At approximately 6:42 p.m., Mr. Icenhour adjourned the Board of Supervisors.

MINUTES
JAMES CITY COUNTY BOARD OF SUPERVISORS
RETREAT
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
January 22, 2019
2:00 PM

A. CALL TO ORDER

B. ROLL CALL

Michael J. Hipple, Vice Chairman, Powhatan District
Ruth M. Larson, Berkeley District
P. Sue Sadler, Stonehouse District
John J. McGlennon, Roberts District
James O. Icenhour, Jr., Chairman, Jamestown District

Scott A. Stevens, County Administrator
Adam R. Kinsman, County Attorney

C. PRESENTATIONS

1. Economic Development

Ms. Amy Jordan, Director of Economic Development, addressed the Board with a reference to the December Economic Development Authority (EDA) Retreat. She noted each Board member had received an EDA Retreat notebook and welcomed any questions or concerns after Board members reviewed the material. Ms. Jordan highlighted the mission statement of the Office of Economic Development (OED) in her PowerPoint presentation. She noted the EDA did not have a mission statement and addressed this as a priority at its Retreat. She further noted its wording supported that of the OED's mission statement. Ms. Jordan highlighted EDA focal points in her presentation: Product, Entrepreneurship, Workforce Development, Strategic Investment and Economic Partnerships.

Mr. Hipple asked which prospective buildings in the \$100,000-\$300,000 range were a target area.

Ms. Jordan noted a breakdown for the respective \$100,000, \$200,000 and \$300,000 properties would be made available.

Mr. Hipple noted this information allowed prospective businesses and the County to focus on "the sweet spot."

Ms. Jordan highlighted ideal acreage, lot size and other factors.

Mr. Hipple commented on the commercial and industrial areas and the possible expansion of value in those sectors. He noted the rework of old buildings to fit potential businesses as another area for economic development. He further noted the Taylor property as a viable site.

Ms. Jordan referenced the Virginia Economic Development Partnership (VEDP) slide in the

PowerPoint presentation that highlighted the mid-size sites. She highlighted the VEDP tier system and noted some of the County's properties have used the tiering system.

Discussion ensued.

Ms. Jordan noted reaching out to local businesses like Owens-Illinois for specific resources and assisting with glass recycling.

Mr. McGlennon inquired about tracking changes in wage rates and ways employers are developing employees. He noted how wage rates and skill level impact affordable housing.

Mr. Stevens asked the Board if it had specific areas for economic development concentration and programs.

Ms. Larson referenced ChefsGo, a valid program for the hospitality industry, and questioned other areas for the best wage opportunity in a variety of programs.

Mr. McGlennon noted energy retro fit programs and training as well as cost savings for citizens.

Ms. Larson noted the times empty shopping centers sat on the market. She further noted the change in retail. Ms. Larson applauded the Manufacturing Day program and asked about tracking the students who participated in the program and the number who had pursued manufacturing jobs after graduation.

Ms. Jordan said she and Ms. Kate Sipes, Assistant Director of Economic Development, would check the data and get back to Ms. Larson.

Ms. Sadler asked for a detailed follow-up on the Owens-Illinois situation. She also asked about the Hankins property.

Ms. Jordan provided an update on the tiering and the Virginia Department of Transportation's involvement.

Mr. Icenhour asked about workforce training, specifically manufacturing, in the the Williamsburg-James City County school system and Thomas Nelson Community College areas by contacting the Workforce Development Board. He wanted to focus efforts on manufacturing and tap into that resource more. He addressed Mr. Stevens about measuring efforts and success.

Mr. Stevens noted staff could work on that request. He also noted that James City County was currently not a member of the Hampton Roads Economic Development Authority (HREDA) and reinvigoration of that group was pending. Mr. Stevens did not feel membership at this time was needed there, but wanted to let the Board know of the status of the HREDA.

2. Land Preservation

Mr. Jason Purse, Assistant County Administrator, addressed the Board regarding land preservation with an update on two particular land parcels in addition to re-engaging the Purchase of Development Rights (PDR) Committee. He highlighted an all-inclusive approach and timeline as well as funding. Mr. Purse noted the three funding areas included PDR, Agricultural and Forestal District (AFD) and Greenspace. He further noted the AFD program could result in reduced property taxes.

Mr. Hipple asked about the length of time for a PDR.

Mr. Purse noted a swap regarding a buy back on property.

Mr. Hipple noted the opportunity for private partnership for funding.

Mr. Purse noted the local land conservancy's relationship with the County was good and opportunities could be discussed.

Mr. Hipple asked about a combination of the PDR and Greenspace land preservation program.

Mr. Purse noted "it's like a tool box" and that certain guidelines were in place, as for the PDR. He further noted the Greenspace program had a more flexible approach. Mr. Purse noted supplying information that highlight options to the landowners and their properties.

Mr. Hipple asked about the size specifics for the Agricultural and Forestal District (AFD) designation.

Mr. Purse noted the AFD acreage specifics included 200 acres or more for a district, 20 acres timber or five acres agricultural farmed land for an add-on to that district and be within a mile of that core district.

Mr. Hipple noted the PDR program had been put on hold while the County finances were addressed. He asked Mr. Kinsman about funding from the Senate Bill from tourism for corridors.

Mr. Kinsman noted he would research it.

Discussion ensued about money set aside from the Senate Bill funding.

Mr. Icenhour noted this funding was accounted for in the two-year plan, but could be addressed after the next budget year.

Mr. McGlennon noted urgency regarding the pressure for development and preservation of critical land. He requested information about the annual financial implications to make these land preservation programs viable.

Mr. Purse noted the PDR Committee should establish prioritization in ranking of what types of properties are available and then address what funding was needed.

Ms. Sadler mentioned the Community Character Corridor and the upkeep of medians and funding for preservation and clean-up in areas throughout the County.

Mr. Icenhour noted the effectiveness of preserving the County should be proactive rather than waiting for people to come to the Board. He suggested compiling a list of County property to preserve, but emphasized funding had to be available for staffing.

Discussion ensued on establishing a timeline for the program as well as properties for consideration.

Mr. Stevens asked the Board for a specific list of areas of interest and priorities. He noted he would work with staff and give the Board an update on the programs and those priorities.

Mr. Purse noted the name of the Purchase of Development Rights program also encompassed

more purchase. He further noted the program could accomplish more things like preserving farmland.

At approximately 3:11 p.m., the Board took a short recess.

At approximately 3:18 p.m., the Board reconvened the Retreat.

3. Communications

Mr. Stevens addressed the Board regarding personnel changes to the Communications Department and its staff dispersal since September 2017. He highlighted the number of positions in communication, the distribution of information and noted social media outlets. He noted the County had maintained a “fairly hard rein” on the Facebook accounts of departments. Mr. Stevens noted that may change moving forward and he emphasized maintaining Public Information messaging and staff capacity. He asked the Board for input.

Ms. Larson thanked him for the update.

Discussion ensued.

4. Update on Greater Williamsburg Chamber and Tourism Alliance

Ms. Larson noted there were both a Tourism Council and a Business Council and that the bylaws for the Alliance had been revised. She mentioned the creation of a nine-member Board. She further noted that each Council were working on its respective bylaws. Ms. Larson highlighted additional changes, marketing plans, financial updates, Council representation and personnel notes regarding the hire of a Chief Financial Officer (CFO). She said the CFO position search would be on hold pending the search for an Executive Director for the Tourism Council. Ms. Larson discussed the New York marketing group that targeted data and demographics of tourism in the area for the marketing plan. She noted a smaller group had been organized that would review the marketing plan. Ms. Larson further noted the maintenance of effort money from the three localities would be put it into a development fund and not into marketing.

Mr. Icenhour asked about the number of members for the Council. He asked about the bylaws.

Ms. Larson said the Alliance bylaws had to be done first before the Councils adopted their bylaws.

Mr. Icenhour noted the three localities had put a lot of effort into the Alliance and its bylaws. He further noted the adopted bylaws should be close to what had already been presented and expressed displeasure if that was not the case. He also noted the taxpayer money involvement and oversight from the community.

Mr. Stevens noted the Alliance was the oversight piece and had no staffing. He further noted it had a nine-member Board and its bylaws were complete. Mr. Stevens stated the Tourism Board was also a nine-member Board with one representative from each local government. He noted the bylaws for the Tourism and Business Councils were “in development.” He further noted he felt those Councils were in alignment with accountability.

Mr. Icenhour asked about shared staffing.

Ms. Larson explained there was some shared staffing, but no additional Tourism staff positions. She further noted existing Tourism staff from the Chamber had moved to the Tourism side as had existing Business staff moved to the Business Council.

Mr. Stevens clarified that staff expenses would be paid from either the Business or Tourism Councils, but not from the Alliance.

Mr. Icenhour requested a copy of the adopted bylaws from the overarching Alliance group.

Mr. Stevens noted he would provide those to him.

Ms. Larson noted the difficulties the Alliance had faced. She highlighted that other states had more funding, but stressed the necessity of the development fund.

Mr. Icenhour noted state money and the emphasis on tourism and the importance of careful use of local taxpayer money. He asked about how the money, to be set aside, would be distributed.

Ms. Larson noted discussion would be forthcoming from the three localities and their County Administrators.

Mr. McGlennon asked about the marketing funds for the region in terms of an increase regarding the new tax revenue.

Ms. Larson noted \$8 million for next year's budget, but further noted that was a low number as more data was needed and she would provide that.

Mr. McGlennon asked about maintenance of advertising from other involved parties.

Ms. Larson said she did not know as that information had not been shared. She noted Busch Gardens had not shared. She further noted she would ask if other groups were maintaining, or even diminishing/increasing, their efforts without asking the monetary amount.

Mr. Icenhour asked Ms. Larson about her representation on the Tourism Council and the Chamber. He asked if there would be changes with the Alliance bylaws.

Ms. Larson noted she had expressed to Ms. Jean Zeidler, Chair, that the localities had representation and maintained their seats on the Tourism and Business side based on the level of financial support.

Mr. Icenhour echoed that sentiment. He asked about the overall Board.

Ms. Larson noted some elected positions with three members from the Tourism Council.

Mr. Icenhour noted the overarching Chamber had three representatives from the Tourism Council, three from the Business Council and three at large.

Mr. Hipple noted no James City County representative could be on the Chamber for a year, but yet funding would come from that locality. He indicated no seats on the three Boards greatly impacted taxpayer money and asked if the money was being used for projects the County and the Board of Supervisors endorsed.

Ms. Larson noted that the language from Senate Bill 942 dictated how this Council was structured.

Mr. McGlennon noted this was a collection from the state in the County's jurisdiction.

Mr. Icenhour noted financial dispersement from the local level.

Mr. Stevens noted Ms. Larson's polite expression of identifying representation on the three Councils. He further noted possible changes regarding a possible separation of LaunchPad and Greater Williamsburg Partnership (GWP). Mr. Stevens noted talks with other County Administrators and branding criteria through GWP. He also noted any further updates on this change would be communicated with the Board.

D. BOARD DISCUSSIONS / GUIDANCE

General discussion ensued regarding the four items mentioned above.

E. ADJOURNMENT

1. Adjourn until 4 p.m. on January 22, 2019, for the Work Session

A motion to Adjourn was made by Michael Hipple, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

At approximately 3:53 p.m., Mr. Icenhour adjourned the Board of Supervisors Retreat.

MINUTES
JAMES CITY COUNTY BOARD OF SUPERVISORS
WORK SESSION
County Government Center Board Room
101 Mounts Bay Road, Williamsburg, VA 23185
January 22, 2019
4:00 PM

A. CALL TO ORDER

B. ROLL CALL

Michael J. Hipple, Vice Chairman, Powhatan District
Ruth M. Larson, Berkeley District
P. Sue Sadler, Stonehouse District
John J. McGlennon, Roberts District
James O. Icenhour, Jr., Chairman, Jamestown District

Scott A. Stevens, County Administrator
Adam R. Kinsman, County Attorney

C. BOARD DISCUSSIONS

Mr. Icenhour noted there were several Public Hearings rescheduled from the January 8, 2019 meeting that would be presented.

1. Public Hearing - Case No. Special Use Permit (SUP)-18-0026. 6096 Centerville Road Detached Accessory Apartment

A motion to Approve was made by Michael Hipple, the motion result was Passed.
AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0
Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

Mr. Alex Baruch, Planner, addressed the Board regarding a detached accessory apartment located at 6096 Centerville Road. He cited the details of the SUP and noted staff recommended Board approval.

Mr. Icenhour welcomed Mr. Heath Richardson, Chair, Planning Commission, to the Board.

Mr. Richardson cited the Planning Commission's voting history on the SUP and recommended the Board's approval.

Mr. Icenhour opened the Public Hearing.

As there were no speakers, Mr. Icenhour closed the Public Hearing.

Mr. Icenhour asked the Board for questions.

Mr. McGlennon asked Mr. Baruch about the property and residency.

Mr. Baruch noted the property was vacant, but the applicants were planning to build a home

with the detached accessory apartment.

2. Public Hearing - Case No. SUP-18-0029. 7206 Merrimac Trail Rental of Rooms Renewal

A motion to Approve was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

Ms. Terry Costello, Deputy Zoning Administrator, addressed the Board regarding the room rental renewal at 7206 Merrimac Trail. She noted staff recommended the Board's approval.

Mr. McGlennon inquired about the restrictive covenant on the property.

Ms. Costello noted it prohibited commercial activity in the neighborhood.

Mr. Richardson cited the Planning Commission's voting history on the SUP and recommended the Board's approval.

Mr. McGlennon inquired if anyone had comments or objections on the proposal.

Mr. Richardson stated no.

Ms. Larson thanked Mr. Richardson for his attendance at the meeting.

Mr. Icenhour opened the Public Hearing.

1. Ms. Shelby Dillon, the applicant, addressed the Board with statistics on the occupancy rate of the property.

As there were no additional speakers, Mr. Icenhour closed the Public Hearing.

3. FY 2018 Financial Audit Presentation

Ms. Sue Mellen, Director, Financial and Management Services (FMS), addressed the Board and introduced Ms. Leslie Roberts, the County's partner with Brown Edwards and Associates. She noted Ms. Roberts would present the FY 2018 financial report.

Ms. Roberts addressed the Board with the highlights of the audit.

Ms. Mellen acknowledged the time and effort of Ms. Sharon Day, Assistant Director, FMS and Ms. Stephanie Lahr, FMS staff, on the school budget work.

Mr. Hipple thanked Ms. Mellen and her staff for their work. He also requested a letter be sent from the Board to the School Board and the Superintendent of Schools addressing the delay of the school budget materials for the audit.

Mr. Icenhour acknowledged the request and noted he would work with the County Administrator on the letter.

Mr. McGlennon also thanked Ms. Mellen and the FMS staff. He also thanked Ms. Roberts for the audit work.

Ms. Mellen noted it was a true team effort from everyone.

Ms. Larson thanked Ms. Mellen for her due diligence and addressing issues. She also thanked the FMS staff for the time, including weekend time, that they provided to the audit. Ms. Larson noted the County's financial stability was paramount and applauded Ms. Mellen for her leadership. She further noted the School's awareness of working closely with FMS to ensure there would be no repeat of a delay in the future.

Ms. Sadler thanked Ms. Mellen and FMS staff for their hard work and time.

4. Public Hearing - FY2020 Pre Budget

Ms. Mellen noted this was a re-scheduled Public Hearing that allowed citizens to voice thoughts on the upcoming budget process. She noted that no action was required this evening and that a presentation would be forthcoming during the Work Session portion of the meeting.

Mr. Icenhour opened the Public Hearing.

1. Ms. Judy Fuss, 3509 Hunter's Ridge, addressed the Board about PDR and her appreciation for the Board's support of PDR and Greenspace programs. She strongly supported reactivation of these programs and staffing needs. Ms. Fuss also requested continued funding the neighborhood stormwater matching grant programs that assisted homeowners associations. She acknowledged staff's input and assistance with stormwater issues in neighborhoods.

As there were no additional speakers, Mr. Icenhour closed the Public Hearing.

Mr. Icenhour noted the Board would recess to the Work Session Room for a continuance of the remaining Board items.

A motion to Recess was made by John McGlennon the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Larson, Sadler, McGlennon, Icenhour

At approximately 4:32 p.m., the Board of Supervisors recessed to the Work Session Room.

At approximately 4:37 p.m., the Board reconvened with a Roll Call by Mr. Stevens.

5. Pre-Budget Work Session Discussion

Ms. Mellen addressed the Board with a pre-budget discussion in a PowerPoint presentation. She presented a financial update and budget cycle timeline and highlighted revenues from various areas including sales tax and the capture of data of internet sales. Ms. Mellen noted the government shutdown and its impact on County residents who are federal employees in relation to consumer-driven revenues.

Discussion ensued.

6. Workforce Housing Task Force Update

Ms. Jeanne Zeidler, co-chair of the Workforce Housing Task Force, addressed the Board. She introduced Ms. Lisa Sturtevant, consultant, and presented an update on the Task Force findings and draft report. Ms. Zeidler highlighted the timeline and priorities of the Task Force in a PowerPoint presentation. She thanked the Board for both staff and consultant resources it

provided to the Task Force as well as the Board's guidance and leadership in moving forward on the recommendations.

Ms. Kim Orthner, Workforce Housing Task Force member, continued the PowerPoint presentation with a definition of "workforce housing". She highlighted the needs of housing based on the adoption of the 2035 Strategic Plan.

Discussion ensued.

7. Curbside Recycling Project Agreement

A motion to Approve was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

Ms. Grace Boone, Director, General Services, addressed the Board regarding recycling. She introduced the new curbside recycling agreement and highlighted details of the agreement with a PowerPoint presentation. She noted Mr. Stephen Geissler, Executive Director of Virginia Peninsulas Public Service Authority, was in attendance.

Discussion ensued on administrative costs and billing.

D. BOARD REQUESTS AND DIRECTIVES

None.

E. CLOSED SESSION

A motion to Enter a Closed Session was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

At approximately 5:52 p.m., the Board of Supervisors entered a Closed Session.

At approximately 6:19 p.m., the Board of Supervisors re-entered Open Session.

1. Certification

A motion to Certify the Closed Session was made by John McGlennon, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

2. Discussion or consideration of the acquisition of real property for a public purpose, where discussion in an open meeting would adversely affect the bargaining position or negotiating strategy of the public body pursuant to Section 2.2-3711(A)(3) of the Code of Virginia

F. ADJOURNMENT

1. Adjourn until 10 a.m. on January 31, 2019, for the VACo Government Day at the State

Capitol

A motion to Adjourn was made by Ruth Larson, the motion result was Passed.

AYES: 5 NAYS: 0 ABSTAIN: 0 ABSENT: 0

Ayes: Hipple, Icenhour Jr, Larson, McGlennon, Sadler

At approximately 6:30 p.m., Mr. Icenhour adjourned the Board of Supervisors.

MINUTES
JAMES CITY COUNTY BOARD OF SUPERVISORS
VACo Government Day
Omni Richmond Hotel
100 S 12th Street, Richmond, VA 23219
January 31, 2019
8:45 AM

A. CALL TO ORDER

B. ROLL CALL

Michael J. Hipple, Vice Chairman, Powhatan District
Ruth M. Larson, Berkeley District
P. Sue Sadler, Stonehouse District (absent)
John J. McGlennon, Roberts District
James O. Icenhour, Jr., Chairman, Jamestown District

Scott A. Stevens, County Administrator
Adam R. Kinsman, County Attorney

The meeting was called to order for the purpose of visiting with the County's State Legislators.

Mr. McGlennon joined the meeting at 8:58 a.m.

C. GOVERNMENT DAY BUSINESS

The Board of Supervisors met with Delegate Mike Mullin, Senator Monty Mason and Delegate Brenda Pogge's administrative staff. The discussions revolved around the Board's adopted 2019 Legislative Program and general interests of the County. No vote or action was taken by the Board.

After the visits with the Legislators, the Board members attended the Virginia Association of Counties (VACo) luncheon where Governor Ralph Northam was the guest speaker and the VACo staff gave various reports and updates. No vote or action was taken by the Board.

Mr. McGlennon left the meeting at 1 p.m. to attend another event.

D. ADJOURNMENT

1. Adjourn until 5 p.m. on February 12, 2019, for the Regular Meeting
A motion to Adjourn was made by Michael Hipple, the motion result was Passed.
AYES: 3 NAYS: 0 ABSTAIN: 0 ABSENT: 2
Ayes: Hipple, Icenhour Jr, Larson,
Absent: McGlennon, Sadler

Mr. Hipple, Mr. Icenhour and Ms. Larson traveled together with Mr. Stevens back to Williamsburg.

At approximately 1:48 p.m., Mr. Icenhour adjourned the Board of Supervisors in Toano, Virginia.

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Ryan T. Ashe, Fire Chief

SUBJECT: Grant Award- Virginia E-911 Services Board PSAP Education

ATTACHMENTS:

	Description	Type
☐	Memo	Cover Memo
☐	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
Fire	Ashe, Ryan	Approved	1/25/2019 - 11:21 AM
Publication Management	Daniel, Martha	Approved	1/25/2019 - 11:34 AM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:41 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:15 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:54 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:55 PM

MEMORANDUM

DATE: February 12, 2019
TO: The Board of Supervisors
FROM: Ryan T. Ashe, Fire Chief
SUBJECT: Grant Award - Virginia E-911 Services Board Public Safety Answering Point - \$2,000

The James City County Fire Department Emergency Communications Division has been awarded a Wireless E-911 Public Safety Answering Point Education Program (PSAP) grant in the amount of \$2,000 from the Virginia E-911 Services Board under the Fiscal Year 2019 PSAP Grant Program.

The funds are to be used for 911 and geographic information system-specific group education and training opportunities. The grant award is for registration, per diem and lodging only and is a reimbursement grant.

The grant does not require a local match, though costs in excess of the award and for other than registration, per diem and lodging will be paid by the Emergency Communications Division.

Staff recommends adoption of the attached resolution to appropriate funds.

RTA/nb
GA-911PSAP19-mem

Attachment

RESOLUTION

GRANT AWARD - VIRGINIA E-911 SERVICES BOARD

PUBLIC SAFETY ANSWERING POINT - \$2,000

WHEREAS, the James City County Fire Department Emergency Communications Division has been awarded a Wireless E-911 Public Safety Answering Point (PSAP) Education Program grant in the amount of \$2,000 from the Virginia E-911 Services Board under the Fiscal Year 2019 PSAP Grant Program; and

WHEREAS, the funds are to be used for 911 and geographic information system-specific group education and training opportunities; and

WHEREAS, the grant does not require a local match.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby authorizes the acceptance of this grant and the following appropriation to the Special Projects/Grants fund:

Revenue:

PSAP Grant-Education	<u>\$2,000</u>
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Expenditure:

PSAP Grant-Education	<u>\$2,000</u>
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James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	___	___	___
LARSON	___	___	___
SADLER	___	___	___
MCGLENNON	___	___	___
ICENHOUR	___	___	___

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

GA-911PSAP19-res

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Nathan R. Green, Commonwealth Attorney

SUBJECT: Grant Award - Commonwealth Attorney - Virginia Domestic Violence Victim Fund - \$56,824

ATTACHMENTS:

	Description	Type
☐	Memorandum	Cover Memo
☐	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	1/23/2019 - 10:40 AM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:54 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:54 PM
Publication Management	Daniel, Martha	Approved	2/5/2019 - 2:19 PM
Legal Review	Kinsman, Adam	Approved	2/5/2019 - 3:58 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:15 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 4:18 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:20 PM

MEMORANDUM

DATE: February 12, 2019

TO: The Board of Supervisors

FROM: Nathan R. Green, Commonwealth Attorney

SUBJECT: Grant Award - Commonwealth Attorney - Virginia Domestic Violence Victim Fund - \$56,824

The Commonwealth Attorney has been awarded a \$56,824 grant (state share \$41,030 and County match \$15,794) from the Virginia Domestic Violence Victim Fund through the State Department of Criminal Justice Services. The State grant will fund the personnel costs of an existing attorney position to assist in the prosecution of misdemeanors and felonies involving domestic violence, sexual abuse, stalking and family abuse. The Commonwealth Attorney has been successful in obtaining this grant in previous years and plans to apply for this grant in the future.

The County match is available in the Commonwealth Attorney's General Fund account.

The attached resolution appropriates these funds to the Special Projects/Grant Fund through June 30, 2019.

Staff recommends adoption of the attached resolution.

NRG/md
GA-FY19VDViolVFd-mem

Attachment

RESOLUTION

GRANT AWARD - COMMONWEALTH ATTORNEY -

VIRGINIA DOMESTIC VIOLENCE VICTIM FUND - \$56,824

WHEREAS, the Commonwealth Attorney for the City of Williamsburg and James City County has been awarded a \$56,824 grant, which is awarded annually from the Virginia Domestic Violence Victim Fund (state share \$41,030; County match \$15,794) through the State Department of Criminal Justice Services (DCJS); and

WHEREAS, this grant would fund the personnel costs of a position in the prosecution of misdemeanors and felonies involving domestic violence, sexual abuse, stalking and family abuse through June 30, 2019; and

WHEREAS, the grant requires a local match of \$15,794, which is available in the Commonwealth Attorney's General Fund account.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby authorizes the additional appropriation to the Special Projects/Grants Fund through June 30, 2019, for the purposes described above:

Revenue:

FY19 Virginia Domestic Violence Victim Fund - DCJS	\$41,030
James City County Matching Funds	<u>15,794</u>
Total	<u>\$56,824</u>

Expenditure:

FY19 Virginia Domestic Violence Victim Fund	<u>\$56,824</u>
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James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
MCGLENNON	_____	_____	_____
SADLER	_____	_____	_____
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Ryan T. Ashe, Fire Chief

SUBJECT: Contract Award- Emergency Management Plans and Exercises

ATTACHMENTS:

	Description	Type
☐	Memo	Cover Memo
☐	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
Fire	Ashe, Ryan	Approved	1/25/2019 - 11:21 AM
Publication Management	Daniel, Martha	Approved	1/25/2019 - 11:33 AM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:42 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:15 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:53 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:54 PM

MEMORANDUM

DATE: February 12, 2019

TO: The Board of Supervisors

FROM: Ryan T. Ashe, Fire Chief
Kitty Hall, Director of Purchasing

SUBJECT: Contract Award - Emergency Management Plans, Training and Exercises

A Request for Proposals (RFP) was solicited from qualified firms to provide emergency management planning, training, exercise development and evaluation services. Purchasing and Emergency Management staff issued the RFP in order to pre-select a qualified vendor to provide these services on an as-needed basis, thereby simplifying the purchasing process. The pre-selection of the vendor was based on its qualifications per the requirements of the Virginia Public Procurement Act.

Interested firms responded to the RFP by describing their interest, qualifications, project approach and experience in performing similar work. A panel of staff members representing the Emergency Management and Purchasing Divisions, as well as the Fire Department, evaluated the proposals and selected the most qualified firm. The resulting contract has an initial term expiring at the end of Fiscal Year 2019, and contains the option for four one-year renewals. The contract contains specific projects, such as developing a Point of Distribution Plan, as well as language which also requires the vendor to provide general planning and training services as requested by the Emergency Management Division. All projects as part of this contract will be funded using various Emergency Management grants.

The firm selected for the contract award is Waldroup Sommer & Associates, LLC.

Staff recommends approval of the attached resolution awarding a contract for the above mentioned services to Waldroup Sommer & Associates, LLC.

RTA/KH/md
CA-EmergMgmtPlns-mem

Attachment

RESOLUTION

CONTRACT AWARD - EMERGENCY MANAGEMENT PLANS,

TRAINING AND EXERCISES

WHEREAS, a Request for Proposals has been advertised and evaluated for annual emergency management planning, training, exercise and evaluation support; and

WHEREAS, Waldroup Sommer & Associates, LLC was determined to be the best qualified to provide the required services; and

WHEREAS, the Fire Department and Emergency Management Division have grant funds available to support the projects outlined in the pending contract.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby awards the contract for annual emergency management planning, training, exercise and evaluation support to Waldroup Sommer & Associates, LLC.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

VOTES

AYE NAY ABSTAIN

HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Teresa J. Fellows
Deputy Clerk to the Board

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

CA-EmergMgmtPlns-res

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Jason Purse, Assistant County Administrator

SUBJECT: Contract Award – JCC Croaker Library HVAC and Boiler Replacement-\$150,190

ATTACHMENTS:

	Description	Type
☐	Memorandum	Cover Memo
☐	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:18 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:53 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:54 PM
Publication Management	Daniel, Martha	Approved	2/5/2019 - 2:16 PM
Legal Review	Kinsman, Adam	Approved	2/5/2019 - 3:58 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:14 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 4:18 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:18 PM

MEMORANDUM

DATE: February 12, 2019

TO: The Board of Supervisors

FROM: Betsy Fowler, Director of the Williamsburg Regional Library

SUBJECT: Contract Award - James City County Croaker Library HVAC and Boiler Replacement - \$150,190

The James City County (JCC) Croaker Library is owned by James City County, but operated by the Williamsburg Regional Library (WRL). While operations are carried out by the WRL staff, any capital improvements are undertaken through the County's Capital Improvement Plan (CIP) budgeting process. In the County Capital Improvements Program (CIP), \$275,000 was included in the Fiscal Year 2017 budget for the Library HVAC replacement costs of two HVAC system air handlers.

The WRL staff, in consultation with the JCC Purchasing Office, determined that Damuth Trane's proposal to replace and install the new system for air handler No. 2 at a proposed cost of \$72,612 is reasonable in comparison to other current County HVAC replacements and current construction cost indices.

WRL staff, in consultation with the JCC Purchasing Office, determined that Damuth Trane's proposal to replace and install one boiler at a proposed cost of \$77,578 is reasonable in comparison to other current County replacements and current construction cost indices.

Staff recommends approval of the attached resolution authorizing the installation services from Damuth Trane in the amount of \$150,190 for the JCC Croaker Library HVAC and boiler replacement.

BF/md
CA-CrkrLibHVAC-mem

Attachment

RESOLUTION

CONTRACT AWARD - JAMES CITY COUNTY CROAKER LIBRARY HVAC AND

BOILER REPLACEMENT - \$150,190

- WHEREAS, due to the need for standard maintenance and replacement of HVAC equipment in County facilities to promote operational efficiency and safety; and
- WHEREAS, one James City County (JCC) Croaker Library HVAC controls and equipment will be replaced, as well as one boiler; and
- WHEREAS, it has been determined by Williamsburg Regional Library staff, in consultation with JCC Purchasing staff, that Damuth Trane is the most qualified to replace and install the HVAC controls and equipment and to replace and install the one boiler required; and
- WHEREAS, Damuth Trane submitted a proposal to perform the required services, the proposed rates have been determined to be reasonable and adequate funds are available in the Capital Improvements budget.
- NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby authorizes the contract award in the amount of \$150,190 to Damuth Trane and Trane Corporate for JCC Croaker Library HVAC and boiler equipment replacement and installation.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

CA-CrkrLibHVAC-res

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board Of Supervisors

FROM: Mark Abbott, Operations Project Coordinator

SUBJECT: Contract Award-James City County Recreation Center Renovations

Renovate the current cardio-room space previously occupied by Sentara Healthcare to accommodate a new stretching area, a personal training room, a class studio, and a newly relocated and expanded cardio-room.

ATTACHMENTS:

	Description	Type
▣	Memorandum	Cover Memo
▣	Resolution	Resolution
▣	New Floor Plan Layout	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Capital Projects	Abbott, Mark	Approved	1/24/2019 - 1:38 PM
General Services	Boone, Grace	Approved	1/28/2019 - 3:16 PM
Publication Management	Daniel, Martha	Approved	1/28/2019 - 3:48 PM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:42 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:15 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:54 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:55 PM

MEMORANDUM

DATE: February 12, 2019

TO: The Board of Supervisors

FROM: Mark Abbott, Operations Project Coordinator

SUBJECT: Contract Award - James City County Recreation Center Renovations Project - \$250,000

The James City County Recreation Center Renovations Project, located at 5301 Longhill Road, will renovate the current cardio-room and the space previously occupied by Sentara Healthcare on the second floor to accommodate a new stretching area, a personal training room, a class studio and a newly relocated and expanded cardio-room. This project will be funded through Capital Improvement budgets approved in Fiscal Year (FY) 2018 and FY 2019.

The following eight qualified firms submitted bids to be considered for contract award:

<u>Firm</u>	<u>Amount</u>
Homeland Contracting Corporation	\$250,000
Unix Electrical Group	\$255,000
Caspian Construction, LLC	\$256,000
Contracting Solutions	\$257,700
David A. Nice Builders, Inc.	\$289,500
Brooks & Co. General Contractors Inc.	\$306,791
Virtexco Corporation	\$351,000
Airtech Solutions, Inc.	\$445,000

Homeland Contracting Corporation has performed satisfactory work for James City County in the past and was determined to be the lowest qualified, responsive and responsible bidder. This project is part of the approved Capital Improvements Program budget.

Staff recommends approval of the attached resolution authorizing the contract award to Homeland Contracting Corporation.

MA/md
CA-JCCRecCtrRenov-mem

Attachments:

1. Resolution
2. Renovation Floor Plan Layout

RESOLUTION

CONTRACT AWARD - JAMES CITY COUNTY

RECREATION CENTER RENOVATIONS PROJECT - \$250,000

WHEREAS, the James City County General Services Division received competitive bids for the James City County Recreation Center Renovations Project; and

WHEREAS, eight bids were considered for award and Homeland Contracting Corporation was the lowest qualified, responsive and responsible bidder; and

WHEREAS, previously authorized Capital Improvements Program budget funds are available to fund this project.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby authorizes the contract award in the amount of \$250,000 to Homeland Contracting Corporation, for the James City County Recreation Center Renovations Project.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

CA-JCCRecCtrRenov-res



SECOND FLOOR PLAN

RECREATION CENTER CARDIO WORKOUT ROOM RELOCATION

ITEM SUMMARY

DATE: 2/1/2019

TO: The Board of Supervisors

FROM: Kitty Hall, Purchasing Director

SUBJECT: Recommendation of Contract Award for Accounting/Budget/Purchasing Software

ATTACHMENTS:

	Description	Type
▣	Board Memo	Cover Memo
▣	Board Resolution	Resolution
▣	Tyler-Munis Software Presentation	Presentation

REVIEWERS:

Department	Reviewer	Action	Date
Purchasing	Hall, Kitty	Approved	2/1/2019 - 10:14 AM
Financial Management	Mellen, Sue	Approved	2/1/2019 - 10:21 AM
Publication Management	Daniel, Martha	Approved	2/1/2019 - 11:28 AM
Legal Review	Kinsman, Adam	Approved	2/5/2019 - 3:58 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:14 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 4:18 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 4:19 PM

MEMORANDUM

DATE: February 12, 2019

TO: The Board of Supervisors

FROM: Kitty Hall, Purchasing Director

SUBJECT: Contract Award - Accounting/Budget/Purchasing Software System - \$750,154

The Fiscal Year (FY) 2019 Capital Improvements Program (CIP) budget includes funds for the purchase of Enterprise Software for Accounting/Budget/Purchasing. This system was budgeted to replace the current software system in place for over 20 years and is no longer feasible to be upgraded or maintained.

This project is designed to replace the legacy HMS/EmGov applications and database used for accounting, budget and purchasing functions. This contract recommendation for a new Accounting/Budget/Purchasing system will provide staff with the ability to expand, build upon and meet the County's strategic goals for implementing Modern Infrastructure, Facilities and Technology Systems, providing Exceptional Public Services and modeling a Fiscally Efficient Government. The implementation will involve several County offices including Accounting, Budget, Purchasing and Information Resources Management. Representatives from these departments worked together with the Purchasing Department as an evaluation team to establish requirements, research products, review requests for proposals and to attend and analyze demonstrations.

James City County received three proposals through a Request for Proposal (RFP) process. After a thorough review of written proposals, all three vendors were invited to demonstrate their software solution to the committee. Upon conclusion of the vendor demonstrations, Tyler Technologies emerged as the top ranked firm and targeted negotiation and follow-up demonstrations were conducted. Additionally, the on-site demonstrations were followed by reference checks, phone calls and field visits to Virginia localities using the system.

The evaluation team determined that Tyler Technologies is the vendor that presents the best solution to meet the needs of the County. This system is in use in the Virginia locality of York County and the Williamsburg-James City County Public School Division. The company and the MUNIS product garnered positive references, and field visits allowed County staff to see the product in operation and ask questions about its use and the implementation process. Additionally, the Tyler product is currently in use in James City County for the Land Development and Asset Management Software, as a result of a 2016 RFP process.

The contract for the Accounting/Budget/Purchasing software was negotiated as an amendment to the current Tyler contract on a fixed-cost basis for implementation costing \$750,154. This is within the County's approved FY 19 CIP adopted budget.

Staff recommends adoption of the attached resolution authorizing the contract amendment award to Tyler Technologies in the amount of \$750,154 for the Accounting/Budget/Purchasing Software System.

KKH/md
CA-ABP-SftwreSys

Attachment

RESOLUTION

CONTRACT AWARD - ACCOUNTING/BUDGET/PURCHASING

SOFTWARE SYSTEM - \$750,154

WHEREAS, a Request for Proposals (RFPs) for an Accounting/Budget/Purchasing Software System was publicly advertised and staff reviewed proposals from three firms interested in providing the solution; and

WHEREAS, funds are available in the Fiscal Year 2019 Capital Improvements Program budget for the purchase of the Accounting/Budget/Purchasing Software System; and

WHEREAS, upon evaluating the proposals, staff determined that Tyler Technologies was the most fully qualified and submitted the solution that best suited the County's needs as presented in the RFPs and negotiated a price of \$750,154 with Tyler Technologies for the Accounting/Budget/Purchasing Software System.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby authorizes the County Administrator to execute a contract with Tyler Technologies for an Accounting/Budget/Purchasing Software System in the amount of \$750,154.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

CA-ABP-SftwreSys-res

Contract Award

Accounting/Budget/Purchasing Software

February 12, 2019

Financial & Management Services

Objective



To replace the County's current aging software system that is no longer feasible to be upgraded or maintained in order to meet the business needs of the Financial & Management Services Department.

Current Software



- HMS/EmGovPower
- Implemented over 20 years ago
 - Runs on an Access Database with an internal Windows network.

Current Software Challenges



- Lacks standardization and efficiency in business practices
- Requires many manual processes
- Lacks modern system capabilities, tools and user-friendly advanced reporting functions which are needed to support current business operations
- Requires the use of additional stand-alone systems to support several key financial management applications.

Project Background



- An RFI was initiated November 18, 2015 to obtain information on potential solutions to replace the EmGovPower system.
- The purpose of the RFI:
 - To obtain information on new technologies or approaches
 - To determine the level of market interest
 - To obtain high level cost estimates for planning and budget purposes
- RFI resulted in a recommendation for a new financial software solution to be solicited through a formal Request for Proposal (RFP)

Request for Proposal Overview

- RFP posted on JCC Website on June 30, 2018
- Three proposals were received and evaluated:
- Proposers conducted on-site demonstrations for 3 full days
- The evaluation committee determined that Tyler Technologies would be the top ranked firm
- At the conclusion of Reference Checks, Field Visits, and Negotiations it was determined that Tyler presented the best solution for the County

About Tyler Technologies



- Tyler Technologies is the largest software company in the nation solely focused on providing integrated software and technology services to the public sector.
- Tyler Technologies is a leading provider of end-to-end information management solutions and services for local governments.
- Tyler Technologies provides services to more than 15,000 local government offices in all 50 states, Canada, the Caribbean, Australia, and other international locations. This includes about 90 cities, counties, and schools in Virginia such as York County and the Williamsburg-James City County School Division.

The Tyler Solution



Munis ERP Software

- Software System that can seamlessly integrate information and processes flowing through an organization
- Has centralized security profiles, and makes information accessible across departments improving efficiency and system controls
- A solution that helps eliminate redundant or incorrect data
- Provides real-time information and enhanced reporting capabilities
- Has an integrated document imaging system that streamlines paper work processes that require manual processing
- Offers integration between the Munis database and Microsoft allowing users to export data, and generate reports

Benefits



- Replaces a vital but outdated business tool
- Enables widespread data sharing from a single secure information repository to improve information accuracy and availability
- Streamlines processes, resulting in the better use of employee time
- Has electronic workflows with notifications
- Detailed, comprehensive audit trail
- The integrated document imaging tool will help to reduce paper and printing costs

Cost



The contract for the Accounting/Budget/Purchasing software was negotiated as an amendment to the current Tyler contract on a fixed-cost basis for implementation costing \$750,154. This is within the County's approved FY 20 CIP adopted budget.

Date

Department Name

Recommendation



This contract recommendation for a new Accounting/Budget/Purchasing system will provide staff with the ability to expand, build upon and meet the County's strategic goals for implementing Modern Infrastructure, Facilities and Technology Systems, providing Exceptional Public Services and modeling a Fiscally Efficient Government.

The staff recommends adoption of the resolution authorizing the contract amendment award to Tyler Technologies in the amount of \$750,154 for the Accounting/Budget/Purchasing Software System

QUESTIONS

February 12, 2019

Financial & Management Services

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Jose Ribeiro, Senior Planner II

SUBJECT: REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

ATTACHMENTS:

	Description	Type
▣	Staff Report	Staff Report
▣	Attachment 1 - Rezoning Resolution	Resolution
▣	Attachment 2 - Height Limitation Waiver Reduction	Resolution
▣	Attachment 3 - Location Map	Exhibit
▣	Attachment 4 - 4. Unapproved Minutes of the December 5, 2018, Planning Commission meeting	Exhibit
▣	Attachment 5 - Master Plan	Exhibit
▣	Attachment 6 - Community Impact Statement	Exhibit
▣	Attachment 7 - Fiscal Impact Study based on the County's Format	Exhibit
▣	Attachment 8 - Parks and Recreation Exception Request	Exhibit
▣	Attachment 9 - Traffic Impact Study	Exhibit
▣	Attachment 10 - 10. LOS Information for the Intersection of Richmond Road and Oakland Drive	Exhibit
▣	Attachment 11 - 11. LOS Information for the Intersection of Richmond Road and Croaker Road/Pricket Road	Exhibit
▣	Attachment 12 - 12. Low Income Tax Credit Program Information	Exhibit
▣	Attachment 13 - Citizen Correspondence	Exhibit
▣	Attachment 14 - 14. Citizen Correspondence Received after the PC Meeting	Exhibit
▣	Attachment 15 - 15. Applicant Prepared Fiscal Impact Study	Exhibit
▣	Attachment 16 - 16. Revised Easement	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Planning	Holt, Paul	Approved	1/25/2019 - 4:45 PM
Development Management	Holt, Paul	Approved	1/25/2019 - 4:46 PM
Publication Management	Daniel, Martha	Approved	1/25/2019 - 5:06 PM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:42 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:16 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:56 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:59 PM

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe**Staff Report for the February 12, 2019, Board of Supervisors Public Hearing**

SUMMARY FACTS

Applicant: Mr. Timothy O. Trant, II, on behalf of Connelly Development, LLC

Land Owner: Ms. Lisa Joy P. Marston, Trustee

Proposal: To rezone a total of \pm 14.96 acres of land from A-1, General Agricultural to R-5, Multi-family Residential District for the purpose of constructing up to 126 apartment units. Access to the apartments is proposed via an entrance road on Oakland Drive through an adjacent property. The proposal also includes a Height Limitation Waiver request for five apartment buildings, up to a maximum height of 40 feet above finished grade.

Locations: 7581 and 7607 Richmond Road

Tax Map/Parcel Nos.: 2310100002 and a portion of 2310100001

Project Acreages: \pm 14.54 acres and \pm 0.42 acres

Current Zoning: A-1, General Agricultural

Proposed Zoning: R-5, Multifamily Residential District

Comprehensive Plan: Moderate-Density Residential and Low Density Residential

Primary Service Area: Inside

Staff Contact: Jose Ribeiro, Senior Planner II

PUBLIC HEARING DATES

Planning Commission: December 5, 2018, 6:00 p.m.

Board of Supervisors: February 12, 2019, 5:00 p.m.

FACTORS FAVORABLE

1. Staff finds the proposal will not negatively impact surrounding development.
2. The proposal's density is within the range recommended for lands designated Moderate-Density Residential (MDR) by the adopted Comprehensive Plan.
3. Increases workforce and affordable housing opportunities via an Easement.
4. To support the proposed density, the applicant is proposing to demonstrate a commitment to various Board of Supervisors' adopted policies and to provide other public benefits (including the workforce and affordable housing assurance) through notes on the Master Plan and via an Easement that the County would be a party to (see the "Ability to Guarantee the Development as Proposed" section below for discussion regarding these items).

FACTORS UNFAVORABLE

1. Some of the typical impacts associated with residential development are not mitigated or addressed, including impacts to schools and public utilities, such as the James City Service Authority (JCSA) (see the "Ability to Guarantee the Development as Proposed" section below for discussion regarding these items).

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.

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Staff Report for the February 12, 2019, Board of Supervisors Public Hearing

2. The project is fiscally negative per the submitted Fiscal Impact Analysis worksheet.
3. Based on current enrollment data, the proposal does not meet the Adequate Public Schools Facilities Test, adopted by the Board of Supervisors on June 23, 1998.
4. This proposal does not fully meet the recommendations of the Parks & Recreation Master Plan for new residential development within the Parks & Recreation Master Plan. The applicant is seeking an exception from the Board of Supervisors, as further discussed below.
5. Because of traffic from this proposed development, the Level of Service (LOS) for a turning movement (eastbound left turn) at the Croaker Road intersection will worsen. The Traffic Study recommends both physical turn lane improvements and adjustments to the traffic signal timing. The applicant proposes to complete the physical turn lane improvements via a note and depiction on the Master Plan and via an Easement that the County would be a party to. However, the adjustments to the traffic signal timing needed to maintain LOS are at the sole discretion of the Virginia Department of Transportation (VDOT).
6. Citizens have expressed concerns with this proposal.

SUMMARY STAFF RECOMMENDATION

With the exception of modifying the existing traffic signal timing at the Croaker Road intersection, staff finds the requirements of the Easement along with the binding Master Plan, would mitigate impacts from this development. VDOT has indicated that it would modify the traffic signal timing if it was determined to improve the performance of the intersection. However, without knowing whether the Board of

Supervisors will accept an Easement, staff cannot recommend approval of this rezoning application at this time.

Should the Board of Supervisors wish to approve the rezoning application, staff recommends approval of the Height Limitation Waiver application. Proposed conditions for this application have been included in the attached resolution (Attachment No. 2). Staff also recommends approval of the request for an exception to the Parks & Recreation Development Guidelines.

PLANNING COMMISSION RECOMMENDATION

At its December 5, 2018 meeting, the Planning Commission recommended approval of this rezoning application by a vote of 5-2. The Planning Commission also recommended that the applicant consider that the proposed improvements to the Oakland Drive/Richmond Road intersection be constructed before the start of construction of the proposed residential development. The Commission also asked the applicant to report to the Board of Supervisors on the feasibility of modifying the construction schedule.

Proposed Changes Made Since the Planning Commission Meeting

The applicant has submitted an additional Fiscal Impact Study (Attachment No. 15). Also, on January 30, 2019, the applicant submitted a revised Easement with new language committing to commencing the off-site traffic improvements prior to on-site land disturbance activities. The applicant has also proposed the installation of new median improvements within the Route 60 median, west of the Oakland Drive crossover (clearing and landscaping). Please refer to Attachment No. 16 for the revised Easement with the attachments submitted by the applicant. Staff notes that at the time of writing this report VDOT had not reviewed the additional improvements proposed within the Route 60 median, west of the Oakland Drive crossover.

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.

SUMMARY

The proposed development includes a number of favorable aspects. In addition, the proposed development's density is within the range recommended for lands designated MDR by the adopted Comprehensive Plan. However, central to the MDR language is the following statement from the adopted Comprehensive Plan:

“Development at this density is not recommended unless it offers particular public benefits. Examples of such public benefits include mixed-cost housing, affordable and workforce housing and enhanced environmental protection.”

As discussed in this staff report, the applicant is proposing to offer public benefits and provide assurances to comply with the Board of Supervisors' adopted policies through a combination of notes on the Master Plan, through stated intention in the Community Impact Statement and through a proposed Easement. The applicant is proposing the County be made a party to the Easement.

Through notes on the Master Plan, compliance with Board adopted policies include: a 150-foot-wide Community Character Corridor (CCC) buffer (a 50-foot-wide buffer width is otherwise required for by-right development), the provision of bike and pedestrian improvements consistent with the Board's adopted Bike and Pedestrian Master Plans (bike and pedestrian would not be required if the property was subdivided in accordance with the by-right minor subdivision regulations), an alternative set of recreation facilities designed to comply with the intent of the Parks & Recreation Master Plan, proposed JCSA Water Conservation Standards (also in the Easement Agreement), and based on the project's location within the Yarmouth Creek Watershed, the implementation of Special Stormwater Criteria measures. Architectural renderings have also been included in the proposed Master Plan (also in the Easement).

While not a note on the Master Plan, the applicant has also submitted a Phase I Archaeological Study which was reviewed by the Virginia Department of Historic Resources.

Through the Easement, the applicant is proposing that any development occurring on this property that results in a density higher than that allowed by-right under the current A-1 Zoning District (i.e., four minimum 3-acre lots) may only be developed in accordance with Virginia Housing and Development Authority's (VHDA) Low Income Tax Credit Program (LIHTC) (or alternative as the County may approve). The applicant is also proposing the following commitments in the Easement:

- Use of the building elevations included in the Master Plan set;
- Achieving EarthCraft/Viridian gold certification (or other comparable certification);
- Development of Water Conservation Standards;
- Construction of the off-site traffic improvements;
- Construction and maintenance of a 5-foot sidewalk across the adjacent property (7575 Richmond Road); and
- Provision of a Nutrient Management Plan (NMP).

In order to achieve a density bonus above nine dwelling units per acre, the applicant proposes to construct each of the buildings to the EarthCraft Gold standard.

There are no Special Use Permit conditions associated with this request. The County Attorney's office has determined that the

Easement is legal and would be binding if accepted by the Board of Supervisors.

HISTORY OF THE PROJECT

In May 2018, the applicant requested that the Rezoning and Height Waiver Application for this project under James City County Case No. Z-0003-2017/HW-0002-2017, be withdrawn from consideration. In September 2018, the applicant submitted a revised application for consideration. The main changes proposed by the revised application are:

- The proposed development will have vehicular access only on Oakland Drive through an entrance road crossing adjacent property located at 7606 Richmond Road. The portion of the property where the access road is proposed (± 0.42 acres) is part of the rezoning application.
- With the addition of the ± 0.42 acres to this rezoning application, the proposed density for the entire project was reduced from ± 9.7 to ± 9.4 (there is no reduction in the number of dwelling units).
- Increase in open space areas of ± 1.13 acres.
- Increase in recreation areas of ± 0.5 acres.
- The clubhouse is now proposed to be located at the western part of the site (next to the proposed access road).
- New improvements to the Route 60/Oakland Drive intersection include:
 - a. Pavement widening between median noses.
 - b. Yield bars and centerline striping.

PROJECT DESCRIPTION

- The applicant is requesting to rezone property at 7581 Richmond Road, from A-1, General Agricultural to R-5, Multifamily Residential District to permit 126 apartment units on ± 14.54 acres. The applicant is also requesting to rezone ± 0.42 acres of property at 7606 Richmond Road from A-1, General Agricultural to R-5, Multifamily Residential District to allow for an access road to connect the apartment units to Oakland Drive. The total area subject to this rezoning application is ± 14.97 acres.

The project proposes a gross density of ± 8.4 units per acre. However, per R-5 Zoning Ordinance requirements, the net density (which takes into account the non-developable portions of the site) is calculated as ± 9.4 units per acre. Per the R-5 District requirements, the project could propose up to a net density of nine units per acre without a need for any density bonuses. In order to achieve the proposed ± 9.4 units per acre net density, the project will need to achieve one bonus density point. From the options available in the Ordinance, the applicant is proposing to achieve the one bonus density point by committing to green building techniques, specifically through the EarthCraft Gold certification. A note to this effect is shown on the Master Plan and there is also a commitment in the Easement; see the “Ability to Guarantee the Development as Proposed” section above for discussion regarding this item.

- The 126 apartment units are arranged on the site in five buildings. One of the buildings is designed to be handicapped accessible and has an elevator. The Master Plan also shows a clubhouse building.
- The applicant is proposing a private access road and parking area. The proposed private access road is located on a portion of adjacent property at 7606 Richmond Road and subject to this

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.

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Staff Report for the February 12, 2019, Board of Supervisors Public Hearing

rezoning application. Private roads are permitted by-right in the R-5 District.

- The project is located on a CCC per the adopted Comprehensive Plan, and thus, provides a 150-foot buffer along the Richmond Road frontage of property at 7581 Richmond Road. The Master Plan shows the buffer as retaining the existing wooded character.
- The project includes buffers along the perimeter of the property at 7581 Richmond Road per the R-5 Zoning Ordinance requirements. However, at the rear of the site, the Master Plan shows a portion of the multi-use field within the buffer, which would require Planning Director approval of a buffer depth reduction at the development plan stage. As proposed, the perimeter buffers would largely retain existing trees and would be supplemented with additional landscaping.
- As shown on Sheet 3.0 of the Master Plan, the R-5 recreation requirements would be met through provision of recreation areas at the rear of the development.
- Per the adopted Pedestrian Accommodations Master Plan, this project includes the construction of a sidewalk along the frontage of 7581 Richmond Road. The Master Plan also shows a sidewalk connection across the adjacent property (7575 Richmond Road) allowing pedestrian access to the Richmond Road intersection with Croaker Road/Pricket Road. In addition, per the adopted Regional Bikeways Plan, the project includes a shoulder bike lane along the frontage of 7581 Richmond Road.
- If approved, the project will also be required to be constructed to the Design Requirements of the R-5 Zoning Ordinance. These Zoning Ordinance requirements include:

- All units being served by public water and sewer (private systems are not permitted);
 - Open space to be maintained exclusively for conservation and recreation purposes;
 - The provision of playground equipment;
 - Parking lot light fixtures limited to a height of 15 feet;
 - Separation distances between the buildings a distance at least equal to the heights of the buildings; and
 - Per Section 24-35 of the Zoning Ordinance, sidewalks will also be required along both sides of all streets and driveways, including the entrance road for this project.
- The applicant is proposing to develop this apartment complex in accordance with VHDA's LIHTC. A brief description of the LIHTC program can be found in Attachment No. 12.

HEIGHT LIMITATION WAIVER

- Includes a 5-foot height waiver request for five apartment buildings that will be no taller than 40 feet in height above finished grade.
- The maximum building heights allowed in R-5 Districts is 35 feet.
- The five buildings will be three stories high and will contain the 126 proposed apartments.
- The clubhouse meets the height limitations of the R-5 District and is not subject to this Height Limitation Waiver request.

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.

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Staff Report for the February 12, 2019, Board of Supervisors Public Hearing

- Section 24-310(g) of the Zoning Ordinance states that structures in excess of 35 feet in height may be erected only upon the granting of a Height Limitation Waiver by the Board of Supervisors and upon finding:

1. Structure will not obstruct light from adjacent property;

Staff finding: The structures will be located a minimum of 120 feet from any property lines. Therefore, staff finds the proposed structures will not obstruct light from adjacent property.

2. Structure will not impair the enjoyment of historic attractions and areas of significant historic interest and surrounding developments;

Staff finding: Staff did not identify any historic attractions or areas of significant historic interest in close proximity to this project. The closest current surrounding development are the CrossWalk Church and the Village at Candle Station, both of which would be several hundred feet from the closest structure and would be visually screened by the Resource Projection Area buffer. The other current surrounding development is the Oakland neighborhood, which uses Oakland Drive as its entrance. The proposed structures may be visible from Oakland Drive, but would also be screened by the proposed perimeter buffer landscaping.

3. Structure will not impair property values in the area;

Staff finding: The Director of Real Estate Assessments reviewed the proposal and determined that buildings will not negatively affect the surrounding property values.

4. Structure is adequately designed and served from the standpoint of safety and that the County Fire Chief finds the fire safety

equipment installed is adequately designed and that the structure is reasonably well located in relation to fire stations and equipment, so as to offer adequate protection to life and property;

Staff finding: The Fire Department indicates that it has no concerns with the proposed buildings from a fire service standpoint.

5. Such structure will not be contrary to the public health, safety and general welfare.

Staff finding: Based on the current proposal and supporting information submitted by the applicant, staff finds that the proposed buildings will not unduly or adversely affect the public health, safety or general welfare.

ABILITY TO GUARANTEE THE DEVELOPMENT AS PROPOSED

- The applicant proposes to commit to certain County policies or adopted documents that remain in effect via notes or depictions on the Master Plan document. These would include the proposed building elevations (also in the Easement); development of water conservation standards with the JCSA (also in the Easement); the road and bicycle/pedestrian improvements (including the off-site improvements at Richmond Road/Croaker and Richmond Road/Oakland Drive and the off-site sidewalk connection across the adjacent property), the access road connecting the apartments to Oakland Drive, the CCC Buffer Guidelines; Parks & Recreation Master Plan Guidelines (with some requested exception elements) and Special Stormwater Criteria from the Yarmouth Creek Watershed Master Plan. A master plan is a binding document per Section 24-23 of the Zoning Ordinance. If an applicant proposes

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.

to not include an element shown on the master plan on subsequent development plans, the Planning Director is charged with making a master plan consistency determination based on the following criteria included in the existing Zoning Ordinance: “a (development plan) may deviate from the Master Plan if the Planning Director concludes that the development plan does not: 1) Significantly affect the general location or classification of housing units or buildings as shown on the Master Plan; 2) Significantly alter the distribution of recreation or open space areas on the Master Plan; 3) Significantly affect the road layout as shown on the Master Plan; 4) Significantly alter the character of land uses or other features or conflict with any building conditions place on the corresponding legislatively-approved case associated with the Master Plan.” Per the Zoning Ordinance, appeals of a Planning Director determination are made by the Development Review Committee.

- The applicant also proposes to achieve a density bonus to allow the project to increase from nine dwelling units per acre to 9.4 dwelling units per acre by achieving EarthCraft Gold certification. The applicant has also indicated that achieving certification would be part of the applicant’s planned funding approval from the Virginia Housing Development Authority (VHDA) and has included this commitment in the Easement.
- The applicant also proposes to commit to certain public benefits via provision of an “Easement” which is included as Attachment No. 16. The Easement commits to development of the property “in accordance with the Virginia Housing and Development Authority’s Low Income Housing Tax Credit Program or such other affordable housing regime as the County may approve.” The applicant is also proposing the following commitments in the Easement:

- Use of the building elevations included in the Master Plan set;
- Achieving EarthCraft/Viridiant gold certification (or other comparable certification);
- Development of Water Conservation Standards;
- Construction of the off-site traffic improvements;
- Construction and maintenance of a five-foot sidewalk across the adjacent property (7575 Richmond Road);
- Provision of a NMP; and
- The applicant has submitted a Phase I Archaeology Study (See discussion on page 10).

PLANNING AND ZONING HISTORY

- The property at 7581 Richmond is zoned A-1, General Agriculture and is currently used as a single residential lot. The property at 7607 Richmond Road is also zoned A-1, General Agricultural and is currently used as a single residential lot and agricultural land, located on both the east and west sides of Oakland Drive.

SURROUNDING ZONING AND DEVELOPMENT

- North and South: A-1, General Agricultural, undeveloped land and residential lots in the Oakland subdivision.
- West: R-1, Limited Residential, residential lots in the Toano Woods subdivision.
- East: One parcel zoned MU, Mixed Use, developed as the CrossWalk Church. The second area is zoned PUD, Planning Unit

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.

Development - Residential, under development as the Village at Candle Station neighborhood consisting of single-family detached and multifamily (townhouse) units.

PUBLIC IMPACTS

Anticipated Impact on Public Facilities and Services

Streets

- A Traffic Impact Study (TIS) was prepared for this development. Based on the Institute of Transportation Engineers manual, the study projects that the development would generate 73 P.M. peak hour trips and approximately 912 daily trips.
- The project is adjacent to Richmond Road which is a four-lane road with a median in this area. The entrance road for the project crosses the adjacent parcel and connects with Oakland Drive. The entrance road and the parking area for the project will be privately maintained.
- The segment of Richmond Road immediately in front of the project is currently operating at a LOS A-C and is anticipated to remain operating at this LOS through 2034. The segment of Richmond Road to the east of Croaker Road is listed in the Transportation Chapter of the Comprehensive Plan as “Forecasted 2035 volumes indicate improvement needed. WATCH” (Table T-1).
- The development proposes to connect with Richmond Road through a proposed private road connected to Oakland Drive. There is an existing median break at the intersection of Oakland Drive and Richmond Road that would allow full access to the project to and from both directions of Richmond Road.

- The TIS analyzed the project entrance as well as the two intersections mentioned above. The study included the following improvements:
 - At the intersection of Richmond Road with Croaker Road/Pricket Road, extend the left-turn lane storage on eastbound Richmond Road from 200 feet to 400 feet.
 - At the intersection of Richmond Road with Oakland Drive (median break), construct a 100-foot left-turn lane with a 100-foot taper on westbound Richmond Road. Pavement widening between median noses and yield bars and centerline striping are also proposed.
 - Adjustments to the current signal timing to optimize its function.
- The TIS includes projected buildout in year 2025 LOS information for the two intersections, with the improvements listed above:

Richmond Road at the Croaker Road/Pricket Road Intersection

A table showing the projected buildout in year 2025 is included in Attachment No. 11. The table also shows how these LOS compare to the projected 2025 LOS without the project being built. The table shows that with the project buildout the overall intersection LOS stays the same in the A.M. and P.M. peak hours (“C” and “D,” respectively). For eastbound left, the study shows the LOS worsening in the A.M. peak hour (from a “D” to an “E”) and staying the same in the P.M. peak hour (LOS “E”). The study also examined adjustments to the signal timing to optimize its function; if these adjustments were done, it could result in maintaining the eastbound left at a LOS “D” in the A.M. peak hour. Staff notes that adjustments to the traffic signal timing are at the sole discretion of VDOT.

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.

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Staff Report for the February 12, 2019, Board of Supervisors Public Hearing

Route 60/Oakland Drive

A table showing the projected build-out in year 2025 is included in Attachment No. 10. All movements are shown as LOS “C” or better.

VDOT has reviewed the traffic study and concurs with the improvements recommended by the study.

Parks & Recreation

- As noted above in the Project Description section, this project must meet the R-5 Zoning Ordinance requirements for recreation area. However, the R-5 requirements do not encompass all aspects of the Development Guidelines contained within the Parks & Recreation Master Plan. The applicant is proposing to meet most Parks & Recreation Development Guidelines through provision of facilities on-site, including parkland, playgrounds and trails. The applicant is requesting an exception to the Guidelines for the multi-use field due to its smaller dimensions (120 foot x 210 foot, instead of 360 foot x 225 foot per the Guidelines). They are also requesting an exception to the courts/pools item. In lieu of the full dimension multi-use field and the court/pool, the applicant has included a dog park area, a second playground (one for toddlers and one for elementary age children) and a pavilion with grills. The applicant’s exception request is included as Attachment No. 8. Planning and Parks & Recreation staff are receptive to this request; however, the waiver must be approved by the Board of Supervisors.

- *Requirement:* Park Land - 0.3 acres minimum.
- *Proposed:* 1.30 +/- acres.
- *Requirement:* Biking/Jogging Trails - 404.5 linear feet minimum.

- *Proposed:* 1,013 linear feet of soft surface trail and 2,367 linear feet of hard surface trail.
- *Requirement:* Playgrounds - one playground (or other age-appropriate activity) minimum.
- *Proposed:* Two playgrounds.
- *Requirement:* Sport Courts or Pools - one court or pool minimum.
- *Proposed:* No courts or pools.
- *Requirement:* Multi-use/Rectangular/Soccer Fields - one multi-use field minimum.
- *Proposed:* One multi-use field; however, the proposed field does not fully meet the recommended dimensions in the Guidelines as described above.

Schools

- The proposed apartment units are anticipated to generate an additional 39 students. As illustrated in the table below, the 39 students projected from the development would not cause the enrollment levels for Toano Middle or Warhill High Schools to exceed effective capacity. However, it would contribute to higher enrollment level exceeding the effective capacity at Norge Elementary School.

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.

Student Enrollment and School Capacity, Williamsburg-James City County Schools 2018

<i>School</i>	<i>Effective Capacity</i>	<i>Enrollment</i>	<i>Projected Students Generated</i>	<i>Enrollment + Projected Students</i>
Norge Elementary	695	680	± 17	697
Toano Middle	790	706	± 9	715
Warhill High	1,441	1,392	± 13	1,405

Source: Student Enrollment Report, October 2018

Fiscal Impact

- The Fiscal Impact Analysis worksheet was submitted per the Fiscal Year 2019 calculations provided by the Department of Financial and Management Services.
- Per that analysis, the development would result in a \$463,425 annual negative fiscal impact to the County.

Fire

- The location of the project allows for coverage by both Fire Station 1, located in Toano and Station 4, located on Olde Towne Road. The Community Impact Statement indicates that both stations are within a 10-minute drive of the project site.

Utilities

- The project would be served by public water and sewer.

- The JCSA has recommended that a Water Conservation Agreement be prepared for this development. See the “Ability to Guarantee the Development as Proposed” section above for discussion regarding this item.
- The JCSA has reviewed the Master Plan and concurs with the proposed utility layout generally.

Environmental/Cultural/Historic***Environmental***

- Watershed: Yarmouth Creek.
- The existing wet pond (Marston Pond) along the project’s southeast border will be used for meeting both water quality and quantity regulations. The Community Impact Statement and Master Plan commit to upgrades to the existing pond, including provision of a forebay near the entrance to the site, which is recommended per the Yarmouth Creek Watershed Management Plan. This forebay shall be designed for off-site drainage in its current condition while the other two forebays will be designed for on-site drainage. The project will also need to implement three Special Stormwater Criteria measures to meet the Yarmouth Creek Watershed Management Plan; see the “Ability to Guarantee the Development as Proposed” section above for discussion of this item. Additional details regarding stormwater management are shown on Sheet C5.0 of the Master Plan. In addition, for this location, staff finds that an NMP would be preferred and is recommended. The applicant has included provisions for an NMP in the Easement.

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.

The Stormwater and Resource Protection Division has reviewed the proposal and generally concurs with the Master Plan as proposed.

Cultural/Historic

- A Phase I Archaeological Study for property at 7581 Richmond Road has been conducted and concluded that no further archaeological historic preservation efforts were necessary on-site. The need for a Phase I Archaeological Study for the area within the limits of the construction of the proposed access road (located on 7606 Richmond Road) would be evaluated as part of the site plan in accordance with Section 24-145 of the Zoning Ordinance.

Nearby and Surrounding Properties

Visual Impact

- Staff finds that the proposed perimeter buffers mitigate visual impacts to other adjacent properties. Additionally, much of the eastern portion of the parcel includes Resource Protection Area which provides an even larger buffer.
- The project is located on a CCC per the adopted Comprehensive Plan, and thus, provides a 150-foot wooded buffer along the Richmond Road frontage of the subject property.

Height

- See Height Limitation Waiver application discussion on pages 5 and 6 of the Staff Report.

COMPREHENSIVE PLAN

The property at 7581 Richmond Road is designated MDR by the adopted Comprehensive Plan. Recommended uses in MDR include multi-family units, apartments, recreation areas, manufactured home parks and subdivisions. The property at 7607 Richmond Road is designated MDR and Low-Density Residential (LDR) by the adopted Comprehensive Plan. Recommended uses in LDR includes single-family and multifamily units, cluster housing and recreation areas.

This application proposes a gross density of ± 8.4 dwelling units per acre. For MDR the Comprehensive Plan recommends “a minimum gross density of four units per acre up to 12 units per acre, depending on the character and density of surrounding development, physical attributes of the property, buffers, the number of dwelling units proposed and the degree to which the development is consistent with the Comprehensive Plan. Development at this density is not recommended unless it offers particular public benefits. Examples of such public benefits include mixed-cost housing, affordable and workforce housing and enhanced environmental protection.” See the “Ability to Guarantee the Development as Proposed” section above for discussion regarding the provision of public benefits and requested density bonuses.

- Richmond Road is a CCC. The project is within the Norge Community Character Area.
- Surrounding Comprehensive Plan Designations include LDR to the southeast, south and southwest (Villages at Candle Station, undeveloped land, Oakland Subdivision), Mixed Use (the CrossWalk Church parcel) and MDR (undeveloped land to the west and north across Richmond Road).

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Staff Report for the February 12, 2019, Board of Supervisors Public Hearing

STAFF RECOMMENDATION

With the exception of modifying the existing traffic signal timing at the Croaker Road intersection, staff finds the requirements of the Easement along with the binding Master Plan, would mitigate impacts from this development. VDOT has indicated that they would modify the traffic signal timing if it was determined to improve the performance of the intersection. However, without knowing whether or not the Board of Supervisors will accept an Easement, staff cannot recommend approval of this rezoning application at this time.

Should the Board of Supervisors wish to approve the rezoning application, staff recommends approval of the Height Limitation Waiver application. Proposed conditions for this application have been included in the attached resolution (Attachment No. 2). Staff also recommends approval of the request for an exception to the Parks & Recreation Development Guidelines.

JR/nb

RZ18-0004-HL18-0002OaklndPt

Attachments:

1. Rezoning Resolution
2. Height Limitation Waiver Resolution
3. Location Map
4. Unapproved Minutes of the December 5, 2018, Planning Commission meeting
5. Master Plan
6. Community Impact Statement
7. Fiscal Impact Study that is based on the County's format

8. Parks & Recreation Exception Request
9. Traffic Impact Study
10. LOS Information for the Intersection of Richmond Road and Oakland Drive
11. LOS Information for the Intersection of Richmond Road and Croaker Road/Pricket Road
12. Low Income Tax Credit Program Information
13. Citizen Correspondence
14. Citizen Correspondence Received after the PC Meeting
15. Applicant Prepared Fiscal Impact Study
16. Proposed Easement and Attachments Submitted by the Applicant on January 30, 2019

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.

RESOLUTION

CASE NO. Z-18-0004. OAKLAND POINTE

WHEREAS, in accordance with § 15.2-2204 of the Code of Virginia, 1950, as amended, and Section 24-13 of the James City County Zoning Ordinance, a public hearing was advertised, adjoining property owners notified and a hearing scheduled on Case No. Z-18-0004; and

WHEREAS, Mr. Timothy Trant of Kaufman & Canoles P.C., has applied for a change in zoning for a total area of \pm 14.96 acres from A-1, General Agricultural, to R-5, Multifamily Residential. One parcel is \pm 14.54 acres of land owned by Lisa Joy P. Marston, Trustee of the Lisa Joy P. Marston Revocable Trust, dated September 13, 2010, located at 7581 Richmond Road, further identified as James City County Tax Map Parcel No. 2310100002 and designated Moderate Density Residential on the 2035 Comprehensive Plan Land Use Map. The other parcel is \pm 0.42 acre of land owned by Broughton, L.L.C. located at 7607 Richmond Road, further identified as a portion of James City County Tax Map Parcel No. 2310100001, and split-designated Moderate Density Residential and Low-Density Residential on the 2035 Comprehensive Plan Land Use Map. The rezoning will allow for the construction of up to 126 apartment units and a private road providing vehicular access to the apartment units; and

WHEREAS, on December 5, 2018, the Planning Commission recommended approval of Case No. Z-18-0004 by a vote of 5-2; and

WHEREAS, the Board of Supervisors of James City County, Virginia, finds Case No. Z-18-0004 to be required by public necessity, convenience, general welfare and good zoning practice.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby approve Case No. Z-18-0004 described herein, and authorizes the County Administrator to execute those documents necessary to accept the easement submitted as part of Case No. Z-18-0004.

BE IT FURTHER RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby approve the exception request to the James City County City County Parks & Recreation Development Guidelines associated with Case No. Z-18-0004 described herein.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

Z18-0004OakIndPt-res

RESOLUTION

CASE NO. HW-18-0002. OAKLAND POINTE

WHEREAS, the Board of Supervisors of James City County, Virginia (the “Board”), has adopted by Ordinance, specific land uses that shall be subjected to a Height Limitation Waiver process; and

WHEREAS, Mr. Timothy Trant of Kaufman & Canoles, P.C., has applied for a Height Limitation Waiver to allow for the construction of five buildings (the “Buildings”), up to a maximum height of 40 feet above finished grade. The Buildings will be constructed on property zoned R-5, Multifamily Residential, located at 7581 Richmond Road and further identified as James City County Real Estate Tax Map Parcel No. 2310100002; and

WHEREAS, the Buildings are depicted on the plan prepared by AES Consulting Engineers, dated October 25, 2017 and revised on September 26, 2018, and entitled “Master Plan for Oakland Pointe a Multi-Family Community;” and

WHEREAS, a public hearing was advertised, adjoining property owners notified and a hearing conducted on Case No. HW-18-0002; and

WHEREAS, the Board finds that the requirements of Section 24-310(g) of the James City County Zoning Ordinance have been satisfied in order to grant a height limitation waiver to allow for the erection of structures up to 40 feet in height above finished grade.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby make the following findings:

1. The Buildings will not obstruct light from adjacent property; and
2. The Buildings will not impair the enjoyment of historic attractions, areas of significant historic interest or surrounding developments; and
3. The Buildings will not impair property values in the area; and
4. The Buildings are adequately designed and served from the standpoint of safety and that the County Fire Chief finds the fire safety equipment to be installed is adequately designed and that the structure is reasonably well located in relation to fire stations and equipment, so as to offer adequate protection to life and property; and
5. The Buildings will not be contrary to the public health, safety and general welfare.

BE IT FURTHER RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby approve Height Limitation Waiver HW-18-0002 to grant a five-foot waiver to the height limitation requirements set forth in the James City County Code to allow for the erection of structures up to 40 feet in height above finished grade as described herein, pursuant to the following conditions:

1. Height Limitations: This Height Limitation Waiver (the “Waiver”) shall be valid for a five-foot waiver to the height limitation requirements set forth in the James City County Zoning Ordinance to allow for the erection of buildings up to 40 feet in height above finished grade (the “Buildings”) on property zoned R-5, Multifamily Residential, located at 7581 Richmond Road and further identified as James City County Real Estate Tax Map Parcel No. 2310100002 (the “Property”). The height of the Buildings shall be calculated in accordance with the Zoning Ordinance definition for “Building, height of” in effect as of the adoption date of the Waiver.
2. Master Plan: The Buildings shall be located on the Property as generally shown on the plan prepared by AES Consulting Engineers, dated October 25, 2017 and revised on September 26, 2018 and entitled “Master Plan for Oakland Pointe A Multi-Family Community.”
3. As-Built Survey: An as-built survey shall be submitted to and approved by the Director of Planning for any building exceeding the permitted building height in the zoning district prior to final Certificate of Occupancy. The intent of this condition is to ensure compliance with the Waiver.
4. Severability: The Waiver is not severable. Invalidation of any word, phrase, clause, sentence or paragraph shall invalidate the remainder.

James O. Icenhour, Jr.
Chairman, Board of Supervisors

ATTEST:

Teresa J. Fellows
Deputy Clerk to the Board

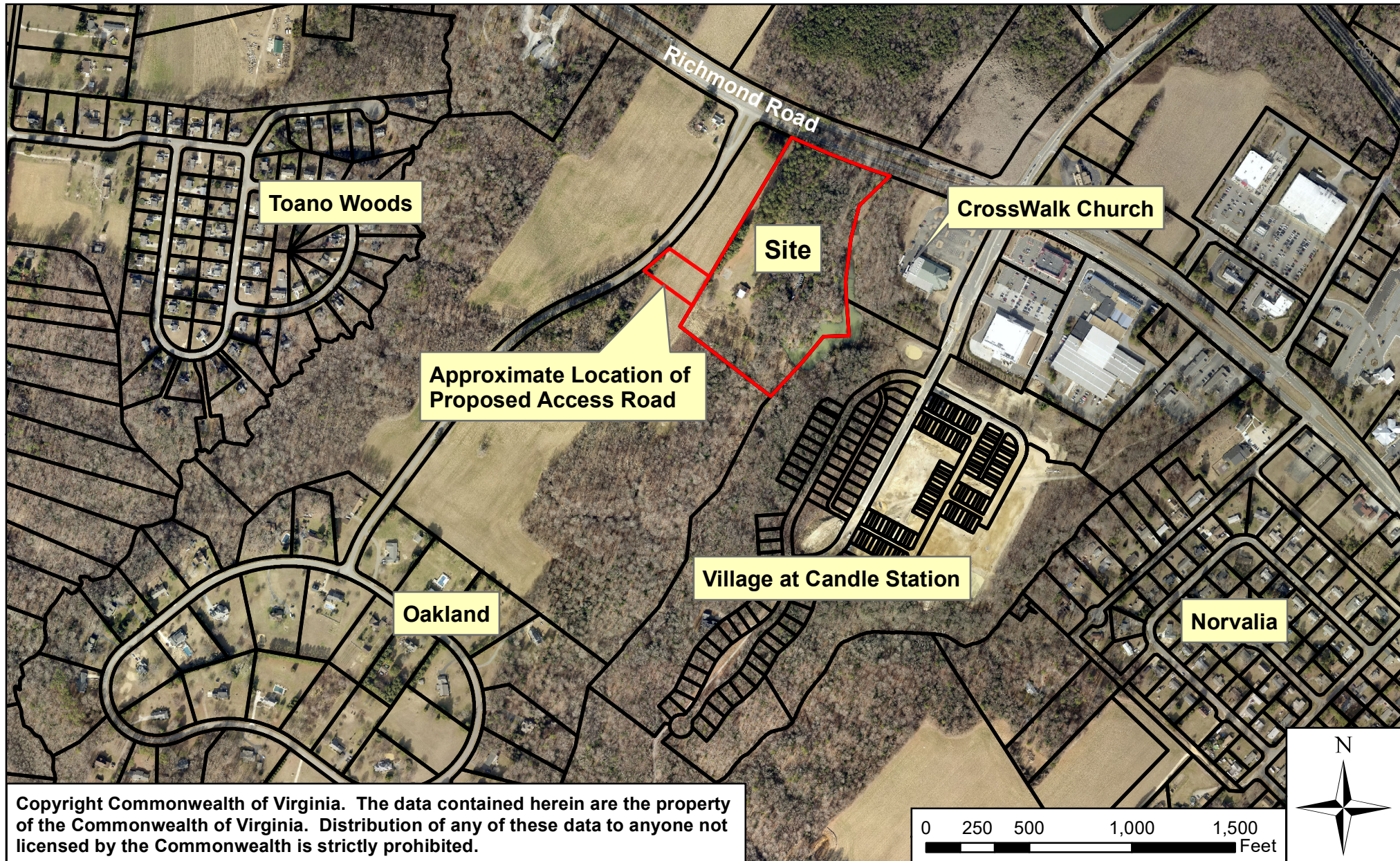
	VOTES		
	<u>AYE</u>	<u>NAY</u>	<u>ABSTAIN</u>
HIPPLE	_____	_____	_____
LARSON	_____	_____	_____
SADLER	_____	_____	_____
MCGLENNON	_____	_____	_____
ICENHOUR	_____	_____	_____

Adopted by the Board of Supervisors of James City County, Virginia, this 12th day of February, 2019.

HW18-0002OakIndPt-res

Z-18-0004 / HW-18-0002

Oakland Pointe



Unapproved Minutes of the December 5, 2018
Planning Commission Regular Meeting

REZONING-18-0004/HEIGHT LIMITATION WAIVER-18-0002. Oakland Pointe

Mr. José Ribeiro, Senior Planner, stated that Mr. Tim Trant, on behalf of Connelly Development, LLC, is requesting to rezone property at 7581 Richmond Road, from A-1, General Agricultural to R-5, Multi-family Residential to allow the development of 126 apartment units on ± 14.54 acres. Mr. Ribeiro further stated that the applicant is also requesting to rezone ± 0.42 acres of adjacent property at 7606 Richmond Road from A-1, General Agricultural to R-5, Multi-family Residential to allow for an access road to connect the apartment units to Oakland Drive. The total area subject to this rezoning application is ± 15 acres.

Mr. Ribeiro stated that the master plan shows how these apartments will be arranged in five buildings with a sixth building proposed as a clubhouse. Mr. Ribeiro stated that the recreation facilities are located at the southern and eastern part of the site with hard and soft trails providing connectivity throughout the project. Mr. Ribeiro further stated that a sidewalk along the frontage of 7581 Richmond Road and across adjacent property is proposed to allow pedestrian access to the Richmond Road intersection with Croaker Road and Pricket Road. Mr. Ribeiro stated that in addition, per the adopted Regional Bikeways Plan, the project includes a shoulder bike lane along the frontage of 7581 Richmond Road. Mr. Ribeiro stated that the master plan also shows the location of a private access road and parking area. Mr. Ribeiro stated that the proposed private access road is located on a portion of adjacent property at 7606 Richmond Road and subject to this rezoning application.

Mr. Ribeiro stated that the project is located on a Community Character Corridor per the adopted Comprehensive Plan, and thus, provides a 150-foot buffer along the Richmond Road frontage of property at 7581 Richmond Road. Mr. Ribeiro stated that the Master Plan shows the buffer as retaining the existing wooded character.

Mr. Ribeiro stated that this project proposes a net density of 9.4 units per acre. Mr. Ribeiro further stated that in order to achieve this density, the project will need to achieve one bonus density point. The project proposes to achieve this by committing to green building techniques, specifically through the Earth Craft Gold certification.

Mr. Ribeiro stated that a Traffic Impact Study was prepared for this development which analyzed physical improvements to mitigate the increase in traffic on local roads. Mr. Ribeiro stated that the study shows that at project buildout in 2025 there is a decline in the Level of Service (LOS) from a "D" to an "E" in the A.M. peak hour for the eastbound left turn at the intersection of Richmond Road and Croaker Road. Mr. Ribeiro stated that the study also examined adjustments to the signal timing to optimize its function. Mr. Ribeiro noted that if these adjustments were done, it could result in maintaining the eastbound left at a LOS "D" in the A.M. peak hour. Mr. Ribeiro stated that staff notes that adjustments to the traffic signal timing are at the sole discretion of the Virginia Department of Transportation (VDOT). Mr. Ribeiro further stated that VDOT has indicated that

they would modify the traffic signal timing if it was determined to improve the performance of the intersection.

Mr. Ribeiro stated that the applicant is proposing to fully meet most Parks and Recreation Development Guidelines; however, the applicant is requesting an exception to the guidelines for the multi-use field and the courts/pools requirements. Mr. Ribeiro stated that Planning and Parks and Recreation staff are receptive to this request; however, the waiver must be approved by the Board of Supervisors.

Mr. Ribeiro stated that in order to address stormwater issues the applicant is proposing to upgrade the existing pond on the property and include the provision of three forebays, to address on-site and off-site drainage. Mr. Ribeiro stated that staff from the Stormwater Resource Protection has reviewed this application and supports the proposed improvements.

Mr. Ribeiro stated that in order to mitigate the impacts of this development and provide public benefits assurances, the applicant is proposing a combination of notes on the Master Plan, through stated intention in the Community Impact Statement and through a proposed Easement. Mr. Ribeiro further stated that the County Attorney's office has determined that the Easement is legal and would be binding.

Mr. Ribeiro stated that the proposed development includes a number of favorable aspects. Mr. Ribeiro stated that in addition, the proposed development's density is within the range recommended for lands designated moderate-density residential (MDR) by the adopted Comprehensive Plan. Mr. Ribeiro stated that central to the MDR language is the following statement from the adopted Comprehensive Plan: "Development at this density is not recommended unless it offers particular public benefits. Examples of such public benefits include mixed-cost housing, affordable and workforce housing and enhanced environmental protection." Mr. Ribeiro stated that the applicant is proposing to offer public benefits such as commitment to affordable housing and enhanced environmental protection. Mr. Ribeiro further stated that the apartment complex is proposed to be developed in accordance with the Virginia Housing and Development Authority's Low Income Housing Tax Credit (LIHTC) program. Mr. Ribeiro stated that this application will also comply with the requirements of the Special Stormwater Criteria.

Mr. Ribeiro stated that with the exception of modifying the existing traffic signal timing at the Croaker Road intersection, staff finds the requirements of the Easement along with the binding Master Plan, would mitigate impacts from this development. Mr. Ribeiro stated that without knowing whether or not the Board of Supervisors will accept an Easement, staff cannot recommend approval of this application at this time.

Mr. Ribeiro stated that staff notes that a height limitation waiver application has also been submitted with the rezoning application for the proposed apartment buildings to be constructed up to 40 feet from grade. Mr. Ribeiro stated that proposed conditions have been included for this application for informational purposes as the Commission does not review Height Limitation Waiver requests.

Mr. Richardson opened the floor for questions from the Commission.

Mr. Haldeman inquired if it is the intent that the rent restrictions will be in force for 30 years.

Mr. Ribeiro stated that he understood this to be correct, but would defer to the applicant.

Mr. Richardson inquired who would make the determination about the signal timing and when this would happen.

Mr. Paul Holt, Director of Community Development and Planning, stated that once the project was built, VDOT would conduct the necessary studies and make the timing adjustments.

Mr. Haldeman inquired why the Traffic Study showed more left turns from eastbound Richmond Road onto Croaker Road in the A.M. hours than in the evening.

Mr. Ribeiro stated that he would defer to the traffic consultant.

Mr. Tim O'Connor inquired if the location of the access road as shown on the master plan is binding. Mr. O'Connor further inquired what approvals would be needed if the location of the road were to change.

Mr. Ribeiro stated that the location on the master plan is binding. Mr. Ribeiro further stated that if a development plan were submitted that showed a different location for the access road, it would require a Planning Director determination about consistency with the master plan.

Mr. Holt noted that it would need to come back for a public hearing

Mr. Haldeman inquired about the decrease in the negative fiscal impact.

Mr. Ribeiro stated that the fiscal impact analysis worksheet is updated every year to reflect the Board of Supervisors' adopted budget. Mr. Ribeiro further stated that the worksheet for FY 18, which was used by the applicant for the first application, had school operating costs which included the City of Williamsburg. Mr. Ribeiro further stated that for Capital Improvements Program (CIP) costs the worksheet used one year of the CIP rather than an average of the five years. Mr. Ribeiro stated that the worksheet had been revised prior to the current application to correct the deficiencies.

Mr. Richardson opened the Public Hearing.

Mr. Tim Trant, Kaufman & Canoles, 4801 Courthouse Street, stated that he represents Connelly Development. Mr. Trant noted that James Norman, Connelly Development, Dexter Williams DRW Consultants, Howard Price, AES Consulting Engineers, and Howard Skinner were in the audience.

Mr. Trant stated that the main change in the application is the access to the development. Mr. Trant stated that the earlier application proposed to take access directly from Richmond Road. Mr. Trant further stated that the current application proposes to take access from Oakland Drive, with

only a pedestrian connection to Richmond Road. Mr. Trant noted that the new access was developed based on public comment at the earlier public hearing and community outreach discussion.

Mr. Trant stated that another significant change is the reduction in negative fiscal impact. Mr. Trant noted that the County's fiscal model is conservative and understandably favorable to the County's interests. Mr. Trant stated that from the applicant's viewpoint it does not take in account all aspect of the project and all revenue generated. Mr. Trant stated that if these revenues were accounted for, they would substantially mitigate the negative fiscal impacts.

Mr. Trant further stated that the project would also be mitigated by its contribution to the County's work force. Mr. Trant noted that there is substantial employment demand in that area of the County. Mr. Trant stated that many of the larger employers have noted that their employees cannot afford to live in the County and are forced to commute long distances. Mr. Trant stated that the cost of commuting, lack of reliable transportation and difficulty finding affordable childcare contributes to chronic absenteeism and high turnover rates. Mr. Trant stated that this, in turn, inhibits productivity and limits growth potential.

Mr. Trant stated that he appreciates the thought and consideration that the Commission gives to each case. Mr. Trant further stated that he believes the decisions in this case are clear cut and that the project complies with planning policies and meets the goals of the Comprehensive Plan. Mr. Trant requested that, while weighing public comment, the Commission also consider the voices of those who are not fully represented at this meeting who would benefit from the housing product that this project will provide.

Ms. Leverenz inquired if service costs had been considered when calculating the additional revenue. Ms. Leverenz noted that most of the fees were merely offsetting the cost of providing services.

Mr. Trant stated that for many of the services such as water and sewer, the cost to expand the service is nominal. Mr. Trant said that the figures he provided are net revenues.

Mr. Krapf inquired whether the recommended rental rate was only the rent or included utilities.

Mr. Trant stated that the rental fee includes some utility considerations.

Mr. Krapf inquired how the affordability of the apartments was calculated.

Mr. Trant stated that the LIHTC program establishes the parameters for the rent restrictions. Mr. Trant further stated that the restriction is a range between 40% and 60% of the Area Median Income (AMI). Mr. Trant stated that the AMI is used to determine what a tenant in that income range can afford. Mr. Trant noted that it is a sliding scale depending on the size of the household. Mr. Trant further stated that through the LIHTC and corresponding financing program, those restrictions are in place from a regulatory perspective.

Mr. Schmidt inquired about the depth of the proposed stormwater retention basins and noted concern over the proximity of the proposed playground.

Mr. Howard Price, AES Consulting Engineers, stated that the pond would be roughly nine-feet deep. Mr. Price further stated that there will be forebays that treat the water before it reaches the pond. Mr. Price further stated that the County has requirements for safety benches. Mr. Price stated that the distance from the pond to the playground will be more than adequate where the safety benches will be applied. Mr. Price noted that the safety benches are graded to be a more gradual flatter slope. Mr. Price further noted that there was at least 100 feet from the pond to the playground.

Mr. Schmidt inquired if the pond was likely to freeze over.

Mr. Price stated that the design of the pond and the aeration devices will prevent the water from freezing.

Ms. Leverenz inquired about the timing of the median improvements on Route 60.

Mr. Trant stated that the median improvements will be part of the site plan process when construction plans are submitted. Mr. Trant stated that the off-site improvements would be constructed in phases; however, in order to get the Certificate of Occupancy (CO) all the required improvements must be complete.

Ms. Leverenz inquired if it was likely that the median improvements would not be constructed prior the start of construction.

Mr. Trant stated that he doubts that the off-site improvements would be made first. Mr. Trant stated that it was more likely that the land clearing would be done first with the intersection improvements being done sometime during the construction process. Mr. Trant noted that the construction entrance would be located where the proposed entrance road will be.

Mr. Richardson inquired about how the proposed timing of the signal at Croaker Road and Richmond Road would mitigate the traffic concerns at that intersection.

Mr. Dexter Williams, DRW Consultants, LLC, stated that adding two or three seconds to the left-turn signal would help the traffic flow. Mr. Williams further stated that once the construction plans were submitted, VDOT would do its own study to determine the necessary changes. Mr. Williams further stated that the Croaker Road widening project with an added lane at that intersection will also be cause for VDOT to look at the signal timing.

Mr. Richardson inquired if the Croaker Road widening would add two turn lanes.

Mr. Williams stated that currently there is one lane northbound and one lane southbound. Mr. Williams further stated that when widened, it will have a single approach lane with a shared left and through lane and a dedicated right-turn lane. Mr. Williams noted that this configuration will allow flexibility for the timing of other turning movements.

Mr. Richardson inquired when the Croaker Road widening would begin.

Mr. Williams stated that he did not have a timeframe for start of construction. Mr. Williams noted that when the Land Use Permit application is submitted for the off-site improvements, there will be discussion with VDOT about any necessary coordination or accommodation for the Croaker Road widening.

Mr. Richardson inquired if the project would be well underway before having discussion with VDOT.

Mr. Williams stated that they would apply for the permit once the site plan is approved.

Mr. Polster inquired if it was true that the A.M. and P.M. LOS projected for 2025 would be the same as 2017.

Mr. Williams confirmed that the overall LOS did not change much.

Mr. Polster inquired if the LOS would improve with the Croaker Road widening.

Mr. Williams confirmed.

Mr. Polster inquired if the LOS would be better than “C” or “D”.

Mr. Williams stated that most likely it would not. Mr. Williams further stated that some of the turning movements would improve.

Mr. Polster inquired if the median improvements would make any improvement in the LOS for westbound traffic exiting Oakland Drive.

Mr. Williams stated that at an unsignalized intersection the LOS is only for yield movements which is the traffic on Oakland Drive which will be “C” or better with the proposed improvements.

Mr. Polster inquired if the median improvements would improve sightlines.

Mr. Williams confirmed.

Mr. Haldeman inquired why the three scenarios for the eastbound left-hand turn onto Croaker Road show a significantly higher traffic count in the morning peak hour than the evening peak hour.

Mr. Williams stated that the morning traffic count is attributed to commuters accessing the interstate.

Mr. Schmidt inquired what the median improvements would look like for the left turn from Oakland Drive.

Mr. Williams stated that AES has done some of those projections but no graphics had been provided for this meeting. Mr. Williams further stated that when the westbound left-turn lane is constructed, the slope will be cut back substantially.

Mr. Schmidt inquired if the trees would be cut back.

Mr. Williams confirmed.

Mr. Trant clarified that the VDOT improvements were not modeled in the applicant's Traffic Impact Analysis (TIA). Mr. Trant noted that the improvement in LOS provided by the Croaker Road widening will be in addition to the improvements proposed by the applicant.

Mr. Holt noted that the Croaker Road widening project is currently in the engineering phase and will then move to the utility relocation phase. Mr. Holt stated that the project should begin the construction phase in FY2023 which begins July 1, 2022.

Mr. Polster inquired about the purpose of the addition of the third forebay.

Mr. Price stated that it is part of the master plan in the Yarmouth Creek Watershed Study. Mr. Price further stated that the Stormwater and Resource Protection Division required the forebay to be added as a pre-treatment facility to meet the Level Two standard for this Best Management Practice.

Mr. Polster inquired if Marston's Pond is being used by another development to handle stormwater.

Mr. Price stated that the pond is also used by The Village at Candle Station.

Mr. Polster inquired if there was any certainty that the pond would be maintained.

Mr. Price stated that there is a maintenance agreement.

Mr. Trant clarified that this is an agreement with the adjoining landowner that is required by the County.

Mr. Haldeman noted that there are 1,100 parcels in the County that are zoned R-5 and that 29 are not yet developed. Mr. Haldeman further noted that there are 2,588 parcels zoned Mixed Use of which 404 are undeveloped. Mr. Haldeman stated that both of these zoning districts allowed apartments as a by-right use. Mr. Haldeman inquired if the applicant considered any of the vacant parcels in these zoning districts.

Mr. Trant stated that the applicant searched extensively in this market before deciding on this parcel. Mr. Trant further stated that this parcel was selected based on its location and proximity to employment centers. Mr. Trant noted that the parcel is in an area where those seeking work force housing are underserved.

Mr. Krapf noted that there are already two housing developments that take Section 8 vouchers or participate in the LIHTC program. Mr. Krapf inquired if those developments draw from a different demographic. Mr. Krapf further inquired if those developments are at capacity.

Mr. Trant stated that it was not possible to obtain data on the other developments' financing and restrictions. Mr. Trant stated that the LIHTC program is very competitive and the main criteria is to prove need. Mr. Trant stated that the market study is carefully reviewed to ensure that the need exists. Mr. Trant stated that the applicant is confident that the need exists in this area. Mr. Trant noted that both of the other properties are full and have a waiting list.

Mr. O'Connor requested that Mr. Trant provide an overview of how tenants are selected. Mr. O'Connor further requested that Mr. Trant discuss the applicant's long-term plan for the property. Mr. O'Connor also requested an explanation of the need for the height waiver. Mr. O'Connor further inquired whether Williamsburg Area Transit Authority (WATA) would be accessing the property. Mr. O'Connor also requested an explanation of the Gold Standard Certification.

Mr. Trant stated that Connelly Development is a small family run business located in South Carolina. Mr. Trant further stated that the company does almost exclusively affordable housing projects. Mr. Trant noted that the company currently owns and operates over 2,000 apartment units.

Mr. Norman Connelly, Connelly Development, stated that the company still owns the first affordable housing complex that they built. Mr. Connelly further stated that the federal oversight for these programs is very stringent. Mr. Connelly stated that, in addition, there is on-site management to ensure that the development is maintained and that tenants do not create nuisances.

Mr. Trant stated that because of the competitive nature of the tax credit program, the second most important criteria is the quality of design. Mr. Trant stated that the project calls for the use of very high quality material that will ensure durability. Mr. Trant further stated that the height waiver is needed to allow the architecture shown in the proposed elevations. Mr. Trant further stated that this design was developed to be compatible with the surrounding development and the character of the area.

Mr. Trant stated that for tenants there is a financial eligibility requirement. Mr. Trant further stated that a background check is done, in particular to check for criminal records. Mr. Trant stated that the majority of applicants are honest and hardworking individuals looking for a decent and safe place to live.

Mr. Trant stated that the Gold Standard certification would be a combination of fixed improvements installed during construction and some ongoing maintenance items.

Mr. Trant stated that there have not been any discussions with WATA. Mr. Trant further stated that the applicant studied the WATA route maps to ensure the viability of the project with available public transportation and routes that would provide access to employment centers.

Ms. Lisa Marston, 7581 Richmond Road, addressed the Commission in support of the application. Ms. Marston noted the benefits to individuals as well as the community and businesses.

Mr. Lee Alexander, 209 Crescent Drive, addressed the Commission in opposition to the application. Mr. Alexander expressed concerns about traffic congestion and safety and the impact on the Yarmouth Creek watershed.

Ms. Bonnie Brown, 105 Crescent Drive, addressed the Commission in opposition to the application. Ms. Brown expressed concerns about traffic safety.

Ms. Allison Otey, 100 Woodmont Place, addressed the Commission in opposition to the application. Ms. Otey expressed concerns about increased residential development and traffic safety.

Ms. Heather Hart, 7661 Turlington Road, addressed the Commission in opposition to the application. Ms. Hart expressed concerns about traffic safety.

Mr. Patrick McCaffery, 124 Crescent Drive, representing a group of Oakland Farms residents addressed the Commission in opposition to the application. Mr. McCaffery noted concerns about traffic volume and safety, loss of rural character, impacts on the Yarmouth Creek watershed, the negative fiscal impact and lack of consistency with the goals, strategies and actions of the Comprehensive Plan.

Mr. Earl Bittner, 7404 Wicks Road, addressed the Commission in opposition to the application. Mr. Bittner expressed concerns about loss of farmland, traffic congestion and the fiscal impact.

Ms. Susan Grainer, 111 Crescent Drive, addressed the Commission in opposition to the application. Ms. Grainer expressed concerns about traffic congestion, loss of community character and the fiscal impact.

Ms. Kim Orthner, 120 Crail, addressed the Commission in support of the application. Ms. Orthner noted that this project would be a step forward in addressing the needs of the County's work force.

Ms. Karen Grainer-Lubore, 208 Crescent Drive, addressed the Commission in opposition to the application. Ms. Grainer expressed concerns about traffic safety, impact on the Yarmouth Creek watershed and the unsuitability of the location.

Mr. Jack Lubore, 208 Crescent Drive, addressed the Commission in opposition to the application. Mr. Lubore expressed concerns about environmental impacts, traffic safety and loss of rural character.

Mr. Gary Driscoll, 114 Crescent Drive, addressed the Commission in opposition to the application. Mr. Driscoll expressed concerns about the location, density, loss of natural habitats and traffic congestion and safety.

Ms. Adrienne Frank, 114 Crescent Drive, addressed the Commission in opposition to the application. Ms. Frank expressed concerns about traffic safety and congestion and stormwater runoff.

Ms. Mary Baldwin 101 Crescent Drive, addressed the Commission in opposition to the application. Ms. Baldwin expressed concerns over loss of rural character, environmental impacts, traffic congestion and safety and additional strain on the school system and public services.

Mr. Richard Baldwin, 101 Crescent Drive, addressed the Commission in opposition to the application. Mr. Baldwin expressed concerns about loss of the rural character of the area.

Mr. Joe Ripchick, 115 Crescent Drive, addressed the Commission in opposition to the application. Mr. Ripchick expressed concerns about loss of the rural character of upper James City County, impacts from additional stormwater runoff, impacts on the school system and traffic safety.

Mr. Edward A. Decker, 107 Woodmont, addressed the Commission in opposition to the application. Mr. Decker expressed concerns about traffic safety.

Mr. Mel Watson, 107 Crescent Drive, addressed the Commission in opposition to the application. Mr. Watson expressed concerns about traffic impacts, environmental impacts and economic impacts.

Mr. Thumper Newman, 3526 Governor's Landing Road, addressed the Commission in support of the application. Mr. Newman highlighted the need for affordable housing.

Mr. Nathan Groeger, 214 Crescent Drive, addressed the Commission in opposition to the application. Mr. Groeger expressed concerns about the impact on the school system.

Ms. Jane Marioneaux, 119 Crescent Drive, addressed the Commission in opposition to the application. Ms. Marioneaux expressed concerns about traffic safety and the impact of development in the upper part of the County.

Mr. Stan Treleaven, 118 Woodland Road, addressed the Commission in opposition to the application. Mr. Treleaven expressed concerns about development and growth in the County.

Mr. David Nice, 4571 Ware Creek Road, addressed the Commission in support of the application. Mr. Nice noted the difficulty of finding and retaining employees and the effect of that difficulty on business owner. Mr. Nice further noted the contributions that affordable housing residents bring to the Community.

Mr. Gary Thompson, 101 Woodmont Place, addressed the Commission in opposition to the application. Mr. Thompson expressed concerns about the additional vehicle trips generated by the development and the impact on traffic safety.

Mr. Harold McDonald, 3147 Cider House Road, addressed the Commission in support of the application. Mr. McDonald noted the quality of the proposed buildings, the thoroughness of the resident application process and the regulations to prevent nuisances.

Mr. Leif Romberg, 6 Michelle's Circle, addressed the Commission in opposition the application. Mr. Romberg expressed concerns about the project's incompatibility with the rural nature of the area, the negative fiscal impact and the impact on the Yarmouth Creek watershed.

Mr. Jerry Burchette, 105 Timberwood Drive, addressed the Commission in opposition to the application. Mr. Burchette expressed concerns that the project is in conflict with the recommendations in the Comprehensive Plan.

Mr. Richard W. Kline, 6592 Rexford Lane, addressed the Commission in support of the application. Mr. Klein noted the need for affordable housing in the County. Mr. Klein further noted the need for affordable housing to be built in small developments that are scattered throughout the locality. Mr. Kline noted the negative impact on the local economy and social structure if all affordable housing is clustered in one area.

Mr. Tom Hardin, 207 Crescent Drive, addressed the Commission in opposition to the application. Mr. Hardin expressed concerns about traffic safety and the environmental impacts.

Ms. Karen Pribush, 7448 Wickes Road, addressed the Commission in opposition to the application. Ms. Pribush expressed concerns over the impact to the rural character of the County. Ms. Pribush also expressed concern over maintenance of the pond.

Ms. Michelle Eardly, 2996 Forge Road, addressed the Commission, in opposition to the application. Ms. Eardly expressed concerns about the loss of community character.

Ms. Ethel Eaton, 138 The Maine, addressed the Commission in support of the application. Ms. Eaton noted the need for affordable housing. Ms. Eaton also noted the benefit of the development to the goal of making Toano vibrant again.

Mr. Arch Marston, 185 Heritage Pointe, addressed the Commission in support of the application. Mr. Marston noted the documented need for affordable housing in that location and compatibility with the Comprehensive Plan.

Mr. Russ Meermans, 7323 Little Creek Road, addressed the Commission in support of the application. Mr. Meermans noted the great need for affordable housing.

Ms. Charvalla West, 206 Louise Lane, addressed the Commission in support of the application. Ms. West noted the need for affordable housing for people already in the community.

Ms. Alexandria Gruendl, 113 Crescent Drive, addressed the Commission in opposition to the application. Ms. Gruendl expressed concerns about traffic safety.

Mr. Adam Davis, 107 Willow Drive, addressed the Commission in support of the application. Mr. Davis noted the need for affordable housing in the community.

As no one else wished to speak, Mr. Richardson closed the Public Hearing.

Mr. Richardson inquired if the Commission would like a recess.

The Commission agreed to recess for ten minutes.

Mr. Holt cautioned the Commission not to discuss the present case among themselves or with anyone else.

The Commission recessed for ten minutes at approximately 9:36 p.m.

The Commission reconvened at approximately 9:46 p.m.

Mr. Richardson opened the floor for questions and discussion by the Commission.

Mr. Krapf inquired about the timing of the median improvements in relation to the project.

Mr. Trant responded that the roadwork is intended to be completed when the project is developed.

Ms. Leverenz inquired whether the Commission could require that the median improvements be completed prior to the beginning of construction.

Mr. Holt stated that since this is not an SUP, the County cannot attach conditions.

Mr. Trant stated that the applicant has proposed an easement agreement which, while new to land use cases, is a time tested way of providing assurances. Mr. Trant further stated that the applicant would need to consider the impacts on the project budget and schedule; however, the Commission could make this part of its recommendation.

Mr. O'Connor recommended calling for disclosures before proceeding further.

Mr. Richardson called for disclosures.

Mr. Krapf stated that the applicant called him in case he had any questions about the application.

Mr. Polster stated that he received a call from Mrs. Marston who inquired if he needed any additional information or documentation.

Mr. O'Connor stated that he spoke with Mr. Marston for clarification on traffic issues.

Mr. Schmidt stated that he traded voice messages with Mr. Trant.

Mr. Haldeman stated that he spoke with the applicant following a Work Force Housing Task Force (WHTF) meeting regarding the need for affordable housing.

Mr. O'Connor inquired why the entrance road was shifted from Richmond Road to Oakland Drive. Mr. O'Connor noted that during consideration of the previous iteration of the plan, the Commission recommended that the entrance be constructed with a right-in and a right-out. Mr. O'Connor stated that the Richmond Road access with the restricted turning movements would alleviate some of the concerns about the Croaker Road and the Oakland Drive intersections.

Mr. Trant stated that the change was made to address strong community sentiment against having any access point on Richmond Road. Mr. Trant further stated that any direct access on Richmond Road was seen as problematic.

Mr. Haldeman stated that his comments were generally brief; however, for this application he had a number of thoughts for consideration.

Mr. Haldeman stated that he has represented the Commission on the WHTF for the past 12 months. Mr. Haldeman stated that this has taken him from a position of total ignorance to one of confusion and frustration. Mr. Haldeman noted that fifteen very smart, motivated people have anguished over this problem for a year and still don't have an answer. Mr. Haldeman stated that part of the problem is that we must deal with a sharp contradiction in two important County goals: increasing workforce housing, on the one hand, and protecting open space and the County's rural, historic, small town ambiance on the other. Mr. Haldeman further stated that this is made even more difficult by land use decisions made by County officials in the 1970s through the 1990s. Mr. Haldeman stated that the rush to pave over James City County left little room for the aftereffects. Mr. Haldeman stated that nobody considered who would staff all these hotels and retail outlets and where they would live.

Mr. Haldeman stated that a related problem is the weak economic model that ensued. Mr. Haldeman further stated that the Comprehensive Plan, in stating the obvious, notes that James City County has relatively expensive housing and poor-paying jobs, which creates an unhealthy, circular pattern of long commutes as County residents leave each morning to work in high-paying jobs elsewhere and people living elsewhere commute into the County to take low-paying jobs. Mr. Haldeman noted that many of the latter simply cannot afford to live here.

Mr. Haldeman stated that, to again state the obvious, any solution to the housing part of this problem will cost money. Mr. Haldeman stated that this will tend to raise taxes which, in turn, will make houses less affordable – another contradiction.

Mr. Haldeman stated that now, the WHTF belatedly is asked to recommend a plan. Mr. Haldeman further stated that the Housing Conditions Study of 2016 recommends, in part, that the County implement sets of both land use policies and corresponding design guidelines that together set and clearly communicate public sector expectations about the location and quality of future development. Mr. Haldeman stated that any plan must involve land use designations, zoning ordinances, regulations, and economic development. Mr. Haldeman stated that it is clear to him that the County has an income problem as much as a housing problem. Mr. Haldeman further

stated that the County has no plan at this point, leaving us simply to consider applications as they arise, meaning that the Commission is reduced to evaluating Oakland Pointe as a one-off, which is not an ideal process.

Mr. Haldeman stated that the project has many favorable factors and he begins by assuming that all easements, master plan notes and waivers will be legally enforceable, as the County Attorneys assert. Mr. Haldeman further stated that he also accepts that potential impacts to Yarmouth Creek will be effectively addressed. Mr. Haldeman stated that he also accepts that the impact to traffic at the Richmond Road/ Croaker Road intersection will be manageable at present.

Mr. Haldeman stated that this project is consistent with an important County goal, which is to increase the supply of housing for low-paid workers. Mr. Haldeman stated that these are workers earning between 40% and 60% of AMI who will be able to rent these apartments without spending more than 30% of their gross income. Mr. Haldeman further stated that this is a goal of the Comprehensive Plan, the Strategic Plan, the Business Climate Task Force Report and the Housing Conditions Study. Mr. Haldeman stated that it is a humanitarian imperative and an economic imperative. Mr. Haldeman stated that numerous sources relate housing cost burdens to health problems, educational deficiencies, traffic congestion and difficulties in attracting and keeping businesses. Mr. Haldeman noted that a large number of County residents are cost burdened, although getting an exact number has not been easy.

Mr. Haldeman stated that staff lists four favorable factors: 1) The proposal will not negatively impact surrounding zoning and development; 2) The proposal's density is within the range recommended for lands designated MDR by the adopted Comprehensive Plan; 3) The proposal meets the Adequate Public Schools Facilities Test; and 4) While unable to provide proffers, the applicant is proposing to demonstrate commitment to various Board of Supervisors adopted policies and other public benefits to support the proposed density through notes on the Master Plan and via an Easement Agreement.

Mr. Haldeman further stated that within the context of affordable housing, this project has five other qualities that recommend approval: 1) The use of the Virginia tax credit program is one relatively painless way to finance below-market housing, and is consistent with one of the County housing imperatives, according to the Housing Conditions Study which is to implement an incentive-based framework of housing development-oriented public policies that help encourage the private sector to jump in as a genuine partner and robustly participate in the co-creation of a full housing ladder, affordable housing options for all income levels; 2) Commitment to EarthCraft Gold certification which is consistent with the Comprehensive Plan; 3) Access to public transportation which is also consistent with the Comprehensive Plan and with the R-5 requirement for access to public facilities; 4) The project is within the PSA; and 5) Mr. Connelly is listed as an experienced developer by the Virginia Housing Development Authority in its November 2018 update.

Mr. Haldeman stated that unfavorable factors include further reducing open space. Mr. Haldeman stated that although the task force has not completed its work, it has established as one of its four principles that James City County's solutions for workforce housing should be designed to respect the County's unique natural, historic and cultural resources. Mr. Haldeman noted that we cannot

solve our workforce housing problem by continuing to bulldoze our open space. Mr. Haldeman stated that maintaining our unique community character, another imperative highlighted in the Comprehensive Plan, the Strategic Plan, the Business Climate Task Force Report and the Housing Conditions Study, will be difficult if we continue to approve expansive residential development, affordable or otherwise. Mr. Haldeman further stated that while uncluttered viewsheds and uncrowded roads are an important part of residents' quality of life, it is also an economic and fiscal issue. Mr. Haldeman stated that the primary principle of the County's Business Climate Task Force Report is that, while attracting, retaining and expanding businesses are essential elements of our continued quality of life, they are subordinate to preserving the uniqueness of James City County, its historic legacy, its rural and small town semi-rural life. Mr. Haldeman further stated that the Land Use Section of the Comprehensive Plan states that economic development is strongly linked to a unique community character, which is a competitive advantage in attracting asset-based businesses and potential employees. Mr. Haldeman further stated that the Comprehensive Plan projects that County population may rise from about 75,000 today to as high as 136,000 by the year 2040, driven by land use policies that were, in the words of the Housing Conditions Study, "shaped not with the knowledge we now have of the negative impacts of sprawl." Mr. Haldeman further stated that if more affordable housing – or more housing of any type, for that matter, ruins James City County's only point of market differentiation, we will doom the economic prospects of the very people we are trying to help.

Mr. Haldeman stated that staff has recommended denial for several reasons: 1) A change in state law prevents the County from accepting proffers for residential rezonings, therefore, some of the typical impacts associated with residential development are not mitigated or addressed, including impacts to schools, impacts to public facilities and utilities; 2) The annual fiscal impact from this project is projected at negative 463,425, revised downward from \$635,000; 3) This proposal does not fully meet the recommendations of the Parks & Recreation Master Plan for new residential development, although Parks and Recreation staff has not expressed an objection; 4) The proposed access from Oakland Drive still adds to the cumulative impact on Richmond Road traffic.

Mr. Haldeman stated that traffic impacts are a major concern. Mr. Haldeman stated that the traffic study focused on the Croaker Road intersection, but Richmond Road traffic is a problem all the way into Williamsburg and is destined to worsen even without this project. Mr. Haldeman stated that he believes the traffic impact is much greater than what is shown in the TIA. Mr. Haldeman stated that the TIA uses a 1.08 annual growth rate factor for projecting future traffic on Richmond Road east of this project; however, there are two proposed residential projects in the Lightfoot section of upper York County that, if built, will yield 769 new homes on parcels formerly zoned Economic Development. Mr. Haldeman noted that the trip generation for the 769 new homes will be far greater than the 887 generated by Oakland Pointe. Mr. Haldeman further noted that it is not clear if the traffic impact of the other proposed developments was included in the TIA. Mr. Haldeman stated that the Comprehensive Plan states that future volumes indicate the potential need for widening Richmond Road between the City of Williamsburg and Olde Towne Road and between Humelsine Parkway and Lightfoot Road; however, it is recommended that Richmond Road remain four lanes and widening these sections should be avoided or limited due to physical limitations and the negative impacts on existing lanes. Mr. Haldeman further stated that the Comprehensive Plan recommends that new developments should be permitted only if it is determined that the project can be served by the existing road while maintaining an acceptable

LOS, or if the impacts can be addressed through road and signalization improvements. Mr. Haldeman noted that the Comprehensive Plan makes clear that if we underestimate future traffic on Richmond Road, we will have no chance to fix it.

Mr. Haldeman stated that there are other inconsistencies with the Comprehensive Plan not mentioned by staff.

Mr. Haldeman stated that affordable housing is supposed to be closer to jobs, and not in rural areas. Mr. Haldeman stated that the increased demand for housing is influenced by those wanting to be residents of James City County, but who commute to work elsewhere. Mr. Haldeman stated that generally, the wages of jobs in surrounding localities are higher than the wages available in James City County. Mr. Haldeman noted that the County's HUD Affordability Index reflects generally affordable housing costs but high transportation expenses which indicates that housing that is affordable to workers is not located near jobs. Mr. Haldeman stated that the Comprehensive Plan supports the provision of mixed cost and affordable/workforce housing near employment centers and transportation hubs. Mr. Haldeman noted that the transportation section of the Comprehensive Plan recommends increasing affordable housing in proximity to job opportunities to reduce in and out commuting and congestion on major regional roadways.

Mr. Haldeman further stated that affordable housing should be in mixed-income neighborhoods. Mr. Haldeman stated that according to the Housing Conditions Study, new developments need to be mixed-income with never more than 40% allocated for households with AMI less than 50% and never with an allocation of less than 10%. Mr. Haldeman further stated that the Comprehensive Plan promotes full integration of affordable and workforce housing units with market rate units within residential developments and throughout the Primary Service Area (PSA).

Mr. Haldeman further stated that residential development should be compatible with adjacent and surrounding land uses. Mr. Haldeman noted that Oakland Pointe would be in the Norge Community Character Area (CCA) and should maintain the unique heritage and identity of the designated CCAs. Mr. Haldeman further stated that the R-5 zoning district calls for a harmonious and orderly relationship between multi-family residential uses and lower-density residential and nonresidential uses; however, this project appears to be at odds with the surrounding uses.

Mr. Haldeman stated that a number of multi-family projects have been approved recently, including Forest Glen and Powhatan Terrace. Mr. Haldeman noted that there is also a Forest Heights application coming forward in the near future. Mr. Haldeman further stated that there are literally hundreds of low-and moderate-priced housing units built or being built in Governor's Green, Settler's Market, Quarterpath, New Town, the Promenade and the Candle Station. Mr. Haldeman stated that 647 new apartment units in Upper York County are either approved or proposed. Mr. Haldeman stated that much of the multi-family housing, including is built near entrances to Routes 199 and/or I-64, prompting the question of whether new residents work in James City County, which is consistent with the County's housing goals, or are they using the newly-widened highways to enjoy County amenities and schools while commuting to jobs in other jurisdictions. Mr. Haldeman noted that wages of jobs in surrounding localities are higher than the

wages available in the County and until we equalize wages, we risk promoting the very commuting traffic congestion that affordable housing is meant to prevent.

Mr. Haldeman stated that over the past three Comprehensive Plan cycles, residents have implored the County to slow residential growth and to protect open space. Mr. Haldeman further stated that 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. Mr. Haldeman noted that 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. Mr. Haldeman further noted that citizen commentary identified the most critical land use issues as growth, the environment and community character. Mr. Haldeman further stated that the overwhelming approval of the 2005 bond referendum to finance the purchase of development rights shows that residents put a monetary value on open space.

Mr. Haldeman further stated that in evaluating the application, it is necessary to consider the effects of the project.

Mr. Haldeman stated that he questions the models used for the Adequate Public Schools Facilities Test. Mr. Haldeman stated that if the 104 units right around the corner at the Station at Norge generate 73 school children how can 126 units at Oakland Pointe generate only 39. Mr. Haldeman further stated that the Adequate Facilities Test shows that Warhill High School (WHS) has the capacity for the extra 13 students; however, the School District's last CIP application requested \$5.1 million to expand the school in 2022, stating that WHS is currently over capacity and enrollment is projected to increase. Mr. Haldeman stated that the CIP also has a placeholder of \$53 million to build a new elementary school in 2028. Mr. Haldeman stated that even if the three affected schools have capacity today, cumulative impact will need to be considered.

Mr. Haldeman stated that another concern is water supply. Mr. Haldeman stated that the Eastern Virginia Groundwater Management Advisory Committee reported to the Virginia General Assembly and the Department of Environmental Quality (DEQ) in 2017 that available groundwater supplies are insufficient to meet the long-term demands of current and future groundwater users, and these groundwater resources are critical to the health, welfare, and economic prosperity of Eastern Virginia. Mr. Haldeman stated that, while the DEQ recently approved the County's water withdrawal permit, they did not allow any additional water withdrawal.

Mr. Haldeman noted that the Williamsburg Regional Library (WRL) is also impacted by the proposal. Mr. Haldeman stated that when it was established, the building had the capacity to serve the surrounding James City County population; however, after decades of growth, this is no longer the case. Mr. Haldeman stated that by 2025, the WRL will require an additional 45,876 square feet to meet public demand.

Mr. Haldeman stated that, in summary, this project meets an important County need and, if anything, it is too small. Mr. Haldeman stated that the applicant has gained his confidence that the

buildings will be attractive and well built; that they will be well buffered from Richmond Road and neighboring homes; and that they will provide adequate protection for Yarmouth Creek. Mr. Haldeman further stated that the project will also: create a large fiscal drain; create a cumulative impact on traffic along Richmond Road, particularly to the east that will be severe and unmitigatable; potentially encourage more people with jobs elsewhere to enjoy life in James City County but serve employers elsewhere; and remove yet another slice of precious open space in contradiction to numerous goals of the Comprehensive Plan.

Mr. Haldeman stated that there are 29 undeveloped R-5 parcels and 404 undeveloped Mixed Use parcels. Mr. Haldeman stated that this project could be built on one of these without a rezoning and, in the case of Mixed Use, without a height waiver.

Mr. Haldeman stated that if the Commission recommends approval to the Board of Supervisors, he hopes that it will condition the approval on the Board's approval of all easements, master plan notes and waivers.

Mr. Krapf stated that everyone agrees that there is a need for affordable housing. Mr. Krapf noted that a Virginia Employment Commission study showed that 19,000 employees are commuting to James City County because they cannot afford to live here. Mr. Krapf also noted that in addition, there are those who fall in the Asset Limited Income Constrained and Employed (ALICE) category. Mr. Krapf stated that for the Stonehouse District alone, 23% of households fall in the ALICE category. Mr. Krapf noted that the Commission's role is to make a land use decision. Mr. Krapf stated that the elements that must be considered are: consistency with the Comprehensive Plan and whether an applicant has adequately mitigated any adverse impacts of the proposal. Mr. Krapf stated that the proposal absolutely does fit with the Comprehensive Plan. Mr. Krapf further stated that the dichotomy is the A-1 zoning designation and the Comprehensive Plan vision that this property would ultimately be developed as MDR. Mr. Krapf further stated that the property is within the PSA and that the PSA is the major guideline for where development should occur in the County. Mr. Krapf stated that those are significant elements in favor of the project. Mr. Krapf further stated that the difficult question is whether the applicant has sufficiently mitigated the impacts of the project. Mr. Krapf noted that the application does not meet the Adequate Public Facilities Test for schools but it misses only for one school and only by two students. Mr. Krapf further stated that his greatest concern is the \$460,000 negative fiscal impact. Mr. Krapf noted, however, that the majority of residential developments have a negative fiscal impact because they require public services. Mr. Krapf further noted that the County has an aging population which will require more continuing care facilities and more people to staff those facilities. Mr. Krapf further noted that it will be important to have sufficient housing for those employees. Mr. Krapf stated that he does also have concerns about the traffic issues.

Mr. Polster stated he views the Comprehensive Plan as a guideline for what the County should be over the next 20 years. Mr. Polster further stated that when evaluating the effect of land use issues on quality of life and community character, the Comprehensive Plan tells us where we would like to have development and under what conditions we want that development. Mr. Polster stated that we have defined rural lands by indicating that development should take place in the PSA. Mr. Polster further stated that the property is within the PSA and the Comprehensive Plan has also designated the property as MDR. Mr. Polster noted that all the adjacent properties are designated

MDR as well. Mr. Polster further noted that the Station at Norge, approved in 2004, which provides affordable housing also required a rezoning and height waiver which is exactly the same as what this application requests. Mr. Polster stated that the application is clearly in accord with the Comprehensive Plan. Mr. Polster further stated that the issue is mitigation of impacts to traffic, the environment and the schools. Mr. Polster stated that the Comprehensive Plan has provided a path forward to find alternatives to Richmond Road which would mitigate traffic impacts. Mr. Polster stated that the County has made a substantial investment in ensuring the viability of the watershed and mitigating drainage concerns for this project as well as for future development. Mr. Polster further stated that the impact to the schools is not new and that the classrooms have been over capacity for a number of years due to the expansion of the Bright Beginnings program. Mr. Polster further stated that the School Board has brought forward a CIP application for the Elementary School which will mitigate that impact. Mr. Polster stated that he is inclined to support the application.

Mr. O'Connor inquired where the County is with the Housing Opportunities Policy.

Mr. Holt stated that as pertaining to new development the policy was rescinded by the Board of Supervisors. Mr. Holt further stated that, for guidance, there are the Goals, Strategies and Actions of the Comprehensive Plan and the adopted Strategic Plan.

Mr. O'Connor asked Mr. Hlavin to comment on the enforceability of the proposed easement.

Mr. Max Hlavin, Deputy County Attorney, stated that enforcement through a proffer or through the easement is not greatly different. Mr. Hlavin stated that the easement would allow for checks and balances throughout the project cycle similar to proffers.

Mr. O'Connor inquired what the process would be if the County wanted to vacate the easement.

Mr. Hlavin stated that the easement would constitute a property interest at the time it is accepted and would require a public hearing process to dispose of it, just as any other property interest.

Mr. Schmidt stated that he spent time observing the Croaker Road/Richmond Road intersection during the noon hour on a weekday. Mr. Schmidt stated that the intersection is a concern. Mr. Schmidt further stated that it will not improve with the build-out of other approved developments. Mr. Schmidt stated that he is concerned about the traffic impacts if any of the other similar properties are developed in the future. Mr. Schmidt noted that he is not certain that the parcels currently zoned for this type of development are of adequate size to accommodate this type of project. Mr. Schmidt noted that the decision made tonight will have impacts into the future.

Ms. Leverenz stated that the Comprehensive Plan is in fact the guiding document for the County's future and is up for review and revision every five years. Ms. Leverenz stated that there is a review cycle starting in 2019. Ms. Leverenz further stated that the Comprehensive Plan is predicated on citizen input. Ms. Leverenz stated that citizens who are interested in the future of the County should take advantage of the opportunities to participate in this process. Ms. Leverenz noted that the property has been designated as MDR in the Comprehensive Plan for more than 25 years. Ms. Leverenz stated that the application certainly meets the criteria of compatibility with the

Comprehensive Plan; however, the mitigation and traffic safety issues are of great concern. Ms. Leverenz stated that if the intersection at Oakland Drive/Richmond Road could be improved prior to start of construction, it would mitigate many of the safety concerns. Ms. Leverenz noted that congestion on Richmond Road is currently a concern and the congestion will only increase unless alternate routes are developed. Ms. Leverenz stated that she has less concern about the fiscal impact. Ms. Leverenz noted the fiscal impact will be the same wherever affordable housing is built. Ms. Leverenz stated that she believes this investment will be worthwhile.

Mr. O'Connor stated that he had requested clarification on the Housing Opportunities Policy (HOP) because it is referenced numerous times in the Comprehensive Plan. Mr. O'Connor stated that while the Comprehensive Plan is a guiding document, the HOP is not. Mr. O'Connor stated that there are multiple areas in the Comprehensive Plan suggesting ways to provide affordable housing in the County. Mr. O'Connor noted that if the County wants affordable housing, the County must be prepared to assume the cost. Mr. O'Connor noted that the high- and moderate density parcels are generally located near interchanges in order to keep traffic off longer stretches of roadway. Mr. O'Connor stated that he believes this is an appropriate location for the project. Mr. O'Connor further stated that, if this project is not approved, other projects with similar impacts could be brought forward that would not provide the same benefit to the County. Mr. O'Connor stated that he is not comfortable with the easement document and the enforcement of the terms and conditions. Mr. O'Connor stated that he is an advocate of affordable housing; however, he is not certain that the way the County has addressed to date has been a benefit to the community. Mr. O'Connor stated that from a land use perspective the application meets all criteria; however, there are still factors that are a concern.

Mr. Richardson stated that in reviewing applications, the Commission considers projects from numerous perspectives and incorporates citizen and applicant input in its decision. Mr. Richardson stated that the Comprehensive Plan provides guidance for how the County should develop. Mr. Richardson stated that one resounding theme is the preservation of community character. Mr. Richardson stated that everyone recognizes the need for affordable housing. Mr. Richardson further stated that people also need to be able to work here, live here, grow their families here and make the County their home. Mr. Richardson further stated that we also need the necessary infrastructure. Mr. Richardson noted that in some instances what is needed for the safety or benefit of the public is not supported by the numbers. Mr. Richardson stated that the Commission considers every application from a land use perspective and whether it is in compliance with the Comprehensive Plan. Mr. Richardson stated that the final piece is mitigation of impacts. Mr. Richardson stated that the County is at a crucial crossroads to define growth, to assess the utility of the PSA and to look at alternatives to widening Richmond Road. Mr. Richardson further stated that it is time for the Williamsburg-James City County Schools to solicit some real public input for what schools we need and where they need to be. Mr. Richardson stated that it is time to formulate a Public Facilities Master Plan. Mr. Richardson stated that the County needs to catalogue what can be improved now and draw a line on development with impacts that cannot be mitigated. Mr. Richardson further stated that the County needs to achieve a solution to the affordable housing issue in a way that avoids a piecemeal solution. Mr. Richardson noted that in addition, we do not know if the Board of Supervisors will accept the easement document. Mr. Richardson stated that with due respect to both sides, he will oppose the application.

Mr. O'Connor inquired if the concern was whether the Board of Supervisors can or will accept the Easement document.

Mr. Hlavin stated that the Board of Supervisors has the authority to accept the Easement document. Mr. Hlavin stated that the staff analysis was based on the unknown of whether the Board of Supervisors would accept the Easement. Mr. Hlavin stated that the Easement document would address some ordinance requirements for the density as well as mitigate some of the development impacts.

Mr. Holt noted that staff did find that within that document the impacts had been mitigated.

Mr. Haldeman complimented Mr. Ribeiro on his thorough presentation and willingness to respond to inquiries.

Ms. Leverenz inquired if there is a procedure for recommending that mitigation of the Oakland Drive/Richmond Road intersection prior to start of construction.

Mr. Holt stated that the motion should be for what is before the Commission. Mr. Holt further stated that if there is strong sentiment from the Commission that the intersection improvements be constructed first, that will be noted in the minutes and staff will reflect it in the staff report that goes to the Board of Supervisors.

Mr. Richardson inquired if that would be a recommendation separate and apart from the motion on what is before the Commission.

Mr. Hlavin stated that the language could be included in the motion that the applicant consider mitigation of those impacts as a matter of timing in relation to land disturbance.

Mr. Holt stated that the Commission could forward a recommendation to the Board of Supervisors that the mitigation be done sooner rather than later.

Mr. Polster stated that the Commission is requesting that the applicant consider the suggestion prior to taking this forward to the Board.

Ms. Leverenz inquired if there is consensus to build in that request.

Mr. Krapf suggested asking the applicant to report to the Board of Supervisors on the feasibility of modifying the construction schedule.

The Commission agreed to ask the applicant to report to the Board of Supervisors on the feasibility of modifying the construction schedule.

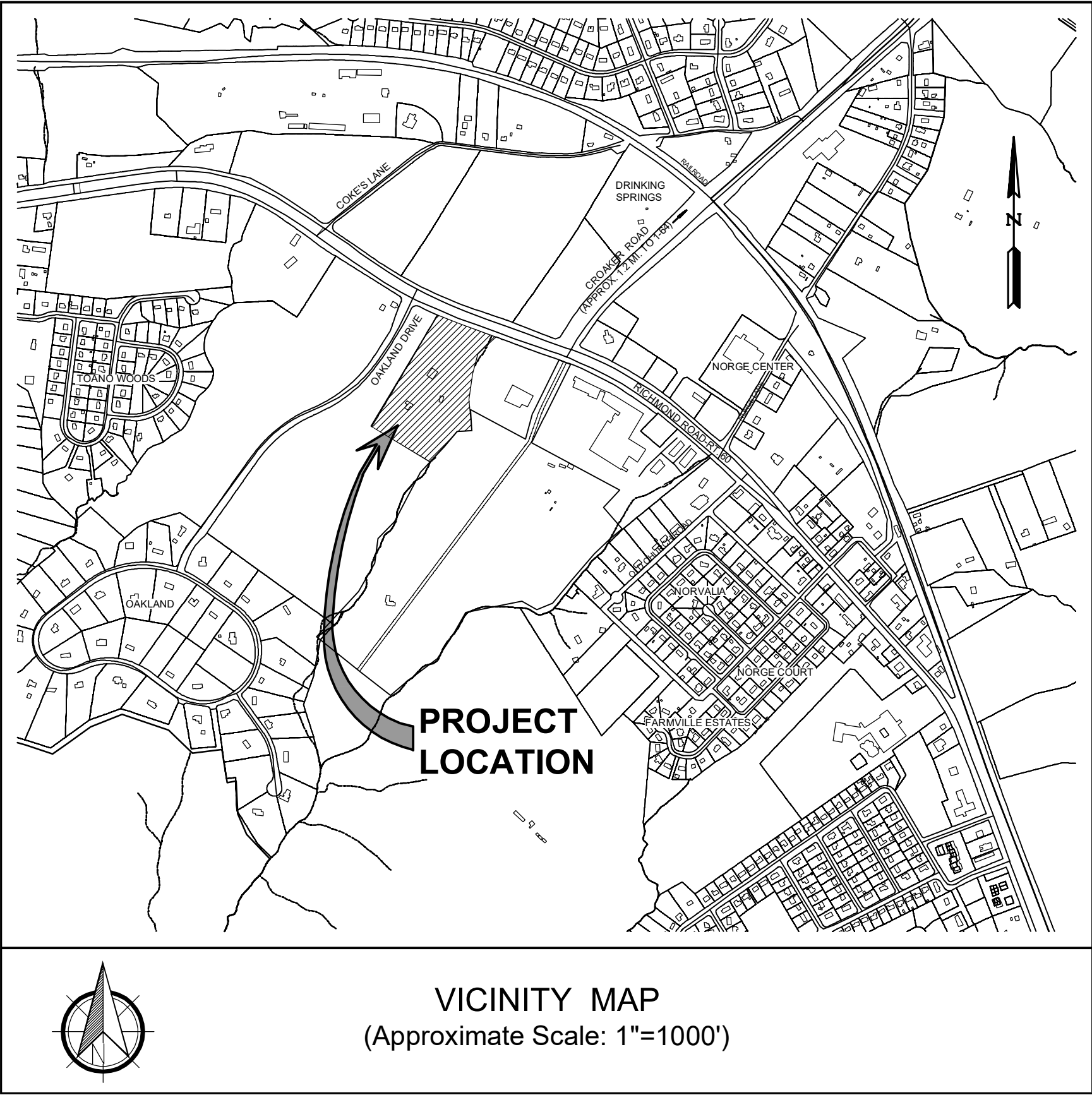
Mr. Polster made a motion to recommend approval of Rezoning-18-0004/Height Limitation Waiver-18-0002, Oakland Pointe contingent on the Board of Supervisors accepting the Easement.

Mr. Holt noted that the Commission did not need to vote on the Height Limitation Waiver as by Ordinance it is only required that the Board of Supervisors review these.

On a roll call vote the Commission voted to recommend approval of Rezoning-18-0004/Height Limitation Waiver-18-0002. Oakland Pointe (5-2).

MASTER PLAN
FOR
Oakland Pointe
A MULTI-FAMILY COMMUNITY

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

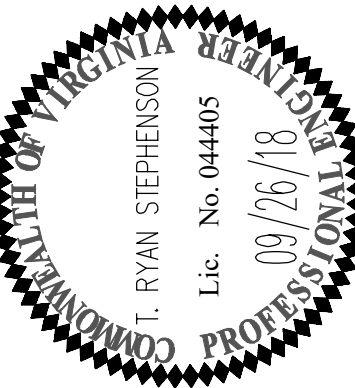


ORIGINAL SUBMITTAL DATE: OCTOBER 25, 2017
REVISED SUBMITTAL DATE: SEPTEMBER 26, 2018

INDEX OF SHEETS:

SHEET NO.	SHEET DESCRIPTION
C1.0	COVER SHEET
C2.0	EXISTING CONDITIONS
C3.0	MASTER CONCEPTUAL PLAN
C4.0	MASTER UTILITY PLAN
C5.0	MASTER STORMWATER PLAN
A-1.00	BUILDING TYPE 'A'-1' ELEVATION
A-2.00	BUILDING TYPE 'A'-2' ELEVATION
A-3.00	BUILDING TYPE 'B' ELEVATION

Rev.	Date	Description
4	09/26/18	REVISED PER CHANGES IN ACCESS
3	02/22/18	REVISED PER VDOT COMMENTS
2	01/10/18	REVISED PER COUNTY COMMENTS
1	12/27/17	REVISED PER COUNTY COMMENTS



THIS PLAN HAS
NOT RECEIVED
FINAL APPROVAL
AND IS NOT
APPROVED FOR
CONSTRUCTION.

5248 Old Towne Road, Suite 1
Williamsburg, Virginia 23188
Phone: (757) 253-0040
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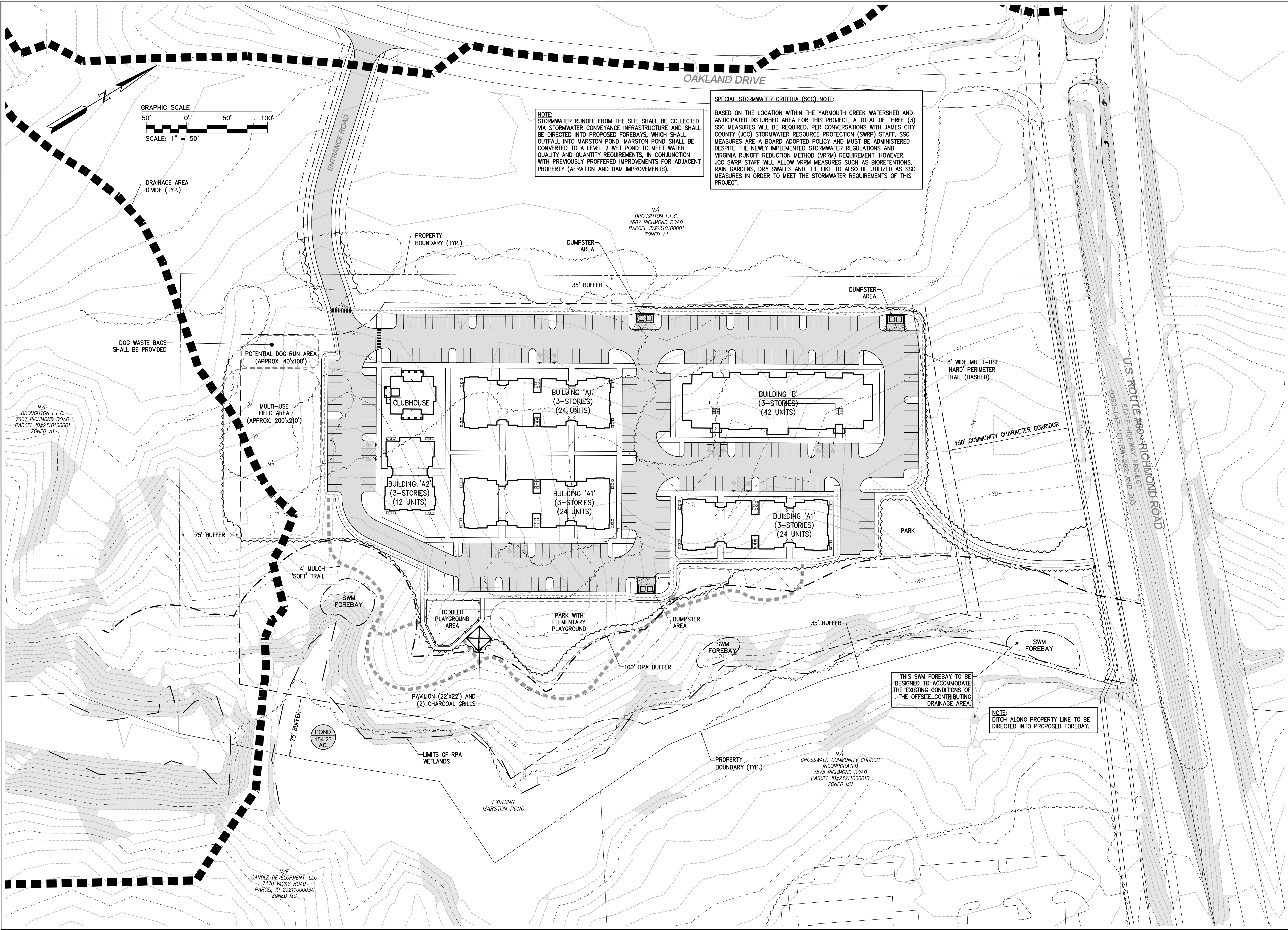
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CONSULTING ENGINEERS

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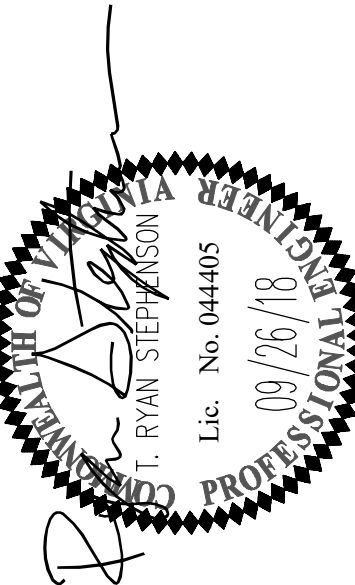
MASTER PLAN
for
OAKLAND POINTE
DEVELOPER: CONNELLY BUILDERS, INC.

STONEHOUSE DISTRICT | JAMES CITY COUNTY | VIRGINIA

Project Contacts: HWP/TRS	
Project Number: 10503-00	
Scale: NA	Date: 10/25/17
Sheet Title: COVER SHEET	
Sheet Number C1.0	



Rev.	Date	Description
4	09/26/18	REVISED PER CHANGES IN ACCESS
3	02/22/18	REVISED PER VDOT COMMENTS
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MASTER PLAN
for
OAKLAND POINTE
DEVELOPER: CONNELLY BUILDERS, INC.

STONEHOUSE DISTRICT | JAMES CITY COUNTY | VIRGINIA

Project Contacts:	HWP/TRS
Project Number:	10503-00
Scale:	1"=50'
Date:	10/25/17
Sheet Title:	MASTER STORMWATER PLAN
Sheet Number:	C5.0

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1 BUILDING TYPE "A1" FRONT & REAR ELEVATION
1/8" = 1'-0"

- 80% of exterior surface Brick
- 20% Cementous siding (Hardi panel)
- Architectural cut 30 year shingles
- Metal handrails and railings
- Concrete decking on breezeways
- Aluminum color coordinated fascia
- Vinyl ventilated soffit
- Metal accent railings
- Energy Efficiency (Earthcraft Gold)

[illegible]

Job Number: 2017

File Reference:

Scale: AS SHOWN

CORP. SEAL

SEAL

OAKLAND POINTE
APARTMENTS
WILLIAMSBURG, VIRGINIA

**PARKS-PLAYER
ARCHITECTURE
& PLANNING, LLC**

315 EAST BROAD STREET
GREENVILLE, SC 29601
(864) 382-5000

BLDG TYPE 'A1'
ELEVATION

Sheet Number:
A-1.00

A B C

C

[illegible]

Community Impact Statement

For

Oakland Pointe

Prepared For

***Connelly Development, LLC
125 Old Chapin Road
Lexington, SC 29072
803-798-0572***

*Original: October 25, 2017
Revised: January 10, 2018
Revised: September 26, 2018*

*AES Project Number: W10503-00
County Number: C-0072-2017*

Prepared by:



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I. INTRODUCTION

Connelly Development, LLC proposes to amend the Zoning Map of James City County, Virginia to create a Multifamily Residential District (R-5) on approximately 14.5 acres presently zoned General Agriculture (A-1). The proposed R-5 would consist of 126 affordable apartment units with access off of Oakland Drive. The property is located in the Stonehouse District adjacent to Oakland, Crosswalk Church and Villages at Candle Station. A vicinity map is included on page 6.

The purpose of this Community Impact Statement is to summarize and organize the planning efforts of the project team into a cohesive package for Staff review, addressing the pertinent planning issues, the requirements of the Multifamily Residential Zoning District, cultural, fiscal, and physical impacts of the proposed development to the County.

Connelly Development, LLC Bio

President Mr. Kevin Connelly is a second-generation builder, with a reputation for performance, value and integrity spanning more than 30 years. The Company approach is to build each project as if we were building it for ourselves- professionally, safely, within budget, on schedule and by partnering. Seventy percent of Mr. Connelly's work is for repeat clients.

Since becoming involved in the residential construction and development industry in 1987 Kevin has been instrumental in producing over 5,867 units of multi-family housing. He is very involved in all aspects of his company's day-to-day operations and has demonstrated the ability to exceed expectations. His experience and knowledge within the construction industry has been instrumental in resolving design challenges often coming up with an innovative approach that is more economically feasible.

Connelly Builders, Inc. has an Unlimited General Contractor License with the State of North Carolina, Georgia, Virginia and South Carolina. Connelly Builders has experience and capability of building anything from a single-family detached dwelling to a mid- rise residential structure.

Kevin is a native of Lexington, South Carolina and is very active within his community. He is a past member of the Lexington Jaycees having served as Vice President, is a member of the Lexington Chamber of Commerce, served as Committee Chairman for the Lexington Chamber of Ducks Unlimited. He is a very active member of the South Carolina Home Builders Association. Kevin is a Board Member, Investors Council Member, has served as Chairman of the Public Policy Committee, and past President of the South Carolina Affordable Housing Coalition.

Kevin is also very active in his church, Mt. Horeb United Methodist in Lexington. Recently Kevin served as co-chair of the building committee and was instrumental in planning, design, and overseeing construction of their \$16.4 million-dollar expansion, one of the largest expansions of the United Methodist Churches in the United States.

II. THE PROJECT TEAM

The organizations that participated in the preparation of the information provided with this rezoning submission are as follows:

- | | |
|---------------------|--|
| • Developer | - Connelly Development, LLC |
| • Civil Engineering | - AES Consulting Engineers |
| • Land Planning | - AES Consulting Engineers |
| • Traffic | - DRW Consultants, LLC |
| • Environmental | - Kerr Environmental Services Corp. |
| • Archaeology | - Circa~ Cultural Resource Management, LLC |
| • Attorney | - Kaufman & Canoles |

Key Components of this Community Impact Statement are:

- Existing Conditions
- Project Description
- Planning Considerations
- Analysis of Impacts to Public Facilities and Services
- Analysis of Environmental Impacts
- Analysis of Storm Water Management
- Traffic Impact Analysis
- Fiscal Impact Study
- Conclusions

III. EXISTING CONDITIONS

Site Location - See Figure 1, Vicinity Map, page 6

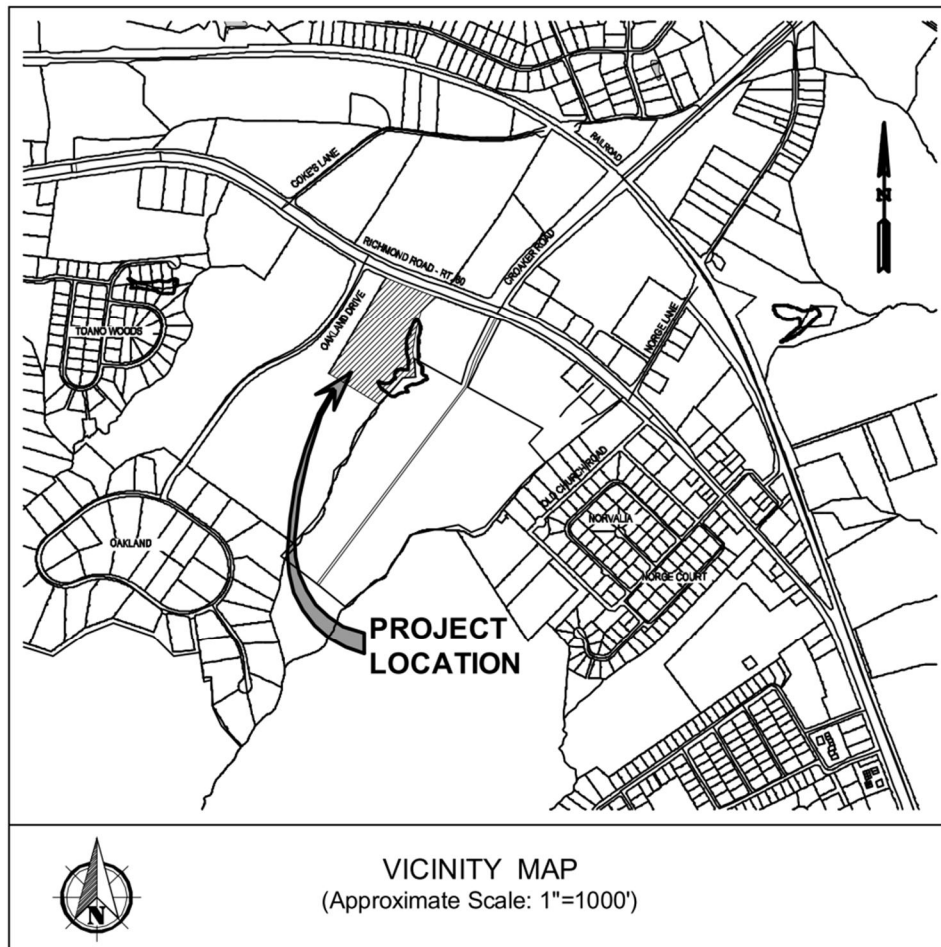
The Existing Conditions Map (included in the Appendix) details the location of buffers, wetlands, soils and slopes. The Master Plan also adheres to all items noted in the environmental constraints analysis as spelled out in Section 24-23 of the Zoning Ordinance. A pre-development site analysis revealed the following results:

Gross Site Area	14.54 acres
<i>RPA Buffers</i>	4.52 acres
<i>Non-RPA Wetland areas</i>	0.00 acres
<i>Areas of 25% or greater slopes (beyond RPA Buffers)</i>	0.00 acres
<u>Total Non-Developable Area</u>	<u>4.52 acres</u>
Gross Developable Area	10.02 acres

IV. PROJECT DESCRIPTION

Connelly Development, LLC proposes to establish an R-5, Multifamily Residential District on the 14.54 acre property. The proposed property will consist of a maximum of 126 apartment units with a clubhouse, multi-use field area, two playground areas (one for toddlers and one for elementary school aged children), pavilion (with charcoal grills), dog run area and a trail/sidewalk system. The concept, as depicted on the Master Plan (included in the Appendix), shows the proposed layout of the site. The roads serving the community will be private and there will be one entrance that will tie into Oakland Drive. Pedestrian connectivity shall be provided to the adjacent properties with a proposed 5' concrete sidewalk. A separate 4' shoulder bike lane will extend from property line to property line along the existing pavement at the property's frontage (conforming to the County's bike lane program). This project will consist of 100% affordable housing through the VHDA program and it will serve a greater need for affordable housing throughout James City County (JCC) in accordance with the JCC Strategic Plan.

Figure 1



VICINITY MAP
for
Oakland Pointe
James City County, Virginia

V. PLANNING CONSIDERATIONS

A. Land Use & Density

The entire 14.54 acre parcel is currently zoned as A-1, General Agriculture District and the Comprehensive Plan designates this parcel as Moderate Density Residential (4 to 12 units/acre). Initial discussions with James City County Staff have indicated that the proposed residential development with affordable housing would be an appropriate neighbor to the existing communities and a good land use fit for this particular site.

The proposed site has a gross density of 8.67 units per acre, which is below the maximum density allowed in the Moderate Density Residential (MDR) classification of the Comprehensive Plan. After subtracting non-developable areas, the net developable area for the site is 12.93 acres which results in a proposed net density of 9.75 units/acre. While this is also within the range of the MDR, the allowable density per the R-5 zoning district (for projects with 101-200 units and three stories or more) is 9.0 units/acre. In order to adhere to the Zoning Ordinance, a bonus point for Earth-Craft Gold certification shall be utilized to meet the required density. With the bonus point added (10% above the base density of 9.0); the new maximum density for the site is 9.90 units/acre. Our proposed density of 9.75 units/acre falls within the newly established density.

B. Environmental

Watershed protection surrounding Yarmouth Creek played an important role when making decisions regarding this property. The proposed development was laid out to provide as much undisturbed open space as possible and limit disturbance to the existing RPA buffer while avoiding impacts to the existing wetlands.

C. Historic & Archeological

Circa~ Cultural Resource Management, LLC has completed a Phase I archaeological investigation for the property. The study has been provided to James City County and it found that no further investigation is required for the property.

D. Zoning Strategy

Since residential apartments are not an allowed use within the A-1 District, a rezoning is being sought to create a Multifamily Residential District (R-5) designation for the property. The Multifamily Residential District is an appropriate vehicle for this proposal and falls in line with the Comprehensive Plan that shows this area as moderate density residential (4 to 12 units/acre). This district provides opportunities for development which reduces land consumption, reduces the amount of land devoted to streets and other impervious surfaces by requiring increased amounts of open space, buffers and

recreational amenities. The conclusions that follow in this report will summarize how this proposal meets the criteria and purpose of the Multifamily Residential District.

While the Zoning Ordinance establishes maximum building heights for the R-5 zoning district, Connelly Development, LLC requests a waiver to permit apartment building heights not to exceed 40 feet. A formal waiver request has been provided to James City County under separate cover.

E. Parks and Recreation

Connelly Development, LLC proposes to provide recreational amenities (1.45 acres of recreation space provided versus 1.26 acres required) designed to satisfy the JCC Recreational Facility Development Guidelines. These amenities shall include a clubhouse, multi-use field area, two playground areas (one for toddlers and one for elementary school aged children), pavilion (with charcoal grills), dog run area and a trail/sidewalk system. The playground areas will each consist of at least five elements and possible facility elements are listed on the Master Plan.

With this application Connelly Development, LLC also requests a waiver to provide alternate amenities from what is detailed in the JCC Recreational Facility Development Guidelines. A formal waiver request has been provided to James City County under separate cover.

VI. ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES

A. Public Water & Sewer Facilities

The proposed development will generate 39,060 GPD (average project daily flow). As this flow is less than 40,000 GPD, an HRSD flow acceptance letter is not required.

Water service shall be provided by looping the system and connecting to the existing 16" JSCA water main located along Richmond Road. The Utility Master Plan is included in the Appendix and shows the proposed waterline layout to serve the development. The site will include a master meter near the property line (at the connection) and all onsite water distribution system features beyond the master meter will be privately owned and maintained. Hydrants will be provided to meet JSCA minimum standards and as otherwise directed by the Fire Marshall.

A fire hydrant flow test was conducted by JCSA on October 18, 2017 and the results of the test indicate approximately 5,850 gpm of flow at 20 psi. These results will be placed into a water model which will be completed and submitted prior to or with the final site plan. The model will examine volume and pressures throughout the immediate water system area, however based on the flows obtained during the test there should be adequate availability for the 126 proposed units.

Sanitary sewer service is provided to the site by a proposed (privately owned and maintained) on-site gravity sewer collection system which will convey wastewater flows to a proposed grinder pump station which will also be privately owned and maintained. Flows will then be directed from the station via proposed sewer force main to an existing 6" JCSA sewer force main along Richmond Road. Per conversations with JCSA, a portion of the existing force main heading towards Lift Station 6-6 shall be disconnected and reconnected into the Lift Station 6-8 service area. This shall be done due to the fact that Lift Station 6-6 would have to be upgraded to handle the additional flow, while Lift Station 6-8 has capacity for this development.

All system components shall be designed to JCSA standards; however onsite water and sewer features will be privately owned and maintained. Please refer to the Utility Master Plan (included in the Appendix) for the preliminary layout of the on-site water and sanitary sewer system. Please find "Table 1" which shows the anticipated wastewater flows for the project.

Table 1 – Projected Wastewater Flows

Type of Development	No. of Units	Flow (GPD/Unit)	Average Daily Flow (GPD)	Duration (hrs)	Avg. Flow (GPM)	Peak Flow (GPM)
RESIDENTIAL						
Apartment Units	126	310	39,060	24	27.1	67.8
TOTAL			39,060		27.1	67.8

B. Fire Protection and Emergency Services

There are currently five (5) fire stations providing fire protection and Emergency Medical Services (EMS) services to James City County. Two (2) stations are located within a reasonable distance to the project site. These are Fire Stations 1 and 4. The closest fire station to the subject site within James City County is Fire Station 1, located at 3135 Forge Road, approximately 2 miles west of this project site. However, both of these stations are within a 10 minute drive of the project site. Response time to the site is within appropriate limits if an emergency event occurs which requires additional fire and life safety support. The proximity of the site to these two fire stations affords the future residents of the project more than adequate response to potential emergencies.

C. Solid Waste

The proposed development on the subject property will generate solid wastes that will require collection and disposal to promote a safe and healthy environment. Multiple dumpster locations are provided on site where trash and recycle material can be deposited into the appropriate vehicle for transport of both materials to a solid waste transfer station.

D. Utility Service Providers

Virginia Natural Gas, Dominion Virginia Power, Cox Communications, and Verizon Communications provide respectively; natural gas, electricity, cable TV service, and telephone service to this area. The current policy of these utility service providers is to extend service to the development at no cost to the developer when positive revenue is identified; plus, with new land development, these utility service providers are required to place all new utility service underground.

E. Schools

The proposed development will generate approximately 39 students K-12. This figure is based on the proposal to build 126 apartment units at a student generation rate of 0.31 per apartment unit. This calculation is provided as part of the Fiscal Impact Analysis (included within the Appendix). The calculated number of K-5 students generated from the proposed development is 17 (44%), grade level 6-8 is 9 (23%) and grade level 9-12 is 13 (33%). The multiplier used for each grade level is based on the pro rata share of students currently enrolled in each grade level as reported in the 2016-2017 enrollment report published by James City County.

The proposed development will be zoned for students to attend Norge Elementary School, Toano Middle School and Warhill High School. All of these schools are currently operating below capacity.

VII. ANALYSIS OF ENVIRONMENTAL IMPACTS

A. Wetlands & Resource Protection Areas

There are existing wetlands and associated Resource Protection Area (RPA) buffers on site and they are shown within the Master Plan (included in the Appendix). The only anticipated impacts to the RPA buffer are for the installation of forebays within the existing on-site BMP and corresponding storm outfalls. The impacts related to the installation of forebays and corresponding storm outfalls can be approved administratively per County Staff.

The wetlands have been field located per delineation by Kerr Environmental Services Corp. and a confirmation of the wetlands and RPA buffers shall be provided by the Army Corps of Engineers during the site plan stage.

B. Soils

The USDA Web Soil Survey shows several soil types within the property boundary. This property is predominantly situated on low to moderately drained soils of Craven-Uchee Complex, Emporia Complex and Johnston Complex soil types. Soils mapping can be seen on the Existing Conditions Map (included in the Appendix).

VIII. ANALYSIS OF STORMWATER MANAGEMENT

A. Water Quality

The Virginia Runoff Reduction Method (VRRM) as set forth by the Virginia Department of Environmental Quality (DEQ) governs the water quality requirements for both new and re-development projects. Since this proposed project will be constructed on mostly wooded area, this site is classified as a “New Development” project. Following the procedures for a new development, the required pollutant load reduction will be calculated to ensure the proposed development does not have a negative impact on downstream waterways. This reduction is measured in total phosphorus, a chemical that the DEQ has determined that drives all other pollutants levels. Essentially, if phosphorus is reduced, so are all the other pollutants.

The VRRM spreadsheet has been included in the Appendix detailing the site soil data, required pollutant removal, and Best Management Practices (BMPs) provided to achieve improved water quality. For this proposed site, 9.03 lbs/year of phosphorus load reduction is required. The existing wet pond (Marston Pond) located on site will be converted to a Level 2 Wet Pond (DEQ SPEC #14) and will be used to treat 13.45 acres of the proposed development, including 4.62 acres of impervious area, in order to achieve this requirement. The existing pond was designed to handle an area equivalent to 60% impervious for the entire parcel (approximately 8.73 acres) however our site is only proposing approximately 4.62 acres of impervious cover (or approximately 32%). Using this Level 2 Wet Pond, 10.82 lbs/year of phosphorus load reduction will be achieved. This load reduction exceeds the requirement by 1.79 lbs/year. Additionally, this Level 2 Wet Pond will need to meet the specifications as set forth by the DEQ, including but not limited to providing adequate treatment volume.

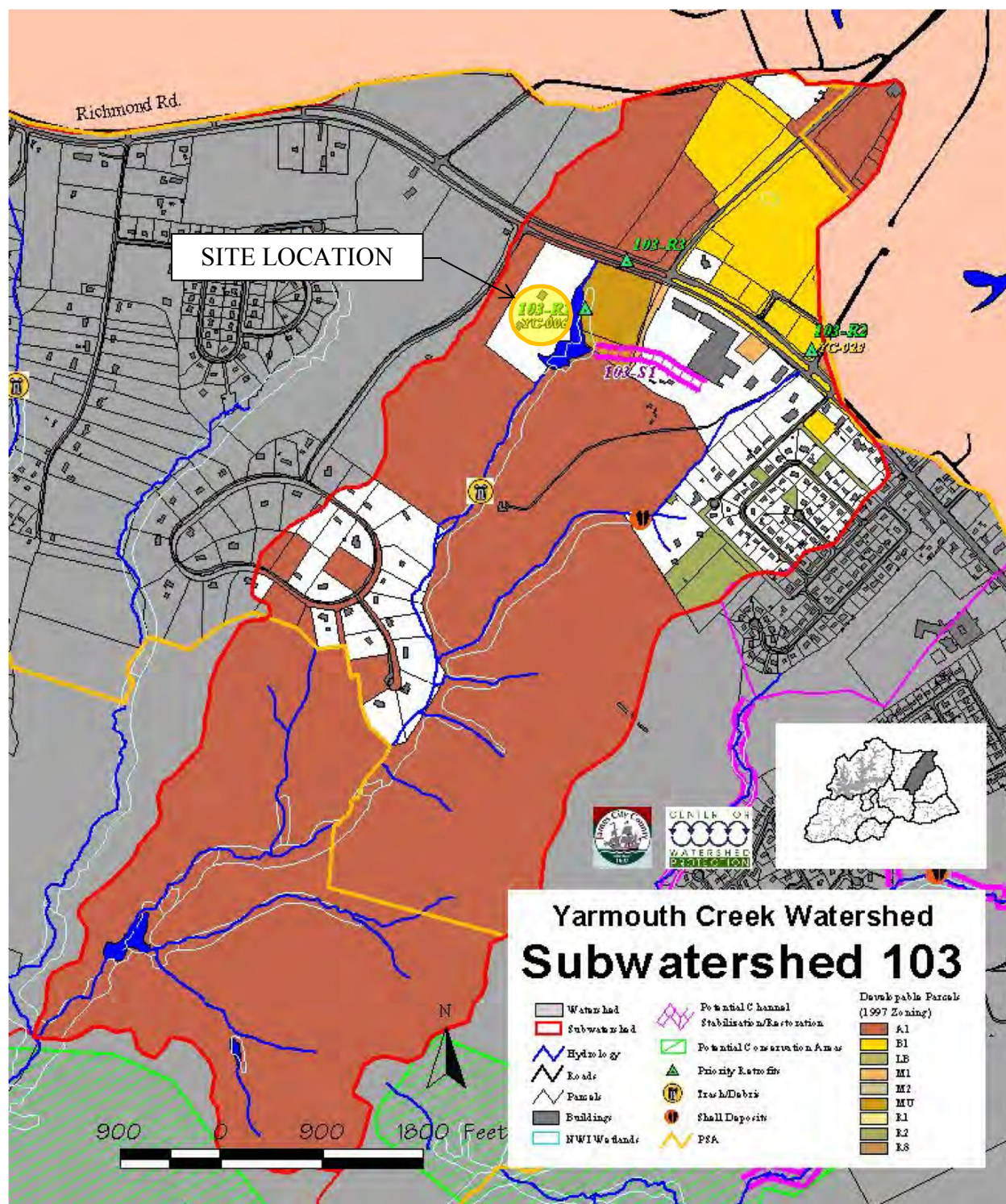
B. Water Quantity

Water quantity control is required to ensure that the post-construction stormwater runoff is controlled to a point that is either at or below the existing condition in terms of flow rates. This quantity of stormwater will be reduced by storing the increased stormwater runoff for a period of time before releasing it back into the downstream waterway. The Level 2 Wet Pond as previously used for water quality control will also be used to store the stormwater to reduce the flow. The Runoff Reduction Method will be used in combination with the SCS Method to calculate the required volume for the Level 2 Wet Pond. Appropriate measures will be taken to ensure that the 1, 2, 10, and 100-year storms are properly contained within the Level 2 Wet Pond and discharged over time with appropriate flows to maintain or better the existing condition.

C. *Special Stormwater Criteria*

Oakland Pointe is located in Subwatershed No. 103, an area considered to be “sensitive” by the Yarmouth Creek Watershed Management Plan as shown below in Figure 2. This plan was put in place to help prevent any degradation of the ecosystem and waterways downstream of Yarmouth Creek. Based on the anticipated disturbed area for this project, a total of three (3) Special Stormwater Criteria (SSC) measures will be required. Per conversations with JCC staff, SSC measures are a Board adopted policy and must be administered despite the newly implemented stormwater regulations and Virginia Runoff Reduction Method (VRRM) requirements. However, JCC staff will allow VRRM measures such as bioretentions, rain gardens, dry swales and the like to also be utilized as SSC measures in order to meet the stormwater requirements of this project. In addition, a forebay has been added to Marston Pond (near the entrance to the site) which is recommended per the Yarmouth Creek Watershed Management Plan. This forebay shall be designed for off-site drainage in its current condition while the other two proposed forebays will be designed for on-site drainage.

Figure 2



D. Storm Sewer System

The proposed storm sewer system will be comprised mainly of curb inlets and reinforced concrete pipes that are placed throughout the site at critical locations. This system will be used to convey the stormwater runoff into the proposed forebays, which will then outfall into the Level 2 Wet Pond for treatment. The Stormwater Master Plan (included in the Appendix) provides the drainage area divide for the stormwater facility. During final design, storm pipe, structures and the forebays will be located accordingly and calculations will be provided.

IX. ANALYSIS OF IMPACTS TO TRAFFIC

DRW Consultants, LLC has completed the required traffic study for the property. The report and findings have been provided to VDOT and James City County for review. Turn lane and entrance improvements have been added to the Master Plan in accordance with the study. These improvements include a proposed westbound 100'x100' turn lane/taper at Oakland Drive and the modification of an existing eastbound 200'x200' turn lane/taper into a 400' turn lane with 100' taper at the intersection of Richmond Road and Prickett Road.

X. FISCAL IMPACT STUDY

A Fiscal Impact Analysis has been prepared and is included in this submittal to the County for review.

XI. CONCLUSIONS

Oakland Pointe represents an appropriate use of land on this site in James City County. This proposed project helps to fill a growing regional need of affordable housing in James City County.

This proposed community meets the intent of the Comprehensive Plan with assurances for the provision of ample open space and its efficient use. The project team's experience in construction assures the county of high standards of design, layout and construction. Oakland Pointe will provide a model for the development of affordable housing in James City County.

The traffic study has concluded that minor turn lane/stacking improvements to Richmond Road will be necessary, while the proposed development will not have a significant impact to the school system. The fiscal analysis concludes a net negative fiscal impact to the County at build out. However, this development addresses the County's long-term need for affordable housing.

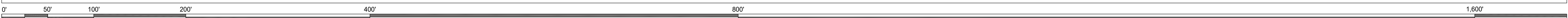
There are adequate public utilities with capacity to serve this project. The site is capable of being served by public sewer and water. Fire and life safety issues have been addressed with this application.

Finally, the careful planning of this project with regard to open space, buffers, carefully planned stormwater management systems and limits on impervious surfaces assures the County that the sensitive Subwatershed No. 103 of the Yarmouth Creek Watershed will be protected.

APPENDIX

- 2 - Master Plan Drawings (includes Architectural Drawings)
 - 3 - Rendered Conceptual Plan
 - 4 - Recreational Space Exhibit
 - 5 - Rendered Proposed Road Improvement Plan
- 6 - VRRM Summary - BMP Pollutant Removal Calculation
 - 7 - Fiscal Impact Analysis Worksheet
 - 8 - Traffic Analysis

- NOTES:
1. PROJECT WILL BE DEVELOPED TO ACHIEVE EARTH-CRAFT GOLD CERTIFICATION.
 2. FINAL LAYOUT OF 5' SIDEWALK TO BE DETERMINED DURING THE DESIGN STAGE OF DEVELOPMENT AND BASED ON FIELD CONDITIONS.
 3. THE 4' MULCH TRAIL SHALL MEANDER THROUGH THE RPA BUFFER IN ORDER TO AVOID CLEARING AND MINIMIZING DISTURBANCE TO THE GREATEST EXTENT POSSIBLE.

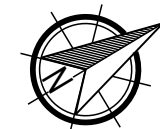


RENDERED CONCEPTUAL PLAN

OAKLAND POINTE

JAMES CITY COUNTY, VIRGINIA

(AES PROJECT #: W10503-00 - AES PROJECT CONTACT: T. RYAN STEPHENSON, P.E.)



Revised: 9/26/2018

DATE: 10/25/2017

SCALE: 1"=50'

SHEET 1 of 1



CONSULTING ENGINEERS

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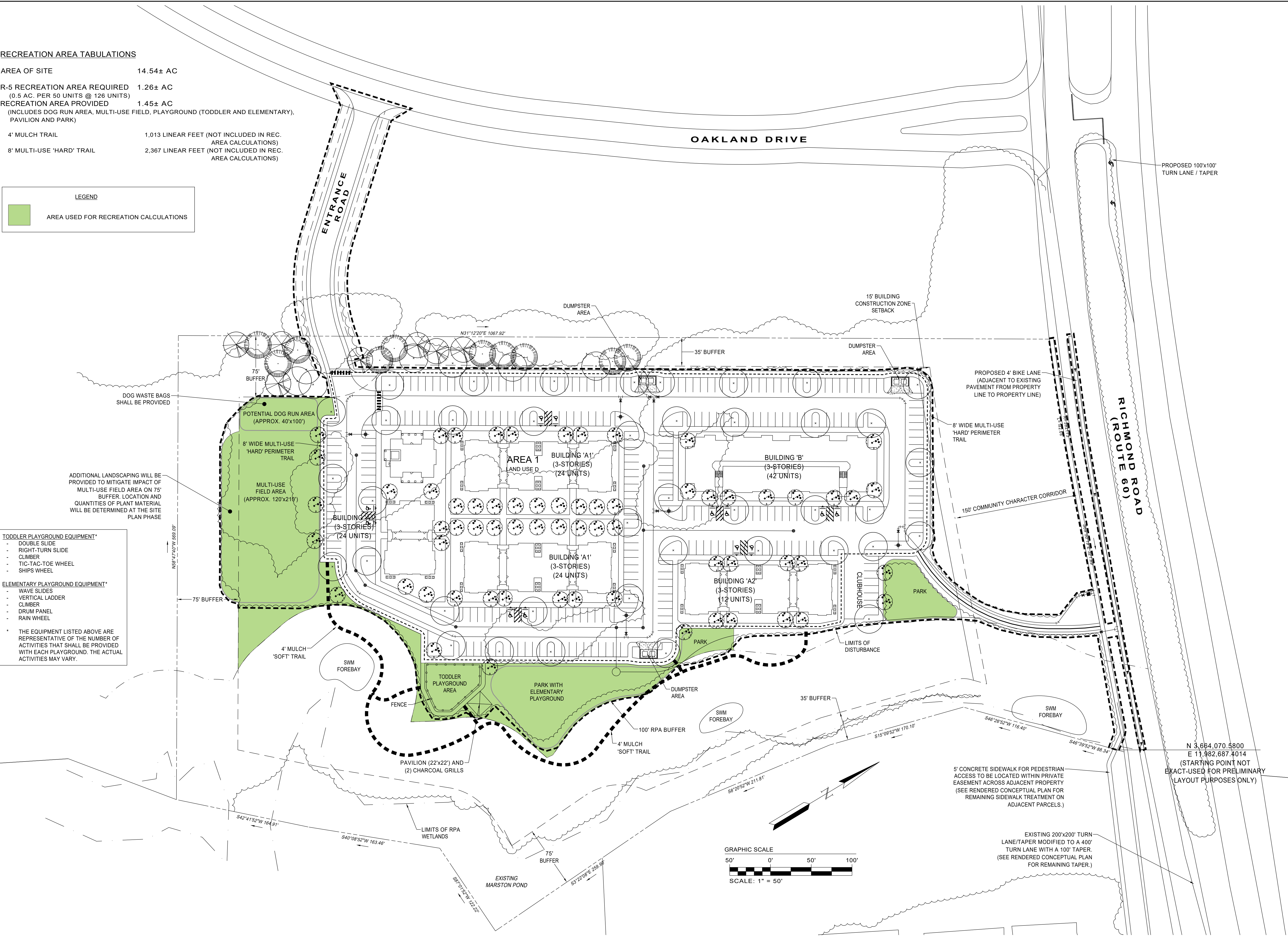
RECREATION AREA TABULATIONS

AREA OF SITE	14.54± AC
R-5 RECREATION AREA REQUIRED (0.5 AC. PER 50 UNITS @ 126 UNITS)	1.26± AC
RECREATION AREA PROVIDED (INCLUDES DOG RUN AREA, MULTI-USE FIELD, PLAYGROUND (TODDLER AND ELEMENTARY), PAVILION AND PARK)	1.45± AC
4' MULCH TRAIL	1,013 LINEAR FEET (NOT INCLUDED IN REC. AREA CALCULATIONS)
8' MULTI-USE 'HARD' TRAIL	2,367 LINEAR FEET (NOT INCLUDED IN REC. AREA CALCULATIONS)

LEGEND

AREA USED FOR RECREATION CALCULATIONS

- TODDLER PLAYGROUND EQUIPMENT*
- DOUBLE SLIDE
 - RIGHT-TURN SLIDE
 - CLIMBER
 - TIC-TAC-TOE WHEEL
 - SHIPS WHEEL
- ELEMENTARY PLAYGROUND EQUIPMENT*
- WAVE SLIDES
 - VERTICAL LADDER
 - CLIMBER
 - DRUM PANEL
 - RAIN WHEEL
- THE EQUIPMENT LISTED ABOVE ARE REPRESENTATIVE OF THE NUMBER OF ACTIVITIES THAT SHALL BE PROVIDED WITH EACH PLAYGROUND. THE ACTUAL ACTIVITIES MAY VARY.



Rev.	Date	Description
1	12/21/17	JMB REVISED PER COUNTY COMMENTS
2	01/10/18	JMB REVISED PER COUNTY COMMENTS
3	02/22/18	JMB REVISED PER VDOT COMMENTS
4	09/26/18	JMB REVISED PER CHANGES IN ACCESS

THIS PLAN HAS NOT RECEIVED FINAL APPROVAL AND IS NOT APPROVED FOR CONSTRUCTION.

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ABES CONSULTING ENGINEERS

Hampton Roads | Central Virginia | Middle Peninsula

MASTER PLAN for OAKLAND POINTE

DEVELOPER: CONNELLY BUILDERS, INC.

STONEHOUSE DISTRICT | JAMES CITY COUNTY | VIRGINIA

Project Contacts:	HWP/TRS
Project Number:	10503-00
Scale:	1"=50'
Date:	10/25/17
Sheet Title:	RECREATIONAL SPACE EXHIBIT



Rev.	Date	Description	Revised By
4	09/26/18	REVISED PER CHANGES IN ACCESS	JMB
3	02/22/18	REVISED PER VDOT COMMENTS	JMB
2	01/10/18	REVISED PER COUNTY COMMENTS	JMB
1	12/27/17	REVISED PER COUNTY COMMENTS	JMB

THIS PLAN HAS
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CONSULTING ENGINEERS

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MASTER PLAN
for
OAKLAND POINTE
DEVELOPER: CONNELLY BUILDERS, INC.
STONEHOUSE DISTRICT | JAMES CITY COUNTY | VIRGINIA

Project Contacts: HWP/TRS
Project Number: 10503-00
Scale: 1"=50' Date: 10/25/17
Sheet Title:
RENDERED
PROPOSED ROAD
IMPROVEMENTS
PLAN
Sheet Number
1 of 1

☐ 2011 BMP Standards and Specifications☒ 2013 Draft BMP Standards and SpecificationsProject Name: **W10503 Oakland Pointe**Date: **10/20/2017****CLEAR ALL**
(Ctrl+Shift+R)

data input cells

constant values

calculation cells

final results

BMP Design Specifications List: 2013 Draft Stds & Specs

Site Information**Post-Development Project (Treatment Volume and Loads)****Land Cover (acres)**

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed			9.92		9.92
Impervious Cover (acres)			4.62		4.62
					14.54

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
P _i (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)

9.03

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary		Treatment Volume and Nutrient Loads	
Forest/Open Space Cover (acres)	0.00	Treatment Volume (acre-ft)	0.5476
Weighted Rv (forest)	0.00	Treatment Volume (cubic feet)	23,855
% Forest	0%	TP Load (lb/yr)	14.99
Managed Turf Cover (acres)	9.92	TN Load (lb/yr)	107.22
Weighted Rv (turf)	0.22	(Informational Purposes Only)	
% Managed Turf	68%		
Impervious Cover (acres)	4.62		
Rv (impervious)	0.95		
% Impervious	32%		
Site Area (acres)	14.54		
Site Rv	0.45		

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)			9.92		9.92	0.22
Impervious Cover (acres)			4.62		4.62	0.95
Total					14.54	

CLEAR BMP AREAS

Total Phosphorus Available for Removal in D.A. A (lb/yr)	14.99
Post Development Treatment Volume in D.A. A (ft ³)	23,855

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
1. Vegetated Roof (RR)													
1.a. Vegetated Roof #1 (Spec #5)	45				0	0	0	0	0	0.00	0.00	0.00	
1.b. Vegetated Roof #2 (Spec #5)	60				0	0	0	0	0	0.00	0.00	0.00	
2. Rooftop Disconnection (RR)													
2.a. Simple Disconnection to A/B Soils (Spec #1)	50			0	0	0	0	0	0.00	0.00	0.00	0.00	
2.b. Simple Disconnection to C/D Soils (Spec #1)	25			0	0	0	0	0	0.00	0.00	0.00	0.00	
2.c. To Soil Amended Filter Path as per specifications (existing C/D soils) (Spec #4)	50			0	0	0	0	0	0.00	0.00	0.00	0.00	
2.d. To Dry Well or French Drain #1, Micro-Infiltration #1 (Spec #8)	50			0	0	0	0	25	0.00	0.00	0.00	0.00	
2.e. To Dry Well or French Drain #2, Micro-Infiltration #2 (Spec #8)	90			0	0	0	0	25	0.00	0.00	0.00	0.00	
2.f. To Rain Garden #1, Micro-Bioretenion #1 (Spec #9)	40			0	0	0	0	25	0.00	0.00	0.00	0.00	
2.g. To Rain Garden #2, Micro-Bioretenion #2 (Spec #9)	80			0	0	0	0	50	0.00	0.00	0.00	0.00	
2.h. To Rainwater Harvesting (Spec #6)	0			0	0	0	0	0	0.00	0.00	0.00	0.00	
2.i. To Stormwater Planter, Urban Bioretention (Spec #9, Appendix A)	40			0	0	0	0	25	0.00	0.00	0.00	0.00	
3. Permeable Pavement (RR)													
3.a. Permeable Pavement #1 (Spec #7)	45			0	0	0	0	25	0.00	0.00	0.00	0.00	
3.b. Permeable Pavement #2 (Spec #7)	75				0	0	0	25		0.00	0.00	0.00	
4. Grass Channel (RR)													
4.a. Grass Channel A/B Soils (Spec #3)	20			0	0	0	0	15	0.00	0.00	0.00	0.00	
4.b. Grass Channel C/D Soils (Spec #3)	10			0	0	0	0	15	0.00	0.00	0.00	0.00	
4.c. Grass Channel with Compost Amended Soils as per specs (see Spec #4)	20			0	0	0	0	15	0.00	0.00	0.00	0.00	
5. Dry Swale (RR)													
5.a. Dry Swale #1 (Spec #10)	40			0	0	0	0	20	0.00	0.00	0.00	0.00	
5.b. Dry Swale #2 (Spec #10)	60			0	0	0	0	40	0.00	0.00	0.00	0.00	
6. Bioretention (RR)													
6.a. Bioretention #1 or Micro-Bioretenion #1 or Urban Bioretention (Spec #9)	40			0	0	0	0	25	0.00	0.00	0.00	0.00	
6.b. Bioretention #2 or Micro-Bioretenion #2 (Spec #9)	80			0	0	0	0	50	0.00	0.00	0.00	0.00	
7. Infiltration (RR)													
7.a. Infiltration #1 (Spec #8)	50			0	0	0	0	25	0.00	0.00	0.00	0.00	
7.b. Infiltration #2 (Spec #8)	90			0	0	0	0	25	0.00	0.00	0.00	0.00	
8. Extended Detention Pond (RR)													
8.a. ED #1 (Spec #15)	0			0	0	0	0	15	0.00	0.00	0.00	0.00	
8.b. ED #2 (Spec #15)	15			0	0	0	0	15	0.00	0.00	0.00	0.00	
9. Sheetflow to Filter/Open Space (RR)													
9.a. Sheetflow to Conservation Area, A/B Soils (Spec #2)	75			0	0	0	0	0	0.00	0.00	0.00	0.00	
9.b. Sheetflow to Conservation Area, C/D Soils (Spec #2)	50			0	0	0	0	0	0.00	0.00	0.00	0.00	
9.c. Sheetflow to Vegetated Filter Strip, A Soils or Compost Amended B/C/D Soils (Spec #2 & #4)	50			0	0	0	0	0	0.00	0.00	0.00	0.00	

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
1. Vegetated Roof (RR)				
0		0.00	0.00	0.00
0		0.00	0.00	0.00

2. Rooftop Disconnection (RR)				
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00
40	0.00	0.00	0.00	0.00

3. Permeable Pavement (RR)				
25	0.00	0.00	0.00	0.00
25		0.00	0.00	0.00

4. Grass Channel (RR)				
20	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00

5. Dry Swale (RR)				
25	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00

6. Bioretention (RR)				
40	0.00	0.00	0.00	0.00
60	0.00	0.00	0.00	0.00

7. Infiltration (RR)				
15	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00

8. Extended Detention Pond (RR)				
10	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00

9. Sheetflow to Filter/Open Space (RR)				
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.00	AREA CHECK: OK.
TOTAL RUNOFF REDUCTION IN D.A. A (ft ³)	0	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)		14.99
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		0.00
TOTAL PHOSPHORUS REMAINING AFTER APPLYING RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		14.99
SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS		

TOTAL RUNOFF REDUCTION IN D.A. A (ft ³)		0
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		0.00
SEE WATER QUALITY COMPLIANCE TAB FOR SITE CALCULATIONS (Information Only)		

10. Wet Swale (no RR)													
10.a. Wet Swale #1 (Spec #11)	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
10.b. Wet Swale #2 (Spec #11)	0			0	0	0	0	40	0.00	0.00	0.00	0.00	
11. Filtering Practices (no RR)													
11.a. Filtering Practice #1 (Spec #12)	0			0	0	0	0	60	0.00	0.00	0.00	0.00	
11.b. Filtering Practice #2 (Spec #12)	0			0	0	0	0	65	0.00	0.00	0.00	0.00	
12. Constructed Wetland (no RR)													
12.a. Constructed Wetland #1 (Spec #13)	0			0	0	0	0	50	0.00	0.00	0.00	0.00	
12.b. Constructed Wetland #2 (Spec #13)	0			0	0	0	0	75	0.00	0.00	0.00	0.00	
13. Wet Ponds (no RR)													
13.a. Wet Pond #1 (Spec #14)	0			0	0	0	0	50	0.00	0.00	0.00	0.00	
13.b. Wet Pond #1 (Coastal Plain) (Spec #14)	0			0	0	0	0	45	0.00	0.00	0.00	0.00	
13.c. Wet Pond #2 (Spec #14)	0	8.83	4.62	0	0	22,985	22,985	75	0.00	14.42	10.82	3.61	
13.d. Wet Pond #2 (Coastal Plain) (Spec #14)	0			0	0	0	0	65	0.00	0.00	0.00	0.00	
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device- Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtering	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.c. Manufactured Treatment Device-Generic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	

10. Wet Swale (Coastal Plain) (no RR)				
25	0.00	0.00	0.00	0.00
35	0.00	0.00	0.00	0.00
11. Filtering Practices (no RR)				
30	0.00	0.00	0.00	0.00
45	0.00	0.00	0.00	0.00
12. Constructed Wetland (no RR)				
25	0.00	0.00	0.00	0.00
55	0.00	0.00	0.00	0.00
13. Wet Ponds (no RR)				
30	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00
40	0.00	103.19	41.28	61.92
30	0.00	0.00	0.00	0.00
14. Manufactured BMP (no RR)				
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	4.62	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	8.83	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)		9.03
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)		14.99
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		10.82
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		0.00
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)		10.82
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)		4.17
SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS		
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)		41.28
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)		41.28

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	4.62	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	4.62	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	9.92	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	8.83	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	
Site Treatment Volume (ft ³)	1					
Runoff Reduction Volume and TP By Drainage Area						
	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	14.99	0.00	0.00	0.00	0.00	14.99
TP LOAD REDUCTION ACHIEVED (lb/yr)	10.82	0.00	0.00	0.00	0.00	10.82
TP LOAD REMAINING (lb/yr)	4.17	0.00	0.00	0.00	0.00	4.17
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	41.28	0.00	0.00	0.00	0.00	41.28
Total Phosphorus						
FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	14.99					
TP LOAD REDUCTION REQUIRED (lb/yr)	9.03					
TP LOAD REDUCTION ACHIEVED (lb/yr)	10.82					
TP LOAD REMAINING (lb/yr):	4.17					
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00	**				
	** TARGET TP REDUCTION EXCEEDED BY 1.79 LB/YEAR **					
Total Nitrogen (For Information Purposes)						
POST-DEVELOPMENT LOAD (lb/yr)	107.22					
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	41.28					
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	65.95					

Runoff Volume and Curve Number Calculations

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
0.00	0.00	0.00

Use NOAA Atlas 14 (<http://hdsc.mws.noa.gov/hdsc/pfds/>)

*Notes (see below):

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water quantity requirements. See VRRM User's Guide and Documentation for additional information.

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in watershed-inches and shown in the spreadsheet as RV(watershed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal. Otherwise RV(watershed-inch) must be multiplied by the drainage area.

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

Drainage Area Curve Numbers and Runoff Depths*

Curve numbers (CN, CNadj) and runoff depths (RV_{Developed}) are computed with and without reduction practices.

Drainage Area A			A Soils	B Soils	C Soils	D Soils	Total Area (acres):	14.54
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	Runoff Reduction Volume (ft³):	0	
	CN	30	55	70	77			
	Area (acres)	0.00	0.00	9.92	0.00			
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00			
	CN	39	61	74	80			
	Area (acres)	0.00	0.00	4.62	0.00			
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.00			
	CN	98	98	98	98			
			CN(D.A. A)					
		82						
		1-year storm	2-year storm	10-year storm				
RV _{Developed} (watershed-inch) with no Runoff Reduction*		0.00	0.00	0.00				
RV _{Developed} (watershed-inch) with Runoff Reduction*		0.00	0.00	0.00				
Adjusted CN*		100	100	100				
*See Notes above								
Drainage Area B			A Soils	B Soils	C Soils	D Soils	Total Area (acres):	0.00
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	Runoff Reduction Volume (ft³):	0	
	CN	30	55	70	77			
	Area (acres)	0.00	0.00	0.00	0.00			
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00			
	CN	39	61	74	80			
	Area (acres)	0.00	0.00	0.00	0.00			
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.00			
	CN	98	98	98	98			
			CN(D.A. B)					
		0						
		1-year storm	2-year storm	10-year storm				
RV _{Developed} (watershed-inch) with no Runoff Reduction*		0.00	0.00	0.00				
RV _{Developed} (watershed-inch) with Runoff Reduction*		0.00	0.00	0.00				
Adjusted CN*		0	0	0				
*See Notes above								
Drainage Area C			A Soils	B Soils	C Soils	D Soils	Total Area (acres):	0.00
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	Runoff Reduction Volume (ft³):	0	
	CN	30	55	70	77			
	Area (acres)	0.00	0.00	0.00	0.00			
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00			
	CN	39	61	74	80			
	Area (acres)	0.00	0.00	0.00	0.00			
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.00			
	CN	98	98	98	98			
			CN(D.A. C)					
		0						
		1-year storm	2-year storm	10-year storm				
RV _{Developed} (watershed-inch) with no Runoff Reduction*		0.00	0.00	0.00				
RV _{Developed} (watershed-inch) with Runoff Reduction*		0.00	0.00	0.00				
Adjusted CN*		0	0	0				
*See Notes above								
Drainage Area D			A Soils	B Soils	C Soils	D Soils	Total Area (acres):	0.00
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	Runoff Reduction Volume (ft³):	0	
	CN	30	55	70	77			
	Area (acres)	0.00	0.00	0.00	0.00			
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00			
	CN	39	61	74	80			
	Area (acres)	0.00	0.00	0.00	0.00			
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.00			
	CN	98	98	98	98			
			CN(D.A. D)					
		0						
		1-year storm	2-year storm	10-year storm				
RV _{Developed} (watershed-inch) with no Runoff Reduction*		0.00	0.00	0.00				
RV _{Developed} (watershed-inch) with Runoff Reduction*		0.00	0.00	0.00				
Adjusted CN*		0	0	0				
*See Notes above								
Drainage Area E			A Soils	B Soils	C Soils	D Soils	Total Area (acres):	0.00
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00	Runoff Reduction Volume (ft³):	0	
	CN	30	55	70	77			
	Area (acres)	0.00	0.00	0.00	0.00			
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.00			
	CN	39	61	74	80			
	Area (acres)	0.00	0.00	0.00	0.00			
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.00			
	CN	98	98	98	98			
			CN(D.A. E)					
		0						
		1-year storm	2-year storm	10-year storm				
RV _{Developed} (watershed-inch) with no Runoff Reduction*		0.00	0.00	0.00				
RV _{Developed} (watershed-inch) with Runoff Reduction*		0.00	0.00	0.00				
Adjusted CN*		0	0	0				
*See Notes above								

DEQ Virginia Runoff Reduction Method New Development Compliance Spreadsheet - Version 3.0

BMP Design Specifications List: 2013 Draft Stds & Specs

Site Summary

Total Rainfall = 43 inches

Site Land Cover Summary

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	9.92	0.00	9.92	68
Impervious Cover (acres)	0.00	0.00	4.62	0.00	4.62	32
					14.54	100

Site Tv and Land Cover Nutrient Loads

Site Rv	0.45
Treatment Volume (ft ³)	23,855
TP Load (lb/yr)	14.99
TN Load (lb/yr)	107.22

Total TP Load Reduction Required (lb/yr)	9.03
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Site Compliance Summary

Total Runoff Volume Reduction (ft ³)	0
Total TP Load Reduction Achieved (lb/yr)	10.82
Total TN Load Reduction Achieved (lb/yr)	41.28
Remaining Post Development TP Load (lb/yr)	4.17
Remaining TP Load Reduction (lb/yr) Required	0.00

** TARGET TP REDUCTION EXCEEDED BY 1.79 LB/YEAR **

Drainage Area Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0.00
Managed Turf (acres)	9.92	0.00	0.00	0.00	0.00	9.92
Impervious Cover (acres)	4.62	0.00	0.00	0.00	0.00	4.62
Total Area (acres)	14.54	0.00	0.00	0.00	0.00	14.54

Drainage Area Compliance Summary

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	Total
TP Load Reduced (lb/yr)	10.82	0.00	0.00	0.00	0.00	10.82

TN Load Reduced (lb/yr)	41.28	0.00	0.00	0.00	0.00	41.28
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Drainage Area A SummaryLand Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	9.92	0.00	9.92	68
Impervious Cover (acres)	0.00	0.00	4.62	0.00	4.62	32
					14.54	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
Total Impervious Cover Treated (acres)	4.62							
Total Turf Area Treated (acres)	8.83							
Total TP Load Reduction Achieved in D.A. (lb/yr)	10.82							
Total TN Load Reduction Achieved in D.A. (lb/yr)	41.28							

Drainage Area B SummaryLand Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
Total Impervious Cover Treated (acres)	0.00							
Total Turf Area Treated (acres)	0.00							
Total TP Load Reduction Achieved in D.A. (lb/yr)	0.00							
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.00							

Drainage Area C SummaryLand Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
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Total Impervious Cover Treated (acres)	0.00
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	0.00
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.00

Drainage Area D SummaryLand Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
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Total Impervious Cover Treated (acres)	0.00
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	0.00
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.00

Drainage Area E Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.00	0.00	0
Impervious Cover (acres)	0.00	0.00	0.00	0.00	0.00	0
					0.00	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft ³)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
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Total Impervious Cover Treated (acres)	0.00
Total Turf Area Treated (acres)	0.00
Total TP Load Reduction Achieved in D.A. (lb/yr)	0.00
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.00

Runoff Volume and CN Calculations

	1-year storm	2-year storm	10-year storm
Target Rainfall Event (in)	0.00	0.00	0.00

Drainage Areas	RV & CN	Drainage Area A	Drainage Area B	Drainage Area C	Drainage Area D	Drainage Area E
CN		82	0	0	0	0
RR (ft ³)		0	0	0	0	0
1-year return period	RV wo RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	RV w RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	CN adjusted	100	0	0	0	0
2-year return period	RV wo RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	RV w RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	CN adjusted	100	0	0	0	0
10-year return period	RV wo RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	RV w RR (ws-in)	0.00	0.00	0.00	0.00	0.00
	CN adjusted	100	0	0	0	0

Version 2018
(Last updated 9/18/2018)



Please make sure to use the accompanying Excel Spreadsheet to calculate the numbers below.

FISCAL IMPACT WORKSHEET AND ASSUMPTIONS

Please complete all *applicable* sections. Please use the provided spreadsheet to perform calculations. If space provided is insufficient, please feel free to include additional pages. If you have any questions please contact the Planning Office at 757-253-6685 or planning@jamescitycountyva.gov

1a) PROPOSAL NAME: Oakland Pointe

1b) Does this project propose residential units? Yes ☒ No ☐ (if no, skip Sec. 2)

1c) Does this project include commercial or industrial uses? Yes ☐ No ☒ (If no, skip Sec. 3)

Fiscal Impact Worksheet Section 2: Residential Developments

2a) TOTAL NEW DWELLING UNITS. Please indicate the total number of each type of proposed dwelling unit. Then, *add* the total number of new dwelling units.

Single-Family Detached		Apartment	126
Townhome/Condominium/Single-Family		Manufactured Home	
Total Dwelling Units			

Are any units affordable? Yes ☒ No ☐ (If yes, how many?) 126

Residential Expenses – School Expenses

2b) TOTAL NEW STUDENTS GENERATED. *Multiply* the number of each type of proposed unit from (2a) its corresponding Student Generation Rate below. Then, *add* the total number of students generated by the proposal.

Unit Type	Number of Proposed Units (from 2a)	Student Generation Rate	Students Generated
Single-Family Detached		0.4	
Townhome/Condo/Attached		0.17	
Apartment	126	0.31	39.06
Manufactured Home		0.46	
Total			39.06

2c) TOTAL SCHOOL EXPENSES. *Multiply* the total number of students generated from (2b) by the Per-Student Total Expenses below.

Total Students Generated	Per-Student Operating Expenses	Per-Student Capital Expenses	Per-Student Total Expenses	Total School Expenses
39.06	\$8,762.38	\$1,948.32	\$10,710.70	\$ 418,359.73

Residential Expenses - Non-School Expenses

2d) TOTAL POPULATION GENERATED. *Multiply* the number of proposed units from (2a) and multiply by the Average Household Size number below.

Total Units Proposed	Average Household Size	Total Population Generated
126	2.45	308.7

2e) TOTAL NON-SCHOOL EXPENSES. *Multiply* the population generated from (2d) by the Per Capita Non-School Expenses below.

Total Population Generated	Per-Capita Non-School Expenses	Total Non-School Expenses
308.7	\$680.24	\$ 209,990.09

2f) TOTAL RESIDENTIAL EXPENSES. *Add* school expenses from (2c) and non-school expenses (2e) to determine total residential expenses.

Total School Expenses	Non-School Expenses	Total Residential Expenses
\$ 418,359.73	\$ 209,990.09	\$ 628,349.82

Residential Revenues

2g) TOTAL REAL ESTATE EXPECTED MARKET VALUE. Write the number of each type of units proposed from (2a). Then *determine the average* expected market value for each type of unit. Then, *multiply* the number of unit proposed by their average expected market value. Finally, *add* the total expected market value of the proposed units.

Unit Type:	Number of Units:	Average Expected Market Value:	Total Expected Market Value:
Single-Family Detached		\$	\$
Townhome/Condo/Multi-family	126 (apartments)	\$ 125,000.00	\$ 15,750,000.00
Total:		N/A	\$

- 2h) TOTAL REAL ESTATE TAXES PAID. *Multiply* the total market value from (2g) by the real estate tax rate below.

Total Market Value	Real Estate Tax Rate	Total Real Estate Taxes Paid
\$ 15,750,000.00	.0084	\$ 132,300.00

- 2i) TOTAL PERSONAL PROPERTY TAXES PAID. *Multiply* the total real estate taxes paid (2h) by the property tax average below.

Real Estate Tax Paid	Personal Property Tax Average	Personal Property Taxes Paid
\$ 132,300.00	0.15	\$ 19,845.00

- 2j) TOTAL SALES & MEALS TAXES PAID. *Multiply* the total real estate taxes paid (2h) by the sales and meals tax average below:

Real Estate Tax Paid	Sales and Meals Tax Average	Total Sales & Meals Taxes Paid
\$ 132,300.00	.09	\$ 11,907.00

- 2k) TOTAL CONSERVATION EASEMENT TAXES PAID. If the proposal contains a conservation easement, *multiply* the size of the proposed conservation easement by the conservation easement assessment rate.

Proposed Conservation Easement Size	Assessment Rate	Conservation Easement Taxes Paid
0	\$2000/acre (prorated)	\$ N/A

- 2l) TOTAL HOA TAXES PAID. If the HOA will own any property that will be rented to non- HOA members, *multiply* the expected assessed value of those rentable facilities by the real estate tax rate below.

HOA Property Type	Total Assessed Value	Real Estate Tax Rate	Total HOA Taxes Paid
	0	.0084	\$ N/A

- 2m) TOTAL RESIDENTIAL REVENUES. *Add* all residential taxes paid to the County from (2h) through (2l).

Total Residential Revenues	\$ 164,052.00
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- 2n) RESIDENTIAL FISCAL IMPACT. Subtract total residential revenues (2m) from total residential expenses (2f).

Total Residential Ex	Total Residential Revenues	Total Residential Fiscal Impact
\$ 628,349.82	\$ 164,052.00	(464,297.82)

Fiscal Impact Analysis Worksheet Section 3: Commercial and Industrial Developments

Commercial and Industrial Expenses

N/A

3a) TOTAL NEW BUSINESSES. How many new businesses are proposed? _____
(Include all businesses that will rent or lease space at the location as part of the proposal, including probable tenants of an office park or strip mall).

3b) TOTAL COMMERCIAL EXPENSES. *Multiply* the total business real estate expected assessment value from (3c) below by the Commercial Expenses Rate below.

Total Expected Assessment Value	Commercial Expense Rate	Total Commercial Expenses
\$1	0.00468	\$ 0

Commercial & Industrial Revenues

3c) TOTAL REAL ESTATE EXPECTED ASSESSMENT VALUE. *Estimate* the expected real estate assessment value, at buildout, of all proposed commercial element properties below.

Proposed Business Properties (by use and location)	Expected Assessment Value
Total: N/A	\$ N/A

3d) TOTAL REAL ESTATE TAXES PAID. *Multiply* the total expected market property value from (3c) by the real estate tax rate below.

Expected Market Value	Real Estate Tax Rate	Real Estate Taxes Paid
N/A	.0084	\$ 0.0

3e) TOTAL BUSINESS PERSONAL PROPERTY TAXES PAID. *Multiply* the total business capitalization for each proposed commercial element by the business personal property tax rate below. Then *add* the total personal property taxes paid.

Proposed Business Name	Total Business Capitalization	Personal Property Tax Rate	Total Business Property Taxes Paid
N/A		0.01	N/A
N/A		0.01	N/A

		0.01	
Total:		N/A	\$ N/A

3f) TOTAL BUSINESS MACHINERY AND TOOLS TAXES PAID. If any manufacturing is proposed, *multiply* the total business capitalization for each proposed manufacturing element by the business machinery and tools tax rate below. Then, *add* the machinery and tools tax paid.

Proposed Business Name	Total Business Capitalization	Machinery and Tools Tax Rate	Total Business Property Taxes Paid
		0.01	
		0.01	
Total: N/A		N/A	\$ N/A

3g) TOTAL SALES TAXES PAID. *Estimate* the applicable total gross retail sales, prepared meals sales, and hotel/motel room sales for proposal's commercial elements below. Then, *multiply* the projected commercial gross sales by the applicable sales tax rates. Then, *add* the total sales taxes paid.

Tax Type	Projected Gross Sales	Sales Tax Rates	Sales Taxes Paid
Retail Sales		0.01 of Gross Retail Sales	
Prepared Meals		0.04 of Prepared Sales	
Hotel, Motel		0.02 of Gross Sales*	
Total:	N/A	N/A	\$ N/A

*Actual Occupancy Tax is 5% of Gross Sales; however, 60% of those funds are targeted to tourism.

3h) TOTAL BUSINESS LICENSES FEES PAID. Estimate each business element's total gross sales. Multiply each business element's projected gross sales by the Annual Business License rate to determine annual business licenses fee paid.

Proposed Business Name(s)	Business Type* (see exhibit sheet)	Projected Total Gross Sales	Business License Rate	Annual Business License Fees Paid
N/A	Professional Services		0.0058	N/A
N/A	Retail Services		0.0020	N/A
N/A	Contractors		0.0016	N/A
N/A	Wholesalers		0.0005	N/A
N/A	Exempt*		No fee due	N/A
N/A	Other Services		0.0036	N/A
N/A	Total	N/A	N/A	\$ 0

3i) TOTAL COMMERCIAL AND INDUSTRIAL REVENUES. *Add* the total taxes and fees paid by all of the business elements from (3d) through (3h).

Total Commercial and Industrial Revenues	\$ 0
---	------

3j) COMMERCIAL FISCAL IMPACT. *Subtract* total commercial and industrial revenues (3i) from total commercial and industrial expenses (3b).

Total Commercial	Total Commercial Revenues	Total Commercial Fiscal Impact
N/A	N/A	\$ 0

3k) TOTAL PROPOSED FISCAL IMPACT. *Add* residential fiscal impacts (2n) and commercial fiscal impacts (3j).

Residential Fiscal Impact	Commercial Fiscal Impact	Total Proposed Fiscal Impact
(464,297.82)	0	\$ (464,297.82)

Fiscal Impact Analysis Worksheet Section 4: Current Land Use

Current Residential Use (If there are no existing residential units, skip to (4g)).

4a) TOTAL CURRENT DWELLING UNITS. Please indicate the total number of each type of existing dwelling unit. Then, *add* the total number of existing dwelling units.

Single-Family Detached	1	Apartment	
Townhome/Condominium/Single-Family Attached		Manufactured Home	
Total Dwelling Units			

Residential Expenses - School Expenses

4b) TOTAL CURRENT STUDENTS. *Multiply* the number of existing units from (4a) by its corresponding Student Generation Rate below. Then, *add* the total number of existing students.

Unit Type	Number of Existing Units	Student Generation Rate	Existing Students
Single-Family Detached	1	0.4	0.4
Townhome/Condo/Attached		0.17	
Apartment		0.31	
Manufactured Home		0.46	
Total	1	N/A	0.4

- 4c) TOTAL CURRENT SCHOOL EXPENSES. *Multiply* the total number of current students from (4b) by the per-student school cost below.

Number of Existing Students	Per-Student School Cost	Current School Expenses
0.4	\$10,710.70	\$ 4,284.28

Residential Expenses - Non-School Expenses

- 4d) TOTAL CURRENT POPULATION. *Multiply* the total number of existing units from (4a) by average household size below.

Total Existing Units	Average Household Size	Total Current Population
1	2.45	2.45

- 4e) TOTAL CURRENT NON-SCHOOL EXPENSES. *Multiply* the current population from (4d) by per-capita non-school expenses below.

Total Current Population	Per-Capita Non-School Expenses	Current Non-School Expenses
2.45	\$680.24	\$ 1,666.58

- 4f) TOTAL RESIDENTIAL EXPENSES. *Add* school expenses from (4c) and non-school expenses from (4e).

School Expenses	Non-School Expenses	Residential Expenses
\$ 4,284.28	\$ 1,666.58	\$ 5,950.86

Residential Revenues

- 4g) TOTAL CURRENT ASSESSMENT VALUE. *Search* for each residential property included in the proposal on the Parcel Viewer at <http://property.jccgov.com/parcelviewer/Search.aspx>. *Indicate* each property's total assessment value below. Then, *add* total assessment values.

Property Address and Description	Assessment Value
7581Richmond Road	\$ 487,600
	\$
	\$
Total:	\$ 487,600

- 4h) TOTAL CURRENT REAL ESTATE TAXES PAID. *Multiply* the total assessment value from (4g) by the real estate tax rate below.

Total Assessment Value	Real Estate Tax Rate	Real Estate Taxes Paid
487,600	.0084	\$ 4,095.44

- 4i) TOTAL CURRENT PERSONAL PROPERTY TAXES PAID. *Multiply* total real estate taxes paid from (4h) by the personal property tax average below.

Real Estate Tax Paid	Personal Property Tax Average	Personal Property Paid
4,095.44	0.15	\$ 614.37

- 4j) TOTAL CURRENT SALES AND MEALS TAXES PAID. *Multiply* the total real estate taxes paid from (4h) by the sales and meals tax average below.

Real Estate Tax Paid	Sales and Meals Tax Average	Average Excise Tax Paid
4,095.44	.09	\$ 368.58

- 4k) TOTAL CURRENT RESIDENTIAL REVENUES. *Add* all current residential taxes paid to the County from (4h) through (4j).

Total Current Residential Revenues	\$ 5,078.39
------------------------------------	-------------

- 4l) CURRENT RESIDENTIAL FISCAL IMPACT. *Subtract* total residential revenues (4k) from total residential expenses (4f).

Total Residential	Total Residential Revenues	Total Residential Fiscal Impact
5,950.86	5,078.39	\$ 872.47

- 4m) FINAL RESIDENTIAL FISCAL IMPACT. *Subtract* current residential fiscal impact from (4l) from proposed residential fiscal impact from (2n).

Proposed Residential Impact	Current Residential Impact	Final Residential Fiscal Impact
464,297.82	872.47	\$ 463,425.35

Current Commercial Use

Current Commercial Expenses (if there are no current businesses or commercial properties, skip to (5k).

- 5a) TOTAL CURRENT BUSINESSES. How many businesses exist on the proposal properties? __
(Include all businesses that rent or lease space at the location).

- 5b) TOTAL CURRENT COMMERCIAL EXPENSES. *Multiply* the current number of businesses operating on the proposal properties by the per-business expense rate below.

Total Expected Assessment Value	Commercial Expense Rate	Total Commercial Expenses
	0.00468	\$

Current Commercial Revenues

- 5c) TOTAL CURRENT ASSESSMENT VALUE. *Search* for each commercial property included in the proposal on the Parcel Viewer at <http://property.jccgov.com/parcelviewer/Search.aspx>. *Indicate* each property's total assessment value below. Then, *add* total assessment values.

Addresses	Assessment Value	Real Estate Tax Rate	Real Estate Tax Paid
		.0084	
		.0084	
Total:			\$

- 5d) TOTAL CURRENT BUSINESS PERSONAL PROPERTY TAXES PAID. *Multiply* the total business capitalization for each current commercial element by the business personal property tax rate below. Then *add* the total personal property taxes paid.

Current Business	Total Business	Personal Property Tax Rate	Business Property Taxes Paid
		0.01	
		0.01	
		0.01	
Total:		N/A	\$

- 5e) TOTAL CURRENT MACHINERY AND TOOLS TAX PAID. If any manufacturing exists, *multiply* the total capitalization for manufacturing equipment by the business machinery and tools tax rate below.

Current Business	Total Business Capitalization	Personal Property Tax Rate	Machinery and Tools Tax Paid
		0.01	\$

- 5f) TOTAL CURRENT SALES TAXES PAID. *Estimate* the applicable total gross retail sales, prepared meals sales, and hotel/motel sales for existing commercial elements below. Then, *multiply* the projected commercial gross sales by the applicable sales tax rates. Then, *add* the total sales taxes paid.

Activity	Projected Gross Sales	Tax Rate	Sales Taxes Paid
Retail Sales		0.01 of Gross Retail Sales	
Prepared Meals		0.04 of Prepared Sales	
Hotel, Motel		0.02 of Gross Sales*	
Total:	N/A	N/A	\$

*Actual Occupancy Tax is 5% of Gross Sales; however, 60% of those funds are targeted to tourism.

5g) TOTAL CURRENT BUSINESS LICENSES FEES PAID. *Estimate* each current business element's total gross sales. Then, *multiply* each business element's projected gross sales by the Annual Business License rate to determine annual business licenses fee paid. Then, *add* the total business license fees paid.

Business Type	Gross Sales	Business License Rate	Annual Business License Fees Paid
Professional Services		\$0.0058	
Retail Sales		\$0.0020	
Contractors		\$0.0016	
Wholesalers		\$0.0005	
Manufacturers		No tax	
Other Services		\$0.0036	

5h) TOTAL CURRENT COMMERCIAL REVENUES. *Add* all current commercial revenues paid by existing businesses from (5c) through (5g).

Total Current Commercial Revenues	\$
--	----

5i) CURRENT COMMERCIAL FISCAL IMPACT. *Subtract* total commercial revenues (5h) from total residential expenses (5b).

Total Commercial Expenses	Total Commercial Revenues	Total Commercial Fiscal Impact
		\$

5j) FINAL COMMERCIAL FISCAL IMPACT. *Subtract* current commercial fiscal impact from (5i) from proposed commercial fiscal impact from (3j).

Proposed Commercial Impact	Current Commercial Impact	Final Commercial Fiscal Impact
		\$

5k) FINAL FISCAL IMPACT. *Subtract* the final commercial fiscal impact from (5i) from final residential fiscal impact from (4m).

Final Residential Impact	Final Commercial Impact	Final Fiscal Impact
\$ 463,425.35	\$0	\$463,425.35

Fiscal Impact Worksheet Section 6: Phasing

Residential Phasing

6a) *Copy and paste* the residential phasing template from the accompanying Excel sheet to the page below.

Commercial Phasing

6b) *Copy and paste* the commercial phasing template from the accompanying Excel sheet to the page below.

Final Phasing Projections

6c) *Copy and paste* the final phasing projection from the accompanying Excel sheet to the page below.

Fiscal Impact Worksheet Section 7: Employment

7a) *Copy and paste* the employment projections from the accompanying Excel sheet to the page below.

DEFINITIONS AND ASSUMPTIONS

Apartment – A building used, or intended to be used as the residence of three or more families living independently of each other. Tenants have no equity in the dwelling.

Assessment Value – Assessment value is assumed to be within 1% of market value. Market value drives assessment value.

Buildout – All data and assumptions reflect the fiscal impact of the proposal at buildout.

Commercial Expense Rate – The commercial expense rate uses the proportional valuation method to determine individual business expenses. Under that method businesses are collectively responsible for impact related to the commercial property valuation.

This rate assumes that the costs of providing County services to a business are directly correlated with that business's property assessment. This assumes more valuable properties have generally more intense uses incurring greater County expenses.

Condominium – A building, or group of buildings, in which units are owned individually and the structure, common areas and common facilities are owned by all the owners on a proportional, undivided basis.

Contractor – Any person, firm or corporation accepting or offering to accept orders or contracts for doing any work on or in any building or structure, any paving, curbing or other work on sidewalks, streets, alleys or highways, any excavation of earth, rock or other materials, any construction of sewers and any installation of interior building components.

Direct Impact – The worksheet only calculates direct financial impacts on the County budget. The worksheet is only one of many development management tools and as such, does not make a determination whether any type of development “should” happen based solely on that proposal's fiscal impact. The tool is not designed to measure non-budget impacts, such as increased traffic or nonbudget benefits, such as forwarding the goals of the Comprehensive Plan. Costs incurred by other entities, such as other localities or the state, remain uncouncted.

Dwelling – Any structure which is designed for use for residential purposes, except hotels, motels, boardinghouses, lodging houses and tourist cabins.

Exempt – Certain types of business activities or products are exempted from annual County business licenses. These include manufacturers, insurance agencies, apartment complexes and gasoline sales.

Fees & Licenses – All fees collected by the County, including business and professional licenses, planning fees, building permit fees, stormwater fees, environmental inspection fees, septic tank fees,

dog licenses and motor vehicle licenses, are deducted from the per-capita and per-business budgetary costs of each department that collects them.

Fiscal Impact Analysis – The County has created a set of standardized data and assumptions to streamline both the creation and review of fiscal impact studies. The County had no itemized list of questions for fiscal impact study creators to answer, resulting in portions of fiscal impact studies with no bearing on the County's budgetary bottom line. The guesswork is removed from the creation of these documents. The data used by fiscal impact study authors also came from myriad sources, often within the County, which were difficult to verify. The fiscal impact worksheet allows consistency across multiple fiscal impact studies.

Fiscal Impact Worksheet – The worksheet helps the applicant present relevant data to the County, using data verified by the County. The worksheet provides consistency across all fiscal impact analyses.

Non-School Expenses – Non-school expenses include all FY10 non-school budget spending. Non-school expenses are calculated using the Proportional Variation method. Using the Proportional Variation method, residents and businesses are assumed to be responsible for differing percentages of the County's non-school spending.

Manufacturing – Assembly of components, pieces, or subassemblies, or the process of converting raw, unfinished materials into different products, substances or purposes.

Market Value – Market value is assumed to be within 1% of assessment value. Market value drives assessment value.

Manufactured Home – A manufactured home is a structure not meeting the specifications or requirements or a manufactured home, designed for transportation after fabrication. The only manufactured homes counted in the Student Generation figure are those in designated manufactured home parks. Manufactured homes on individual lots are indistinguishable from single-family detached dwellings for the purposes of the worksheet.

Phasing – All residential developments are assumed to have an absorption rate of 20% per annum. All commercial development are assumed to have an absorption rate of 20% per annum. The date stamp Year 1 in the phasing template represents 365 days after the Board of Supervisors approval.

Professional Services – Work performed by an independent contractor within the scope of the practice of accounting, actuarial services, architecture, land surveying, landscape architecture, law, dentistry, medicine, optometry, pharmacy or professional engineering. Professional services shall also include the services of an economist procured by the State Corporation Commission.

Proportional Valuation Impact – Proportional valuation impact assumes that a proposed residential or commercial project's fiscal impact is proportional to the percentage of the total tax base that is either residential or commercial.

James City's proportional valuation is calculated using the County's Real Estate Mapping GIS program. The program calculated an aggregate property assessment value of \$12,893,394,900 for the entire County. The program calculated an aggregate commercial and industrial assessment value of \$1,631,761,400. Dividing the commercial value by the total value shows that commercial and industrial properties compose 13% of the total property tax base and are responsible for 13% of County non-school expenses. This results in residential development being responsible for Schools impacts and 87% of non-school County operations. The proportional valuation method does not factor other assorted residential and commercial taxes, fees and licenses into account. As 13% of the tax base, businesses contribute 13% for all County non-school expenses. As 87% of the tax base, residents contribute 87% for all County non-school expenses.

Furthermore, individual business expenses to the County are calculated using the proportional valuation impact method. (See Commercial Expense Rate)

Per-Business Expense Rate – The per-business expense rate assumes that the County incurs non-school expenses equal to 0.04% of the commercial real estate assessment of any given business.

Per Capita Evaluation Method – This worksheet uses the Per Capita Evaluation method to assign per-capita and per-business costs to non-school expenses. This method assumes that current per-capita and per-business expenditures and service levels are consistent with future per-capita and per-business expenditures and service levels.

Per Capita – Per capita calculations divide each department's spending, minus fees and state contributions, by the current County population. This number excludes institutional residents in detention at correctional facilities and mental institutions. Total population is determined from James City County Planning Division figures.

Per Student – Per student calculations divide County contributions to WJCC Schools, minus state educational contributions, by the total number of K-12 students living in James City and also attending WJCC Schools. Total students are determined from Williamsburg-James City County Schools School Year enrollment reports.

Per Business – Per business calculations divide each departments spending, minus fees and state contributions, by the total number of County businesses. Total businesses are determined by the number of business licenses issued.

Total Number of JCC Businesses				5490*
Percentage	of	Property	Tax	13%**
Assessments				

*James City County Commissioner of the Revenue

**Commercial impacts are calculated on a proportional variation process

Proffer – Proffers paid for schools can only be applied toward the capital expense portion of per-student school expenses. (See Board of Supervisors’ Proffer Policy.)

Retail Services – Display and sale of merchandise at retail or the rendering of personal services, such as food, drugs, clothing, furniture, hardware, appliances, barber and beauty, antiques, and household uses and other uses.

Single-Family Detached Dwelling – A detached structure arranged or designed to be occupied by one family, the structure only having one dwelling unit.

State Contributions – The state contributes both targeted and unspecified funds to the James City County budget. Funds for specific departments were subtracted from the budget totals of those departments. Unspecified state fund amounts were compiled, then evenly subtracted (7.75% of each department total) across all non-school departments.

Student Generation Rate – The student generation rate employs a demographic multiplier. The 5-year averages from the American Community Survey from the U.S. Census Bureau is utilized to develop accurate estimates of the demographics based on each household.

Townhome –In a structure containing three or more dwelling units, a dwelling unit for single-family occupancy, not more than three stories in height, attached by one or more vertical party walls extending to the roof sheathing without passageway openings to one or more additional such dwelling units, each of which is served by an individual exterior entrance or entrances.



5248 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
Phone (757) 253-0040
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aesva.com

November 20, 2018

Mr. Paul Holt
Planning Director
James City County
101-A Mounts Bay Road
P.O. Box 8784
Williamsburg, Virginia 23187

**RE: Oakland Pointe
Parks and Recreation Exception Request
Rezoning Application
AES Project Number: W10503-00**

Dear Mr. Holt:

AES Consulting Engineers on behalf of Connelly Development, LLC is requesting an exception to the James City County Recreational Facility Development Guidelines for the subject project. Pursuant to the recent adoption of the Master Plan for Parks and Recreation (April 11, 2017), an exception is allowed by the Board of Supervisors through recommendations from the Director of Planning and the Director of Parks and Recreation.

Our rezoning proposal shall meet the guideline standards as listed for the park area, bike/jogging trail and playground area; however, the areas of exception are the hard court surface and the multi-use field.

Our proposal shall include a park area and playground with a pavilion located within close proximity to each to serve the entire family. In addition, over 2000 feet of multi-use trail is provided within the site that connects to a trail along Richmond Road. This provides excellent connectivity to adjacent properties.

The hard court surface requirement is an issue with long term consequences for most developments as they generally lead to being a hangout for activities that create a disturbance to the neighbors. In lieu of this court, this proposal is providing a dog park area that appeals to a larger percentage of the residents.

The field requirement appears to be more a question of size and location. Our proposal provides a field, but the dimensions fall short of the requirement. We submit that the field is large enough to engage in multiple activities and serve the intended function. The location does encroach into the buffer only because that area is already cleared and the wooded buffer to the neighbors is quite large. This area can be mitigated elsewhere on the site and create a more useful buffer than the large buffer that already exist in the rear of this property.

Mr. Paul Holt
November 20, 2018

AES Project Number: W10503-00
page 2 of 2

We appreciate the time spent by the various review agencies in the review and guidance for this project. If anyone has any questions in reference to this project please do not hesitate to call me at my office at 757-253-0040.

Sincerely,

AES Consulting Engineers



Howard W. Price
Principal
howard.price@aesva.com

Traffic Analysis For Oakland Pointe Apartments

JAMES CITY COUNTY, VIRGINIA

For:
Connelly Development, LLC

By:
**DRW Consultants, LLC
Midlothian, VA**

September 23, 2018

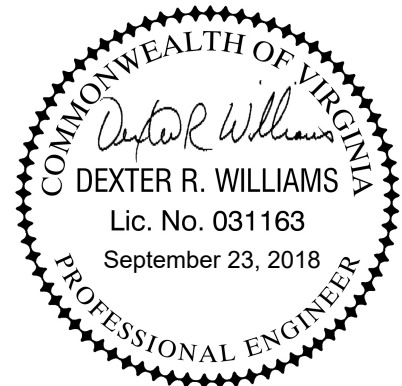
Traffic Analysis For Oakland Pointe Apartments

JAMES CITY COUNTY, VIRGINIA

For:
Connelly Development, LLC

By:
**DRW Consultants, LLC
Midlothian, VA**

September 23, 2018



FOREWORD

This traffic study is the latest update of the original November 20, 2017 study for Oakland Pointe Apartments.

Following are the revisions since the original study:

- 1. The eastbound left turn lane on Rt. 60 at Croaker Road will be reconstructed to have 400 feet of storage/100-foot taper. The original study had 300 feet storage/100-foot taper. The existing left turn lane has 200 feet storage.*
- 2. Oakland Pointe Apartments will have access only on Oakland Drive. The original study had access on Rt. 60 Richmond Road.*
- 3. The unsignalized crossover at Rt. 60/Oakland Drive will have median noses cut back and yield bar striping control in the crossover like other locations on Rt. 60. This is in addition to the westbound left turn lane on Rt. 60 at the crossover that was included in the original study.*
- 4. Traffic level of service at Rt. 60/Oakland Drive crossover is calculated for the stop control on the Oakland Drive approach to Rt. 60 and for the median yield bar control. The original study did not include median yield bar control.*
- 5. Traffic signal timing at Rt. 60/Croaker Road uses the coordinated split values. The original traffic study used the default values. This change more accurately reflects signal timing. A modified signal timing alternative also is included for the Rt. 60/Croaker Road intersection.*
- 6. The original traffic study used Trip Generation Manual 9th Edition (TGM9). This study uses the more up to date Trip Generation Manual 10th Edition (TGM10).*

All traffic counts in this study are the same as the original study.

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REPORT TEXT

INTRODUCTION AND SCOPE

Connelly Development, LLC proposes to develop an apartment project in James City County, Oakland Pointe Apartments. The site fronts on Rt. 60 Richmond Road between Croaker Road to the east and Oakland Drive to the west. The upper section of Exhibit 1 shows the site location in the VDOT Hampton Roads District. The lower section of Exhibit 1 shows the location of the site and adjacent areas on the County's parcel map.

Access to Oakland Pointe Apartments is proposed via an entrance on Oakland Drive through an adjacent property. This traffic study has been prepared to document existing and future traffic conditions with and without site development. The following intersections are included in the study for counts and analysis:

1. Rt. 60 Richmond Road/Croaker Road/Pricket Road - signalized
2. Rt. 60 Richmond Road/Oakland Drive - unsignalized

The conceptual development plan by AES is shown on Exhibit 2a and includes 126 apartments. Vehicular access is provided by a connection across the adjacent property to Oakland Drive. A sidewalk is included along the Rt. 60 frontage. Pedestrian access is provided throughout the development with pedestrian connections to Rt. 60 and Oakland Drive.

Road improvements proposed to be built by the project are shown on Exhibit 2b. These include:

1. Reconstruction of eastbound left turn lane on Rt. 60 at Croaker Road to extend existing 200 feet storage to 400 feet storage.
2. Reconstruction of Rt. 60/Oakland Drive intersection (see Exhibit 2c for detail) to include:
 - a. Pavement widening between median noses
 - b. Westbound left turn lane
 - c. Yield bars and centerline striping.

This study includes AM and PM peak hour traffic analysis at the existing two intersections for the following scenarios:

- Existing traffic
- 2025 without the project (with build out of Candle Factory rezoning/Village At Candle Station with access on Pricket Road)
- 2025 with the project and related improvements as shown on Exhibits 2b and 2c.

EXISTING TRAFFIC CONDITIONS

Intersection turning movement traffic counts were conducted by Peggy Malone & Associates from 7 to 9 AM and from 4 to 6 PM on Tuesday, October 10, 2017. Total volumes are tabulated on Appendix Exhibit A and B series and peak hour counts without balance are shown on Appendix Exhibit D.

Exhibit 3 shows AM and PM peak hour traffic on the study area road network diagram. Rt. 60 Richmond Road (posted speed limit 45 mph, east-west orientation) is a four lane divided roadway. Lane configurations at the Richmond Road intersections with Croaker Road/Pricket Road and Oakland Drive are shown on Exhibit 3.

Synchro 10 has been used to calculate intersection levels of service. VDOT signal timing was obtained for the Richmond Road/Croaker Road/Pricket Road intersection.

The following reports are included in the technical appendix:

1. For signalized Richmond Road/Croaker Road/Pricket Road, 2000 Highway Capacity Manual (HCM2000) report is used. See Appendix Exhibits J1 and J2 for the HCM2000 report AM and PM peak hours, respectively. HCM2010 HCM 6th Edition produce NEMA custom phasing violations and are not used.
2. Unsignalized intersection (Richmond Road/Oakland Drive) LOS results are shown in Appendix Exhibits K1 and K2 for the AM and PM peak hours, respectively.
3. Synchro Queues results are shown in Appendix Exhibits L1 and L2 for the AM and PM peak hours, respectively.
4. SimTraffic Queuing & Blocking results are shown in Appendix Exhibits M1, and M2 series for the AM and PM peak hours, respectively.

The following table shows existing peak hour intersection levels of service and queuing results at Richmond Road/Croaker Road/Pricket Road:

2017 COUNTS - TABLE 1-1 Richmond Road/ Croaker Road/Pricket Road									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
Overall	C	31.3	D	36.1					
EBL	D	52.1	D	52.5	200	286	150	254	126
EBT	B	18.4	C	27.7		208	220	126	141
EBR	B	15.0	C	23.4	10	0	0	27	46
WBL	D	42.8	D	45.1	200	23	85	55	44
WBT	C	26.4	C	33.3		127	323	120	222
WBR	C	24.4	C	26.3	200	40	66	70	109
NBL	D	38.0	D	49.9	165	29	157	14	157
NBL/T	D	39.0	D	42.4		49	132	67	208
NBR	D	37.1	D	38.8	150	0	0	20	34
SBL/T	D	52.7	D	53.5		189	422	186	986
SBR	C	29.9	C	30.6	200	36	59	65	1145

SimTraffic queue shown is maximum report value for multi-lane groups

There is overall LOS C at the Richmond Road/Croaker Road intersection in the AM peak hour and overall LOS D in the PM peak hour. There is LOS D or better for all turning movements.

Queuing on the eastbound left turn on Richmond Road at Croaker Road is of importance because site traffic will use this turn lane for left turns. Queuing for this left turn was recorded at the time of counts and is tabulated on Appendix Exhibits C1 and C2. The following table shows the recorded queues and calculated values in Table 1-1.

TABLE 1-2 EASTBOUND LEFT QUEUING		
SOURCE	AM	PM
Field	250	161
Synchro	286	150
SimTraffic	254	126

A 10-minute SimTraffic interval was used for AM peak hour traffic and a 60-minute interval was used for PM peak hour traffic as was done in the previous study to calibrate the eastbound left turn queue.

In Table 1-1, the other notable queues are on the southbound approach in the PM peak hour.

The following table shows existing peak hour intersection levels of service and queuing results at Rt. 60 Richmond Road/Oakland Drive:

2017 COUNTS - TABLE 1-3 Richmond Road/Oakland Drive									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
NBL	C	19.4	C	21.4		3	3	21	21
NBT	B	11.7	B	11.2		3	3	22	26
WBL	A	9.8	A	9.5		0	3		40

The existing intersection is controlled by a stop sign on the Oakland Drive approach to eastbound Rt. 60. The northbound left turn on Oakland Drive has LOS C in the AM peak hour and PM peak hour. All other movements have LOS A and B.

2025 BACKGROUND TRAFFIC

Exhibit 4 shows VDOT daily traffic counts (2012 through 2016) and linear regression analysis trend for Rt. 60 Richmond Road west and east of Croaker Road. For the 2025 design year, the traffic counts show 1.0 growth factor west of Croaker Road and a 1.08 growth factor east of Croaker Road.

A 1.08 growth factor is applied to 2017 counts to produce 2025 background traffic (growth factor only) as shown on Exhibit 5.

Build out of the Candle Factory development on Pricket Road (including Village at Candle Station) is also included in this traffic study. Table 1 on Exhibit 6 shows trip generation for the remaining development on Pricket Road using Trip Generation 10th Edition (TGM10). Table 2 shows trip distribution for the remaining development (see Appendix Exhibit E for trip assignment percentages for Pricket Road and for Oakland Drive). Trip assignments for the remaining development are shown on Exhibit 7 and 2025 background traffic without Oakland Pointe Apartments is shown on Exhibit 8.

For analysis reports, see Technical Appendix as follows:

- HCM2000 signalized intersections LOS: Exhibit J3 and J4
- Unsignalized intersection: Exhibit K3 and K4
- Synchro Queues: Exhibits L3 and L4.
- SimTraffic Queuing & Blocking: Exhibits M3 and M4.

The following table shows 2025 background traffic peak hour intersection levels of service and queuing results at Rt. 60 Richmond Road/Croaker Road/Pricket Road:

2025 Background - TABLE 2-1 Richmond Road/ Croaker Road/Pricket Road									
Traffic LOS And Seconds Delay By Lane					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
Overall	C	31.4	D	39.6		AM	PM	AM	PM
EBL	D	51.3	E	59.7	200	321	162	273	136
EBT	B	19.6	C	29.4		227	241	213	175
EBR	B	15.9	C	24.4	10	0	0	57	62
WBL	D	40.4	D	48.6	200	28	90	60	122
WBT	C	27.0	D	36.5		136	353	104	216
WBR	C	24.9	C	27.8	200	47	79	81	131
NBL	D	38.2	E	57.0	165	54	168	14	172
NBL/T	D	38.9	D	45.7		70	138	93	225
NBR	D	36.5	D	40.9	150	0	0	33	90
SBL/T	D	50.1	E	57.1		214	470	434	950
SBR	C	29.4	D	41.5	200	45	67	248	1146

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS for both peak hours is the same as existing conditions with not much change for turning movement LOS in the AM peak hour. For the eastbound left, northbound

left and the southbound left/through in the PM peak hour, LOS changed from LOS D to LOS E.

The following table shows existing peak hour intersection levels of service and queuing results at Rt. 60 Richmond Road/Oakland Drive:

2025 Background - TABLE 2-2 Richmond Road/Oakland Drive									
Traffic LOS And Seconds Delay By Lane					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
NBL	C	19.4	C	22.7	180	3	3	44	32
NBT	B	11.6	B	11.2	180	3	3	25	31
WBL	A	9.8	A	9.6		0	3	14	59

The northbound left turn on Oakland Drive has LOS C in the AM peak hour AND PM peak hours. All other movements have LOS A and B.

SITE TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Table 3 on Exhibit 6 shows trip generation for the site using TGM10, published by the Institute of Transportation Engineers (ITE). Site trip distribution is shown in Table 4 on Exhibit 6.

Site trip assignment is shown on Exhibit 9.

2025 TRAFFIC WITH SITE

Exhibit 10 shows 2025 AM and PM peak hour traffic with site traffic.

The westbound left turn on Richmond Road at Oakland Drive warrants a left turn lane (see Appendix Exhibit F) of 100-foot full width lane with 100-foot taper. This improvement is included on Exhibit 10. Also included for analysis is an additional 200 feet of storage on the eastbound left turn on Richmond Road at Croaker Road.

A major change with previous studies is the reconstruction of the Rt. 60/Oakland Drive crossover add area to the crossover and to included yield bars and a centerline stripe as shown on Exhibit 2c. This allows two step traffic operations for left turns at this location.

For analysis reports, see Technical Appendix as follows:

- HCM2000 signalized intersections LOS: Exhibit J5 and J6 series
- Unsignalized intersection LOS: Exhibits K5 and K6 series
- Synchro Queues: Exhibits L5 and L6 series
- SimTraffic Queuing & Blocking: Exhibits M5 and M6 series.

The following table shows 2025 total traffic peak hour intersection levels of service and queuing results at Rt. 60 Richmond Road/Croaker Road/Pricket Road:

2025 Total - TABLE 3-1 Richmond Road/ Croaker Road/Pricket Road Existing Signal Timing - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
Overall	C		D			AM	PM	AM	PM
EBL	E	57.2	E	63.8	400	341	193	409	170
EBT	B	19.8	C	30.7		234	262	132	165
EBR	B	15.9	C	25.4	10	0	0	47	64
WBL	D	40.5	D	50.5	200	28	102	63	138
WBT	C	27.0	D	39.0		138	377	153	226
WBR	C	24.9	C	28.8	200	46	98	75	123
NBL	D	38.3	E	62.5	165	54	208	51	171
NBL/T	D	39.0	D	47.3		71	151	119	235
NBR	D	36.6	D	41.1	150	0	0	29	109
SBL/T	D	49.9	E	59.0		215	422	290	948
SBR	C	29.4	C	31.3	200	48	60	206	499

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS for both peak hours is the same as existing conditions. The AM peak hour eastbound left turn has LOS E the AM and the eastbound left, northbound left and the southbound left/through have LOS E in the PM peak hour like the background traffic.

With the proposed yield bar/centerline stripe at the Rt. 60/Oakland Drive crossover, LOS is calculated separately for eastbound and westbound Rt. 60 as follows:

2025 Total - TABLE 3-2 EB Richmond Road/Oakland Drive - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
NBT	C	17.3	C	16.6	180	5	5	32	50
NBR	B	12.0	B	11.5	180	8	5	24	32
SBL/T	C	19.1	C	19.6		5	18	34	51

2025 Total - TABLE 3-3 WB Richmond Road/Oakland Drive - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
WBL					100				33
NBL	B	10.9	C	16.3	50	3	5	41	57

All movements at the two locations have LOS C.

2025 TRAFFIC WITH SITE AND OPTIMIZED SIGNAL TIMING

As a sensitivity test for LOS and queuing results, the signal timing at the intersection has been optimized using Synchro with the following results:

2025 Total - TABLE 4-1 Richmond Road/ Croaker Road/Pricket Road Optimized Signal Timing - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
Overall	C	31.7	D	41.1					
EBL	D	50.8	E	68.5	400	269	205	413	156
EBT	B	19.4	C	30.6		239	260	349	165
EBR	B	15.6	C	25.3	10	0	0	42	73
WBL	D	42.2	D	50.5	200	32	102	69	119
WBT	C	27.6	D	38.1		166	370	131	227
WBR	C	25.5	C	28.5	200	10	91	78	133
NBL	D	40.0	E	64.7	165	63	214	10	185
NBL/T	D	41.1	D	48.1		81	152	116	255
NBR	D	38.1	D	41.4	150	0	0	29	121
SBL/T	D	50.4	E	59.2		247	422	212	969
SBR	C	30.4	C	31.5	200	11	60	47	499

SimTraffic queue shown is maximum report value for multi-lane groups

In the AM peak hour, the eastbound left turn LOS reduces to D.

The following tables show peak hour intersection levels of service and queuing results at Rt. 60 Richmond Road/Oakland Drive:

2025 Total - TABLE 4-2 EB Richmond Road/Oakland Drive - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
NBT	C	17.3	C	16.6	180	5	5	31	42
NBR	B	12.0	B	11.5	180	8	5	33	34
SBL/T	C	19.1	C	19.6	50	5	18	32	46

2025 Total - TABLE 4-3 WB Richmond Road/Oakland Drive - Oakland Drive Access									
Traffic LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
WBL					100				28
NBL	B	10.9	C	16.3	50	3	5	34	50

LOS is the same at Rt. 60/Oakland Drive crossover with optimized timing and queues are somewhat reduced.

SUMMARY AND CONCLUSIONS

Traffic levels of service are not much affected by the project with the greatest effect being the increase in the queue on the eastbound left turn lane on Rt. 60 at Croaker Road.

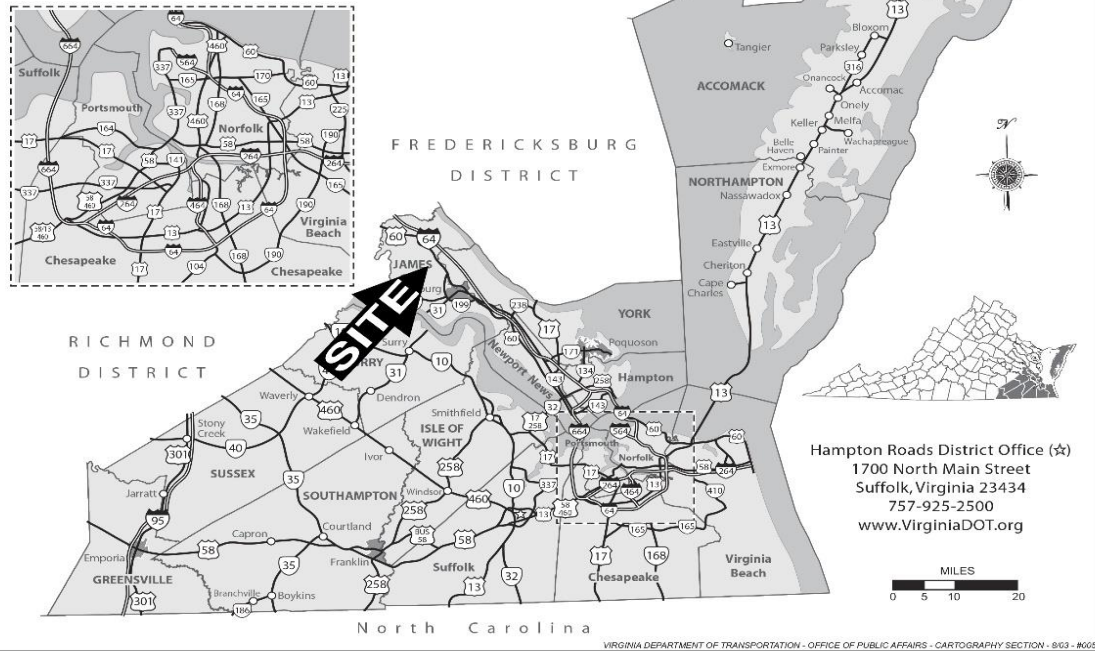
Improvements to the Rt. 60 corridor by the development to compensate for impacts as shown on Exhibit 2b and 2c include:

1. Reconstruction of eastbound left turn lane on Rt. 60 at Croaker Road to extend existing 200 feet storage to 400 feet storage.
2. Reconstruction of Rt. 60/Oakland Drive intersection (see Exhibit 2c) to include:
 - a. Pavement widening between median noses
 - b. Westbound left turn lane
 - c. Yield bars and centerline striping.



REPORT EXHIBITS

Virginia Department of Transportation HAMPTON ROADS DISTRICT



OAKLAND POINTE APARTMENTS
REGION AND AREA MAPS

DRW Consultants, LLC
804-794-7312

Exhibit 1

Rev	Date	Description
1	10/27/17	REVISIONS TO COUNTY COMMENTS
2	10/27/17	REVISIONS TO COUNTY COMMENTS
3	10/27/17	REVISIONS TO COUNTY COMMENTS
4	10/27/17	REVISIONS TO COUNTY COMMENTS
5	10/27/17	REVISIONS TO COUNTY COMMENTS
6	10/27/17	REVISIONS TO COUNTY COMMENTS
7	10/27/17	REVISIONS TO COUNTY COMMENTS
8	10/27/17	REVISIONS TO COUNTY COMMENTS
9	10/27/17	REVISIONS TO COUNTY COMMENTS
10	10/27/17	REVISIONS TO COUNTY COMMENTS

THIS PLAN HAS
NOT RECEIVED
FINAL APPROVAL
AND IS NOT
APPROVED FOR
CONSTRUCTION.

AES
CONSULTING ENGINEERS
1000 Old Town Road, Suite 1
Falls Church, VA 22044
Phone: (703) 255-0000
Fax: (703) 255-0000
www.aes-engineers.com

MASTER PLAN
for
OAKLAND POINTE
DEVELOPER: CONNELLY BUILDERS, INC.
JAMES CITY COUNTY
DISTRICT 1

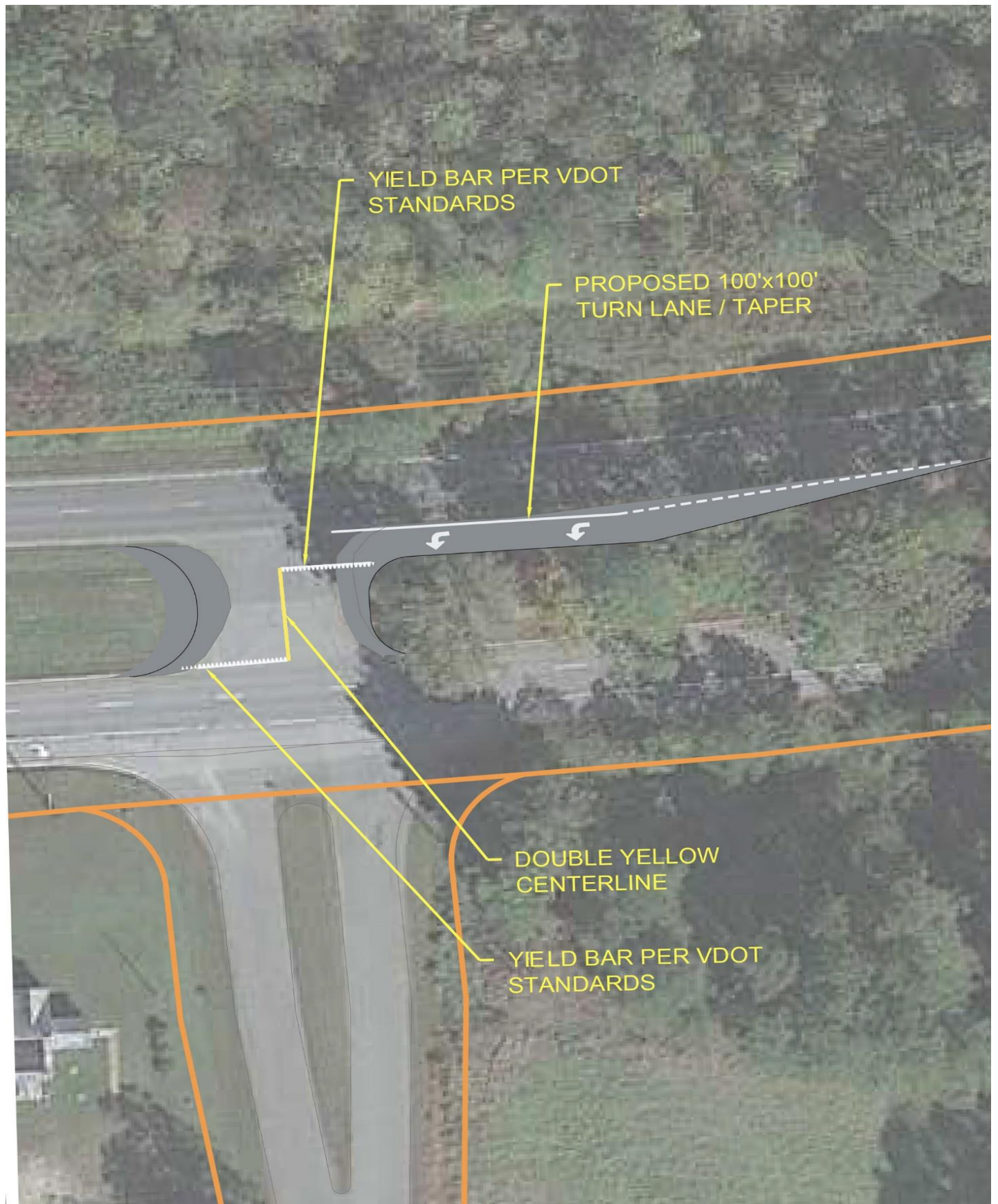
Project Number: 1000-000
Date: 10/27/17
Scale: 1" = 50'
Sheet No.: 1 of 1
RENDERED
PROPOSED ROAD
IMPROVEMENTS
PLAN



OAKLAND POINTE APARTMENTS
ROAD IMPROVEMENTS PLAN

DRW Consultants, LLC
804-794-7312

Exhibit 2b

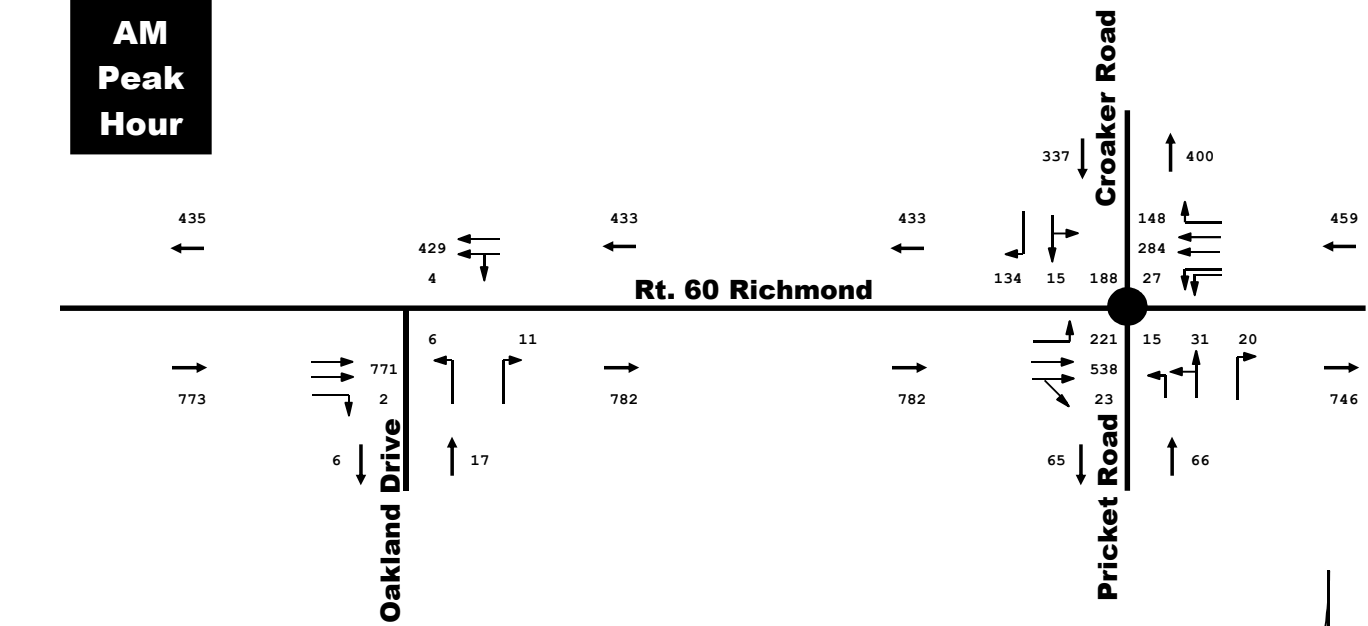


RT. 60/OAKLAND DRIVE CROSSOVER
PROPOSED PAVEMENT AND TRAFFIC CONTROL

DRW Consultants, LLC
804-794-7312

Exhibit 2c

**AM
Peak
Hour**



**PM
Peak
Hour**

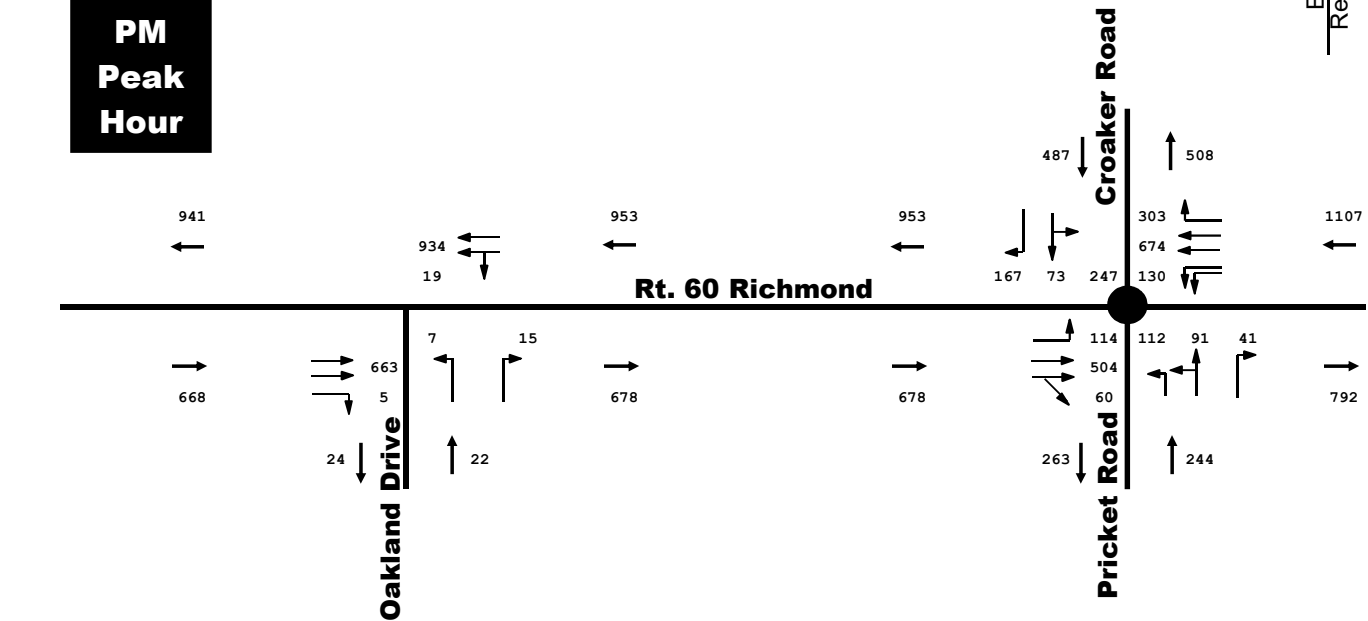


Exhibit
Reference

2017 PEAK HOUR COUNTS
WITH BALANCE

DRW Consultants, LLC
804-794-7312

Exhibit 3

Street: Richmond Road, Rt. 60

From: Rt. 30

To: Croaker Road

Street: Richmond Road, Rt. 60

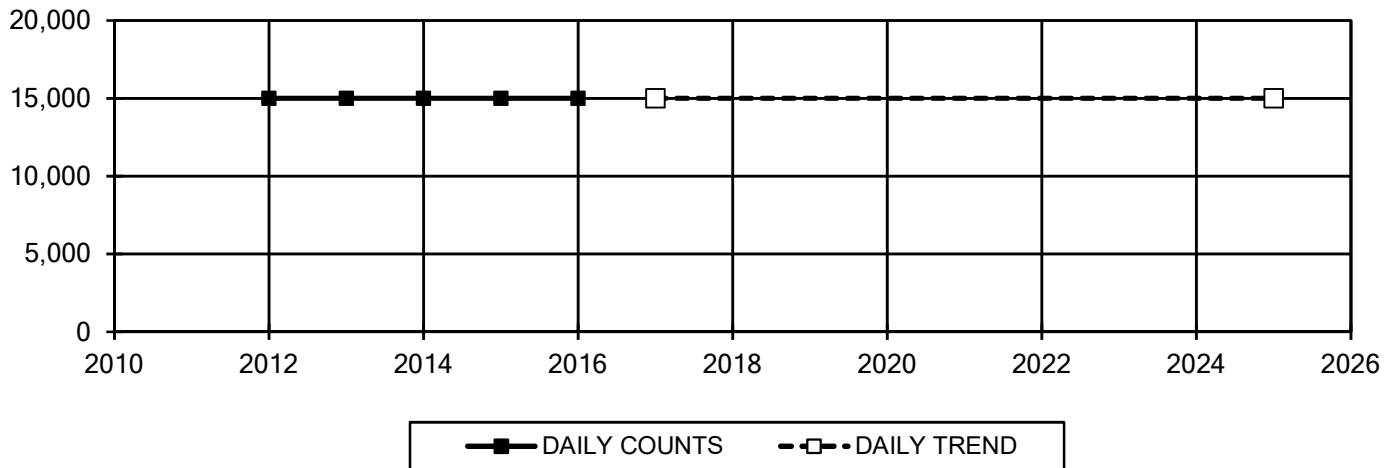
From: Croaker Road

To: Centerville Road

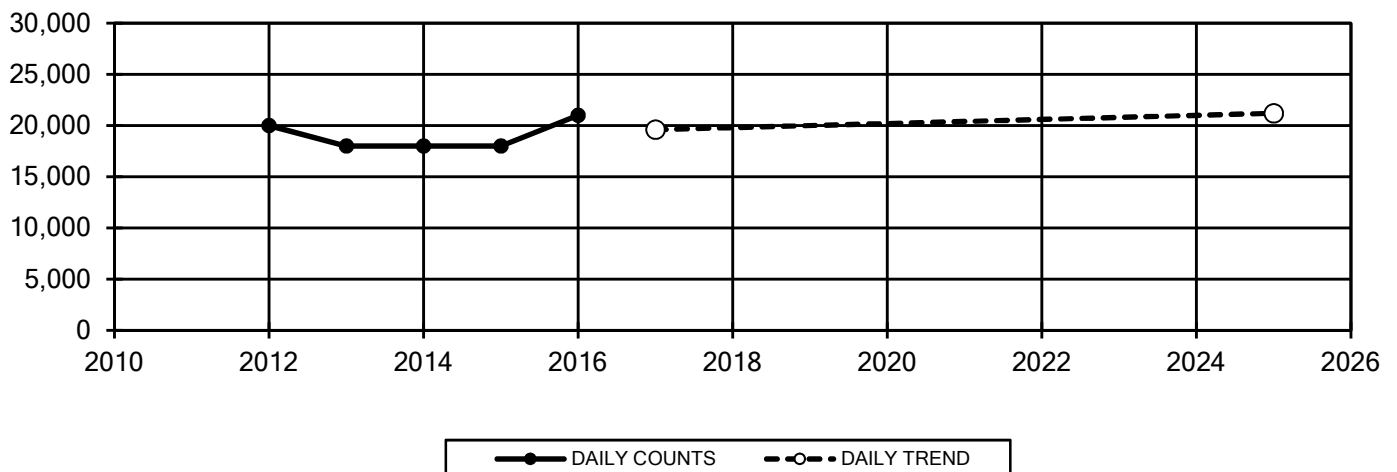
Year	DAILY COUNTS	
2012	15,000	
2013	15,000	
2014	15,000	
2015	15,000	
2016	15,000	
Year	DAILY TREND	
2017	15,000	$\Delta 17$
2025	15,000	1.00

Year	DAILY COUNTS	
2012	20,000	
2013	18,000	
2014	18,000	
2015	18,000	
2016	21,000	
Year	DAILY TREND	
2017	19,600	$\Delta 17$
2025	21,200	1.08

From Rt. 30 To Croaker Road



From Croaker Road To Centerville Road



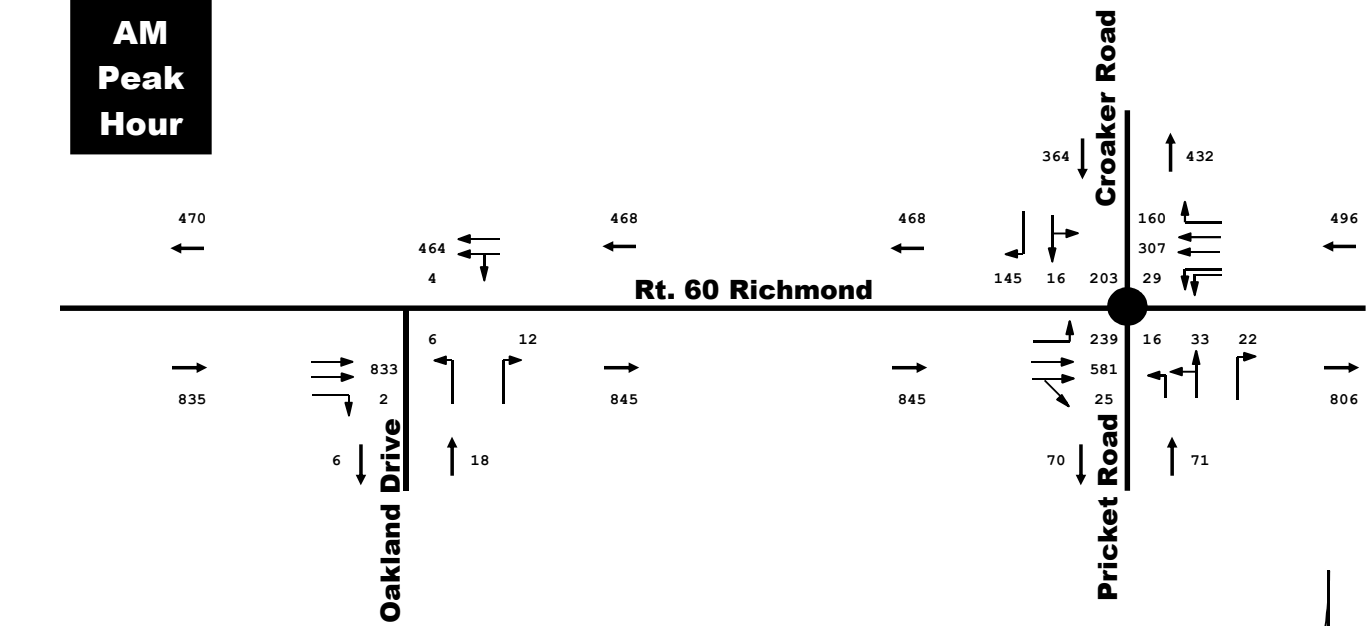
VDOT Average Annual Daily Traffic (AADT) Volume Estimates

RT. 60 RICHMOND ROAD
DAILY TRAFFIC COUNTS AND TRENDS

DRW Consultants, LLC
804-794-7312

Exhibit 4

**AM
Peak
Hour**



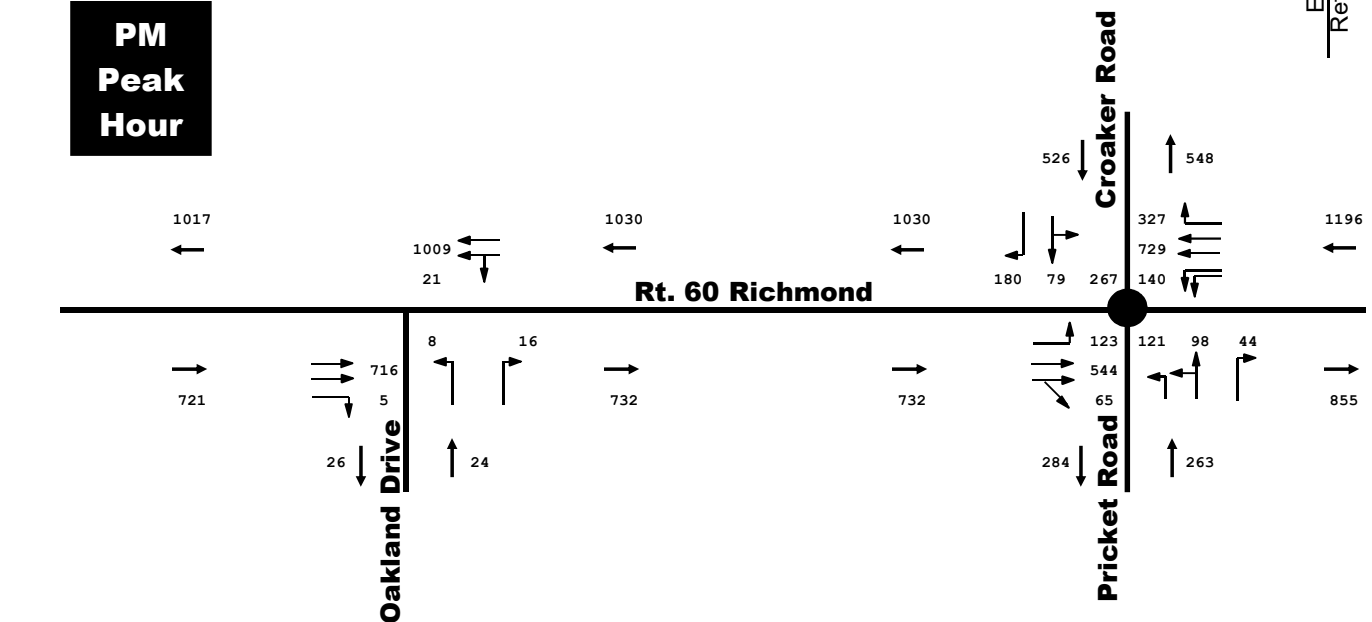
TO

WILLIAMSBURG

GROWTH FACTOR: 1.08

Exhibit
Reference

**PM
Peak
Hour**



2025 PEAK HOUR BACKGROUND TRAFFIC
GROWTH FACTOR ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 5

		LAND USE CODE	SQ.FT., OTHER UNITS	WEEKDAY TRIP GENERATION						
				AM PEAK HOUR			PM PEAK HOUR			DAILY
VALUE	LAND USE			Enter	Exit	Total	Enter	Exit	Total	

TABLE 1 - Trip Generation - Candle Factory Remaining Development

eq.-adj. st.	Single-Family	210	33 units	7	21	28	22	13	35	375
eq.-adj. st.	Multifamily Low Rise	220	78 units	9	29	38	30	17	47	549
rate-adj. st.	Mini-Warehouse	151	355 units	2	1	3	3	4	7	63
TOTAL:				18	51	69	55	34	89	987

TABLE 2 - Candle Factory Trip Distribution

		18				51	69	55		34	89	
		AM Peak Hour						PM Peak Hour				
		Entering Traffic		Exiting Traffic				Entering Traffic		Exiting Traffic		
Direction		% Dist.	Trips	% Dist.	Trips			% Dist.	Trips	% Dist.	Trips	
Rt. 60 West		33%	6	33%	17			33%	18	33%	11	
Rt. 60 East		40%	7	40%	20			40%	22	40%	14	
Croaker North		27%	5	27%	14			27%	15	27%	9	
		100%	18	100%	51			100%	55	100%	34	

TABLE 3 - Trip Generation - Oakland Farm Apartments

eq.-adj. st.	Multifamily Low Rise	220	126 units	14	45	59	46	27	73	912
TOTAL:				14	45	59	46	27	73	912

TABLE 4 - Oakland Farm Trip Distribution

		14				45	59	46	27	73
		AM Peak Hour				PM Peak Hour				
		Entering Traffic		Exiting Traffic		Entering Traffic		Exiting Traffic		
Direction		% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	
Rt. 60 West		33%	5	33%	15	33%	15	33%	9	
Rt. 60 East		40%	5	40%	18	40%	19	40%	11	
Croaker North		27%	4	27%	12	27%	12	27%	7	
		100%	14	100%	45	100%	46	100%	27	

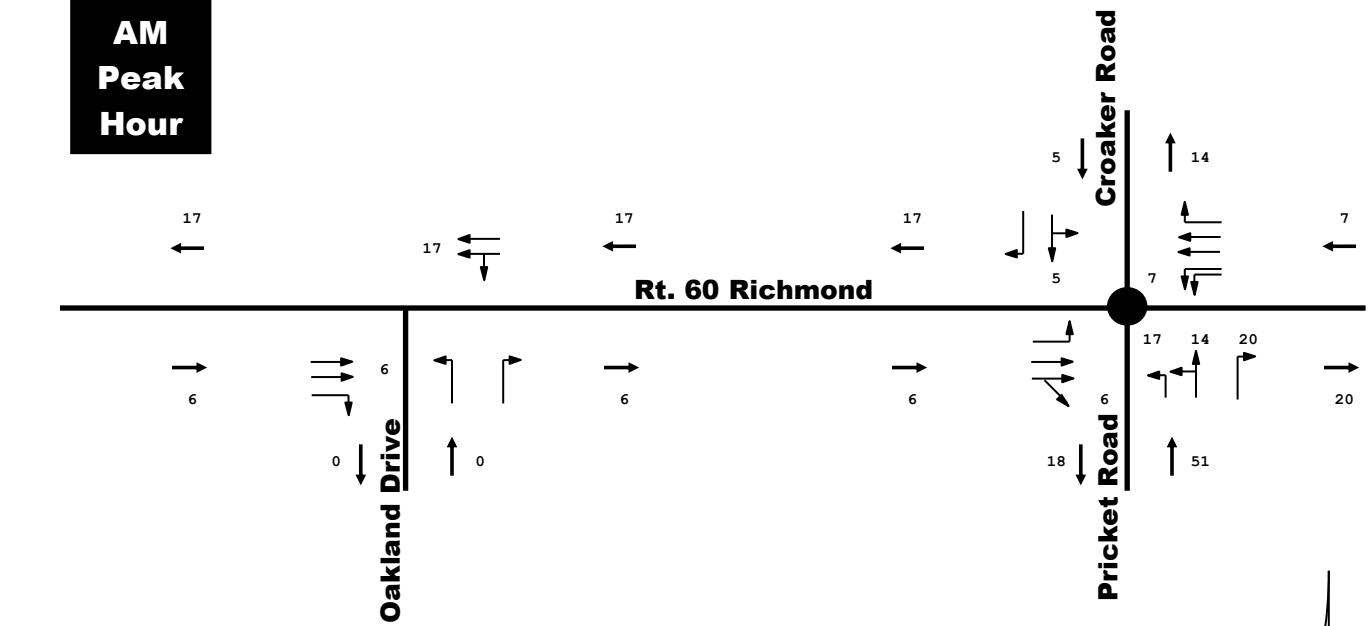
Trip generation rates from Trip Generation Manual, 10th Edition
(TGM10) by the Institute of Transportation Engineers (ITE)

REMAINING CANDLE FACTORY DEVELOPMENT
AND OAKLAND FARM APARTMENTS
TRIP GENERATION AND DISTRIBUTION

DRW Consultants, LLC
804-794-7312

Exhibit 6

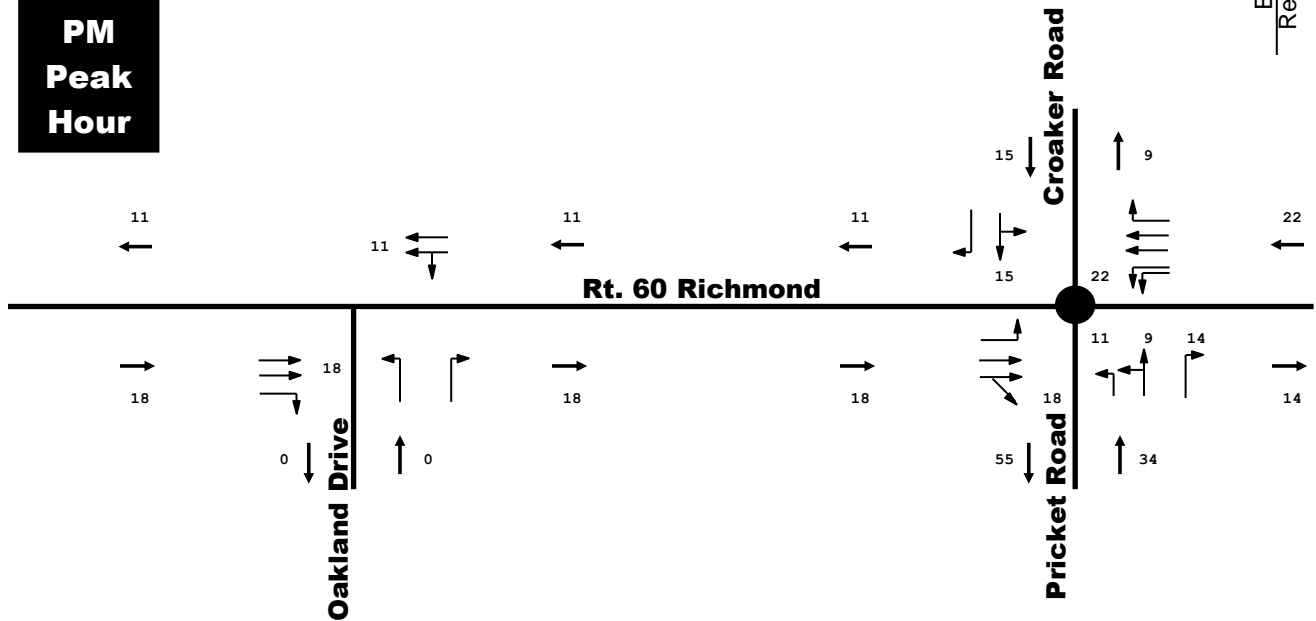
**AM
Peak
Hour**



TO
WILLIAMSBURG

Exhibit
Reference

**PM
Peak
Hour**

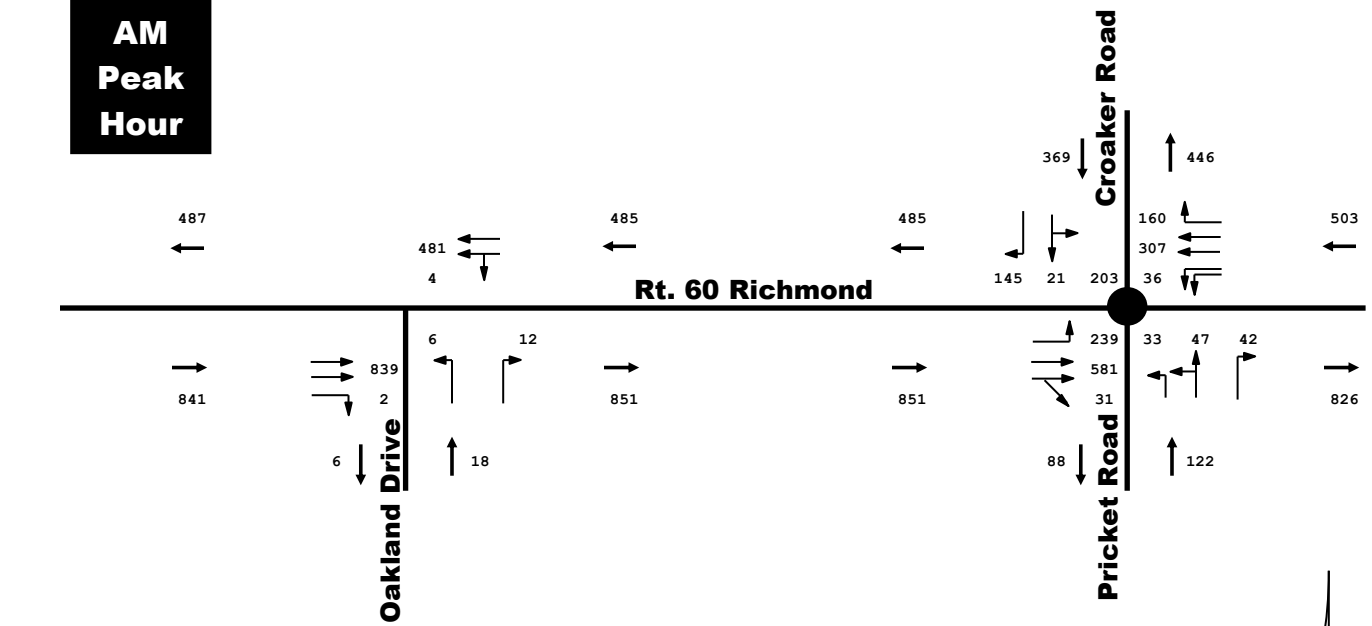


REMAINING CANDLE FACTORY TRIP ASSIGNMENT

DRW Consultants, LLC
804-794-7312

Exhibit 7

**AM
Peak
Hour**



**PM
Peak
Hour**

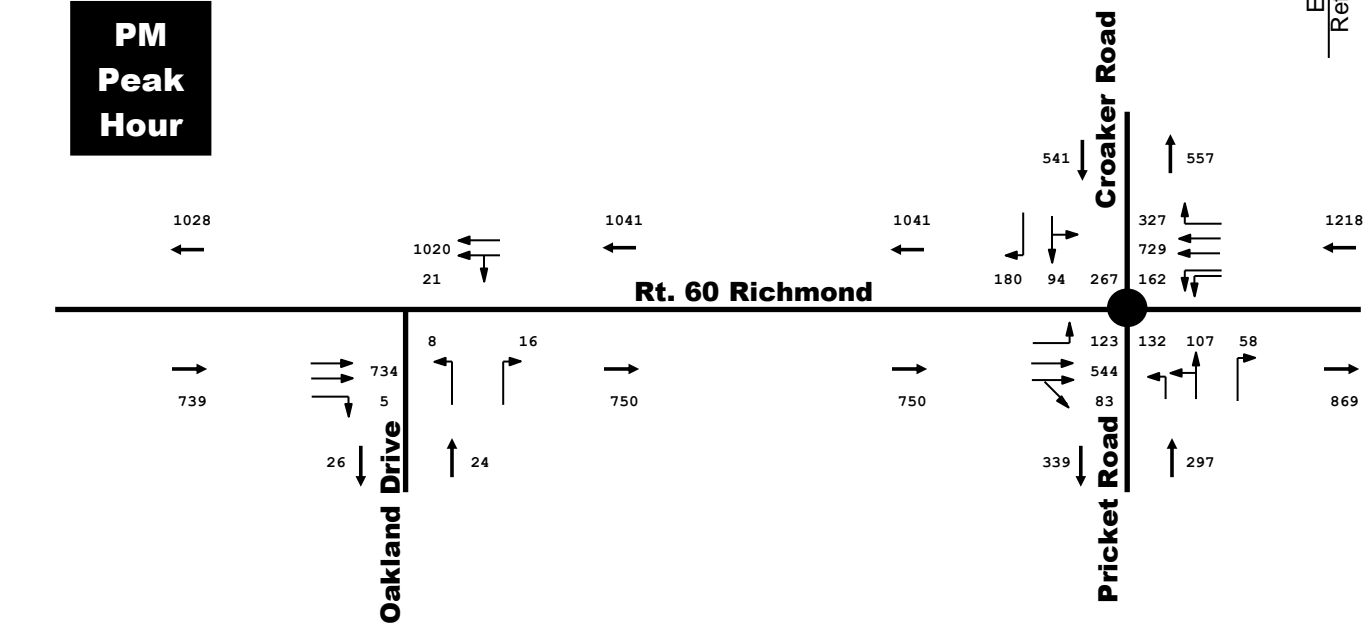


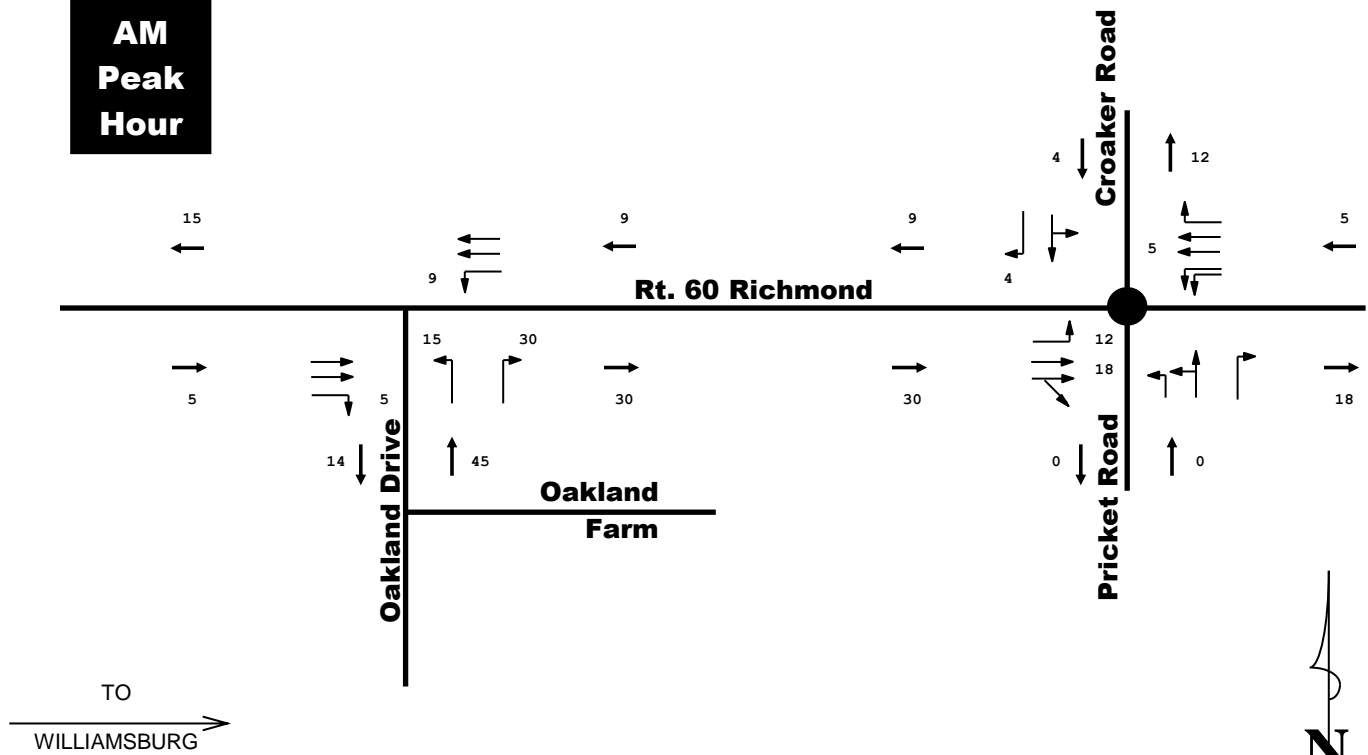
Exhibit
Reference

2025 PEAK HOUR BACKGROUND TRAFFIC
WITHOUT OAKLAND FARM APARTMENTS

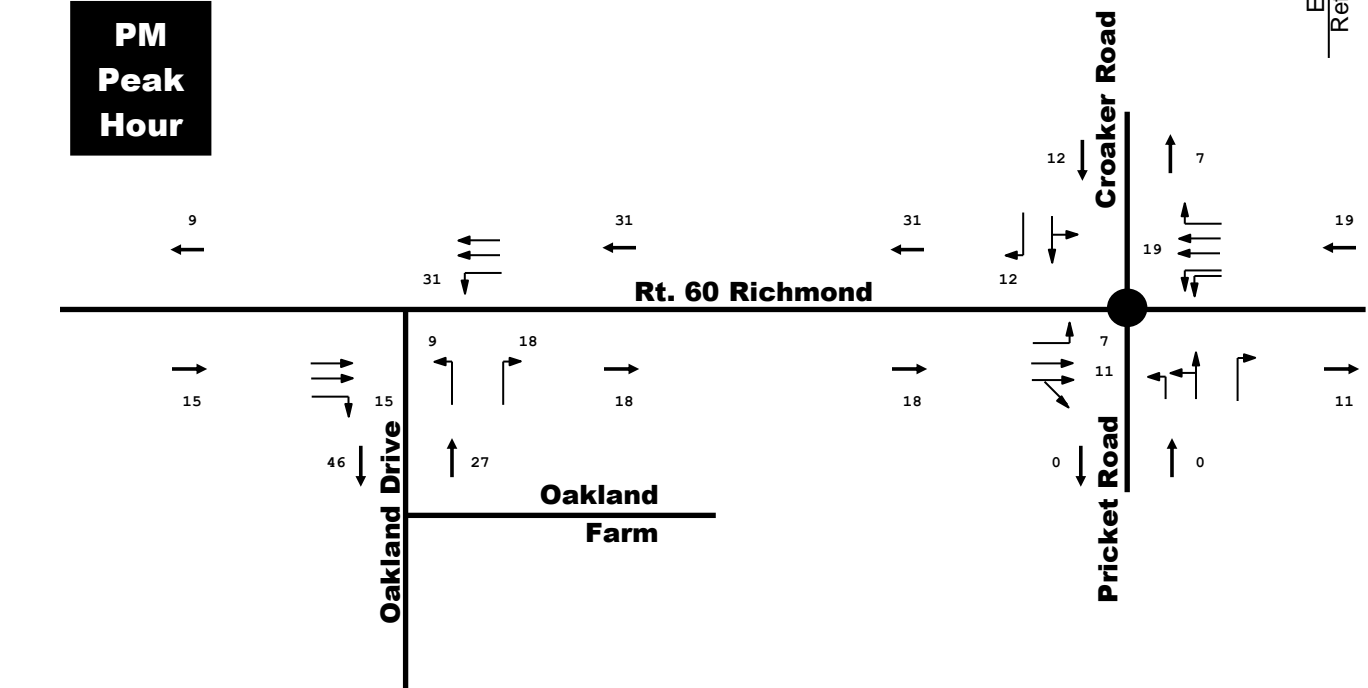
DRW Consultants, LLC
804-794-7312

Exhibit 8

**AM
Peak
Hour**



**PM
Peak
Hour**





APPENDIX EXHIBITS

APPENDIX TABLE OF CONTENTS

APPENDIX EXHIBITS	Number
2017 Tabulated Total Traffic Counts:	AM PM
Rt. 60 Richmond Road/Croaker Road	A3 A6
Rt. 60 Richmond Road/Oakland Drive.....	B3 B6
2017 Tabulated Eastbound Left Turn Queues	AM PM
Rt. 60 Richmond Road/Croaker Road	C1 C2
2017 Counts Without Balance	AM PM
.....	D D
2017 Development Trip Distribution	AM PM
.....	E E
Turn Lane Warrants	AM PM
Rt. 60 Westbound Left Turn At Oakland Drive	F F
HCM 2000 Signalized Intersection LOS	AM PM
Existing.....	J1 J2
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 Background.....	J3 J4
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 With Site Existing Timing	J5 J6
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 With Site Optimized Timing	J7 J8
Rt. 60 Richmond Road/Croaker Road	Page 1
Unsignalized LOS	AM PM
Existing.....	K1 K2
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 Background.....	K3 K4
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 With Site	K5 K6
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 With Site Optimized Signal Timing	K7 K8
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
Synchro Queues	AM PM
Existing.....	L1 L2
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 Background.....	L3 L4
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 With Site – Existing Timing	L5 L6
Rt. 60 Richmond Road/Croaker Road	Page 1
2025 With Site – Optimized Timing.....	L7 L8
Rt. 60 Richmond Road/Croaker Road	Page 1
SimTraffic Queuing & Blocking Report	AM PM
Existing – 60 Minute Interval	M1 M2
Rt. 60 Richmond Road/Croaker Road	Page 1
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 Background.....	M3 M4
Rt. 60 Richmond Road/Croaker Road	Page 1
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 With Site – Existing Timing	M5 M6
Rt. 60 Richmond Road/Croaker Road	Page 1
Rt. 60 Richmond Road/Oakland Drive.....	Page 1
2025 With Site – Optimized Timing.....	M7 M8
Rt. 60 Richmond Road/Croaker Road	Page 1
Rt. 60 Richmond Road/Oakland Drive.....	Page 1

Peggy Malone & Associates, Inc.

(888) 247-8602

File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. AM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Car

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	77	132	5	1	215	4	70	44	0	118	2	7	1	1	11	41	2	52	0	95	439
07:15 AM	63	109	2	0	174	5	79	43	0	127	2	11	6	0	19	41	3	24	0	68	388
07:30 AM	39	147	5	0	191	5	61	29	0	95	3	4	10	0	17	43	1	23	0	67	370
07:45 AM	25	125	5	0	155	10	59	22	0	91	5	4	3	0	12	56	6	20	0	82	340
Total	204	513	17	1	735	24	269	138	0	431	12	26	20	1	59	181	12	119	0	312	1537
08:00 AM	28	111	4	0	143	18	59	37	0	114	2	3	4	0	9	51	4	18	0	73	339
08:15 AM	29	116	2	0	147	12	50	22	0	84	1	5	6	0	12	52	5	14	0	71	314
08:30 AM	21	133	12	0	166	14	52	19	0	85	8	2	5	0	15	65	6	17	0	88	354
08:45 AM	21	110	3	0	134	12	52	24	0	88	3	9	8	0	20	57	5	22	0	84	326
Total	99	470	21	0	590	56	213	102	0	371	14	19	23	0	56	225	20	71	0	316	1333
Grand Total	303	983	38	1	1325	80	482	240	0	802	26	45	43	1	115	406	32	190	0	628	2870
Apprch %	22.9	74.2	2.9	0.1		10	60.1	29.9	0		22.6	39.1	37.4	0.9		64.6	5.1	30.3	0		
Total %	10.6	34.3	1.3	0	46.2	2.8	16.8	8.4	0	27.9	0.9	1.6	1.5	0	4	14.1	1.1	6.6	0	21.9	

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	77	132	5	214	4	70	44	118	2	7	1	10	41	2	52	95	437
07:15 AM	63	109	2	174	5	79	43	127	2	11	6	19	41	3	24	68	388
07:30 AM	39	147	5	191	5	61	29	95	3	4	10	17	43	1	23	67	370
07:45 AM	25	125	5	155	10	59	22	91	5	4	3	12	56	6	20	82	340
Total Volume	204	513	17	734	24	269	138	431	12	26	20	58	181	12	119	312	1535
% App. Total	27.8	69.9	2.3		5.6	62.4	32		20.7	44.8	34.5		58	3.8	38.1		
PHF	.662	.872	.850	.857	.600	.851	.784	.848	.600	.591	.500	.763	.808	.500	.572	.821	.878

Peggy Malone & Associates, Inc.

(888) 247-8602

File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. AM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Truck

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	5	7	2	0	14	0	2	1	0	3	0	0	0	0	0	2	1	4	0	7	24
07:15 AM	7	9	2	0	18	1	3	1	0	5	2	1	0	0	3	3	1	3	0	7	33
07:30 AM	3	4	1	0	8	1	7	4	0	12	0	2	0	0	2	2	0	4	0	6	28
07:45 AM	2	5	1	0	8	1	3	4	0	8	1	2	0	0	3	0	1	4	0	5	24
Total	17	25	6	0	48	3	15	10	0	28	3	5	0	0	8	7	3	15	0	25	109
08:00 AM	5	6	0	0	11	0	3	4	0	7	0	1	1	0	2	1	1	3	0	5	25
08:15 AM	5	4	1	0	10	1	2	3	0	6	0	1	0	0	1	3	0	2	0	5	22
08:30 AM	1	7	0	0	8	0	4	1	0	5	1	0	0	0	1	3	0	4	0	7	21
08:45 AM	2	11	1	0	14	2	3	2	0	7	2	0	0	0	2	2	1	3	0	6	29
Total	13	28	2	0	43	3	12	10	0	25	3	2	1	0	6	9	2	12	0	23	97
Grand Total	30	53	8	0	91	6	27	20	0	53	6	7	1	0	14	16	5	27	0	48	206
Apprch %	33	58.2	8.8	0		11.3	50.9	37.7	0		42.9	50	7.1	0		33.3	10.4	56.2	0		
Total %	14.6	25.7	3.9	0	44.2	2.9	13.1	9.7	0	25.7	2.9	3.4	0.5	0	6.8	7.8	2.4	13.1	0	23.3	

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	7	9	2	18	1	3	1	5	2	1	0	3	3	1	3	7	33
07:30 AM	3	4	1	8	1	7	4	12	0	2	0	2	2	0	4	6	28
07:45 AM	2	5	1	8	1	3	4	8	1	2	0	3	0	1	4	5	24
08:00 AM	5	6	0	11	0	3	4	7	0	1	1	2	1	1	3	5	25
Total Volume	17	24	4	45	3	16	13	32	3	6	1	10	6	3	14	23	110
% App. Total	37.8	53.3	8.9		9.4	50	40.6		30	60	10		26.1	13	60.9		
PHF	.607	.667	.500	.625	.750	.571	.813	.667	.375	.750	.250	.833	.500	.750	.875	.821	.833

Peggy Malone & Associates, Inc.

(888) 247-8602

File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. AM

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Groups Printed- Car - Truck

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
07:00 AM	82	139	7	1	229	4	72	45	0	121	2	7	1	1	11	43	3	56	0	102	463
07:15 AM	70	118	4	0	192	6	82	44	0	132	4	12	6	0	22	44	4	27	0	75	421
07:30 AM	42	151	6	0	199	6	68	33	0	107	3	6	10	0	19	45	1	27	0	73	398
07:45 AM	27	130	6	0	163	11	62	26	0	99	6	6	3	0	15	56	7	24	0	87	364
Total	221	538	23	1	783	27	284	148	0	459	15	31	20	1	67	188	15	134	0	337	1646
08:00 AM	33	117	4	0	154	18	62	41	0	121	2	4	5	0	11	52	5	21	0	78	364
08:15 AM	34	120	3	0	157	13	52	25	0	90	1	6	6	0	13	55	5	16	0	76	336
08:30 AM	22	140	12	0	174	14	56	20	0	90	9	2	5	0	16	68	6	21	0	95	375
08:45 AM	23	121	4	0	148	14	55	26	0	95	5	9	8	0	22	59	6	25	0	90	355
Total	112	498	23	0	633	59	225	112	0	396	17	21	24	0	62	234	22	83	0	339	1430
Grand Total	333	1036	46	1	1416	86	509	260	0	855	32	52	44	1	129	422	37	217	0	676	3076
Apprch %	23.5	73.2	3.2	0.1		10.1	59.5	30.4	0		24.8	40.3	34.1	0.8		62.4	5.5	32.1	0		
Total %	10.8	33.7	1.5	0	46	2.8	16.5	8.5	0	27.8	1	1.7	1.4	0	4.2	13.7	1.2	7.1	0	22	
Car	303	983	38	1	1325	80	482	240	0	802	26	45	43	1	115	406	32	190	0	628	2870
% Car	91	94.9	82.6	100	93.6	93	94.7	92.3	0	93.8	81.2	86.5	97.7	100	89.1	96.2	86.5	87.6	0	92.9	93.3
Truck	30	53	8	0	91	6	27	20	0	53	6	7	1	0	14	16	5	27	0	48	206
% Truck	9	5.1	17.4	0	6.4	7	5.3	7.7	0	6.2	18.8	13.5	2.3	0	10.9	3.8	13.5	12.4	0	7.1	6.7

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	82	139	7	228	4	72	45	121	2	7	1	10	43	3	56	102	461
07:15 AM	70	118	4	192	6	82	44	132	4	12	6	22	44	4	27	75	421
07:30 AM	42	151	6	199	6	68	33	107	3	6	10	19	45	1	27	73	398
07:45 AM	27	130	6	163	11	62	26	99	6	6	3	15	56	7	24	87	364
Total Volume	221	538	23	782	27	284	148	459	15	31	20	66	188	15	134	337	1644
% App. Total	28.3	68.8	2.9		5.9	61.9	32.2		22.7	47	30.3		55.8	4.5	39.8		
PHF	.674	.891	.821	.857	.614	.866	.822	.869	.625	.646	.500	.750	.839	.536	.598	.826	.892

Truck % 8 5 26 11 5 7 20 16 0 4 20 11

Peggy Malone & Associates, Inc.

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File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. PM

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Groups Printed- Car

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	28	102	8	0	138	21	152	66	0	239	20	12	7	0	39	68	10	35	0	113	529
04:15 PM	21	110	10	0	141	36	136	56	0	228	25	15	5	0	45	52	15	33	0	100	514
04:30 PM	41	88	7	0	136	34	171	65	0	270	20	19	7	0	46	60	24	55	0	139	591
04:45 PM	30	120	17	0	167	27	174	80	0	281	23	27	16	0	66	52	19	47	0	118	632
Total	120	420	42	0	582	118	633	267	0	1018	88	73	35	0	196	232	68	170	0	470	2266
05:00 PM	34	129	18	0	181	29	148	77	0	254	25	12	13	0	50	63	11	32	1	107	592
05:15 PM	25	121	13	0	159	36	163	65	1	265	29	23	8	0	60	57	21	38	0	116	600
05:30 PM	23	126	12	0	161	36	134	78	1	249	34	28	3	0	65	72	22	38	0	132	607
05:45 PM	16	119	15	0	150	29	158	59	1	247	26	14	13	0	53	68	19	33	0	120	570
Total	98	495	58	0	651	130	603	279	3	1015	114	77	37	0	228	260	73	141	1	475	2369
Grand Total	218	915	100	0	1233	248	1236	546	3	2033	202	150	72	0	424	492	141	311	1	945	4635
Apprch %	17.7	74.2	8.1	0		12.2	60.8	26.9	0.1		47.6	35.4	17	0		52.1	14.9	32.9	0.1		
Total %	4.7	19.7	2.2	0	26.6	5.4	26.7	11.8	0.1	43.9	4.4	3.2	1.6	0	9.1	10.6	3	6.7	0	20.4	

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	30	120	17	167	27	174	80	281	23	27	16	66	52	19	47	118	632
05:00 PM	34	129	18	181	29	148	77	254	25	12	13	50	63	11	32	106	591
05:15 PM	25	121	13	159	36	163	65	264	29	23	8	60	57	21	38	116	599
05:30 PM	23	126	12	161	36	134	78	248	34	28	3	65	72	22	38	132	606
Total Volume	112	496	60	668	128	619	300	1047	111	90	40	241	244	73	155	472	2428
% App. Total	16.8	74.3	9		12.2	59.1	28.7		46.1	37.3	16.6		51.7	15.5	32.8		
PHF	.824	.961	.833	.923	.889	.889	.938	.931	.816	.804	.625	.913	.847	.830	.824	.894	.960

Peggy Malone & Associates, Inc.

(888) 247-8602

File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. PM

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Groups Printed- Truck

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound						
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total	
04:00 PM	0	5	0	0	5	0	4	1	0	5	0	0	0	0	0	0	1	1	0	0	2	12
04:15 PM	0	2	0	0	2	1	3	5	0	9	0	1	1	0	2	1	0	2	0	3	16	
04:30 PM	1	1	0	0	2	1	3	2	0	6	0	0	0	0	0	0	0	3	0	3	11	
04:45 PM	1	4	0	0	5	0	7	1	0	8	0	0	1	0	1	1	0	2	0	3	17	
Total	2	12	0	0	14	2	17	9	0	28	0	1	2	0	3	2	1	8	0	11	56	
05:00 PM	1	2	0	0	3	1	1	0	0	2	1	0	0	0	1	2	0	6	0	8	14	
05:15 PM	0	1	0	0	1	1	1	1	0	3	0	1	0	0	1	0	0	3	0	3	8	
05:30 PM	0	1	0	0	1	0	2	1	0	3	0	0	0	0	0	0	0	1	0	1	5	
05:45 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	1	0	2	4	
Total	1	5	0	0	6	2	5	2	0	9	1	1	0	0	2	3	0	11	0	14	31	
Grand Total	3	17	0	0	20	4	22	11	0	37	1	2	2	0	5	5	1	19	0	25	87	
Apprch %	15	85	0	0		10.8	59.5	29.7	0		20	40	40	0		20	4	76	0			
Total %	3.4	19.5	0	0	23	4.6	25.3	12.6	0	42.5	1.1	2.3	2.3	0	5.7	5.7	1.1	21.8	0	28.7		

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	2	0	2	1	3	5	9	0	1	1	2	1	0	2	3	16
04:30 PM	1	1	0	2	1	3	2	6	0	0	0	0	0	0	3	3	11
04:45 PM	1	4	0	5	0	7	1	8	0	0	1	1	1	0	2	3	17
05:00 PM	1	2	0	3	1	1	0	2	1	0	0	1	2	0	6	8	14
Total Volume	3	9	0	12	3	14	8	25	1	1	2	4	4	0	13	17	58
% App. Total	25	75	0		12	56	32		25	25	50		23.5	0	76.5		
PHF	.750	.563	.000	.600	.750	.500	.400	.694	.250	.250	.500	.500	.500	.000	.542	.531	.853

Peggy Malone & Associates, Inc.

(888) 247-8602

File Name : 1-Croaker Rd._Pricket Rd. & Richmond Rd. PM

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Groups Printed- Car - Truck

	Richmond Rd Eastbound					Richmond Rd Westbound					Pricket Rd Northbound					Croaker Rd Southbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
04:00 PM	28	107	8	0	143	21	156	67	0	244	20	12	7	0	39	68	11	36	0	115	541
04:15 PM	21	112	10	0	143	37	139	61	0	237	25	16	6	0	47	53	15	35	0	103	530
04:30 PM	42	89	7	0	138	35	174	67	0	276	20	19	7	0	46	60	24	58	0	142	602
04:45 PM	31	124	17	0	172	27	181	81	0	289	23	27	17	0	67	53	19	49	0	121	649
Total	122	432	42	0	596	120	650	276	0	1046	88	74	37	0	199	234	69	178	0	481	2322
05:00 PM	35	131	18	0	184	30	149	77	0	256	26	12	13	0	51	65	11	38	1	115	606
05:15 PM	25	122	13	0	160	37	164	66	1	268	29	24	8	0	61	57	21	41	0	119	608
05:30 PM	23	127	12	0	162	36	136	79	1	252	34	28	3	0	65	72	22	39	0	133	612
05:45 PM	16	120	15	0	151	29	159	59	1	248	26	14	13	0	53	69	19	34	0	122	574
Total	99	500	58	0	657	132	608	281	3	1024	115	78	37	0	230	263	73	152	1	489	2400
Grand Total	221	932	100	0	1253	252	1258	557	3	2070	203	152	74	0	429	497	142	330	1	970	4722
Apprch %	17.6	74.4	8	0		12.2	60.8	26.9	0.1		47.3	35.4	17.2	0		51.2	14.6	34	0.1		
Total %	4.7	19.7	2.1	0	26.5	5.3	26.6	11.8	0.1	43.8	4.3	3.2	1.6	0	9.1	10.5	3	7	0	20.5	
Car	218	915	100	0	1233	248	1236	546	3	2033	202	150	72	0	424	492	141	311	1	945	4635
% Car	98.6	98.2	100	0	98.4	98.4	98.3	98	100	98.2	99.5	98.7	97.3	0	98.8	99	99.3	94.2	100	97.4	98.2
Truck	3	17	0	0	20	4	22	11	0	37	1	2	2	0	5	5	1	19	0	25	87
% Truck	1.4	1.8	0	0	1.6	1.6	1.7	2	0	1.8	0.5	1.3	2.7	0	1.2	1	0.7	5.8	0	2.6	1.8

	Richmond Rd Eastbound				Richmond Rd Westbound				Pricket Rd Northbound				Croaker Rd Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	31	124	17	172	27	181	81	289	23	27	17	67	53	19	49	121	649
05:00 PM	35	131	18	184	30	149	77	256	26	12	13	51	65	11	38	114	605
05:15 PM	25	122	13	160	37	164	66	267	29	24	8	61	57	21	41	119	607
05:30 PM	23	127	12	162	36	136	79	251	34	28	3	65	72	22	39	133	611
Total Volume	114	504	60	678	130	630	303	1063	112	91	41	244	247	73	167	487	2472
% App. Total	16.8	74.3	8.8		12.2	59.3	28.5		45.9	37.3	16.8		50.7	15	34.3		
PHF	.814	.962	.833	.921	.878	.870	.935	.920	.824	.813	.603	.910	.858	.830	.852	.915	.952
Truck %v	2	2	0		2	2	1		1	1	2		1	0	7		

Peggy Malone & Associates, Inc.
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Groups Printed- Car

Start Time	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
07:00 AM	208	0	0	208	2	118	1	121	1	2	1	4	333
07:15 AM	168	0	0	168	2	95	0	97	1	1	0	2	267
07:30 AM	181	1	0	182	0	92	0	92	0	4	0	4	278
07:45 AM	148	0	0	148	0	86	0	86	3	4	0	7	241
Total	705	1	0	706	4	391	1	396	5	11	1	17	1119
08:00 AM	144	0	0	144	0	81	0	81	0	2	0	2	227
08:15 AM	150	0	0	150	1	60	0	61	1	2	3	6	217
08:30 AM	164	0	0	164	0	78	0	78	0	2	0	2	244
08:45 AM	141	0	0	141	0	78	0	78	1	3	0	4	223
Total	599	0	0	599	1	297	0	298	2	9	3	14	911
Grand Total	1304	1	0	1305	5	688	1	694	7	20	4	31	2030
Apprch %	99.9	0.1	0		0.7	99.1	0.1		22.6	64.5	12.9		
Total %	64.2	0	0	64.3	0.2	33.9	0	34.2	0.3	1	0.2	1.5	

	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	208	0	208	2	118	120	1	2	3	331
07:15 AM	168	0	168	2	95	97	1	1	2	267
07:30 AM	181	1	182	0	92	92	0	4	4	278
07:45 AM	148	0	148	0	86	86	3	4	7	241
Total Volume	705	1	706	4	391	395	5	11	16	1117
% App. Total	99.9	0.1		1	99		31.2	68.8		
PHF	.847	.250	.849	.500	.828	.823	.417	.688	.571	.844

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Groups Printed- Truck

Start Time	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
07:00 AM	14	1	0	15	0	7	0	7	1	0	0	1	23
07:15 AM	18	0	0	18	0	7	0	7	0	0	0	0	25
07:30 AM	10	0	0	10	0	11	0	11	0	0	0	0	21
07:45 AM	7	0	0	7	0	7	0	7	0	0	0	0	14
Total	49	1	0	50	0	32	0	32	1	0	0	1	83
08:00 AM	11	0	0	11	0	6	0	6	0	0	0	0	17
08:15 AM	10	2	0	12	0	4	0	4	0	0	0	0	16
08:30 AM	8	0	0	8	0	10	0	10	0	0	0	0	18
08:45 AM	13	1	0	14	0	7	0	7	0	1	0	1	22
Total	42	3	0	45	0	27	0	27	0	1	0	1	73
Grand Total	91	4	0	95	0	59	0	59	1	1	0	2	156
Apprch %	95.8	4.2	0		0	100	0		50	50	0		
Total %	58.3	2.6	0	60.9	0	37.8	0	37.8	0.6	0.6	0	1.3	

	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	14	1	15	0	7	7	1	0	1	23
07:15 AM	18	0	18	0	7	7	0	0	0	25
07:30 AM	10	0	10	0	11	11	0	0	0	21
07:45 AM	7	0	7	0	7	7	0	0	0	14
Total Volume	49	1	50	0	32	32	1	0	1	83
% App. Total	98	2		0	100		100	0		
PHF	.681	.250	.694	.000	.727	.727	.250	.000	.250	.830

Peggy Malone & Associates, Inc.

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File Name : 2-Oakland Rd. & Richmond Rd. AM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Car - Truck

	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
07:00 AM	222	1	0	223	2	125	1	128	2	2	1	5	356
07:15 AM	186	0	0	186	2	102	0	104	1	1	0	2	292
07:30 AM	191	1	0	192	0	103	0	103	0	4	0	4	299
07:45 AM	155	0	0	155	0	93	0	93	3	4	0	7	255
Total	754	2	0	756	4	423	1	428	6	11	1	18	1202
08:00 AM	155	0	0	155	0	87	0	87	0	2	0	2	244
08:15 AM	160	2	0	162	1	64	0	65	1	2	3	6	233
08:30 AM	172	0	0	172	0	88	0	88	0	2	0	2	262
08:45 AM	154	1	0	155	0	85	0	85	1	4	0	5	245
Total	641	3	0	644	1	324	0	325	2	10	3	15	984
Grand Total	1395	5	0	1400	5	747	1	753	8	21	4	33	2186
Apprch %	99.6	0.4	0		0.7	99.2	0.1		24.2	63.6	12.1		
Total %	63.8	0.2	0	64	0.2	34.2	0	34.4	0.4	1	0.2	1.5	
Car	1304	1	0	1305	5	688	1	694	7	20	4	31	2030
% Car	93.5	20	0	93.2	100	92.1	100	92.2	87.5	95.2	100	93.9	92.9
Truck	91	4	0	95	0	59	0	59	1	1	0	2	156
% Truck	6.5	80	0	6.8	0	7.9	0	7.8	12.5	4.8	0	6.1	7.1

	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	222	1	223	2	125	127	2	2	4	354
07:15 AM	186	0	186	2	102	104	1	1	2	292
07:30 AM	191	1	192	0	103	103	0	4	4	299
07:45 AM	155	0	155	0	93	93	3	4	7	255
Total Volume	754	2	756	4	423	427	6	11	17	1200
% App. Total	99.7	0.3		0.9	99.1		35.3	64.7		
PHF	.849	.500	.848	.500	.846	.841	.500	.688	.607	.847

TRUCK % 7 5 0 7 17 0

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File Name : 2-Oakland Rd. & Richmond Rd. PM
Site Code :
Start Date : 10/10/2017
Page No : 1

Groups Printed- Car

	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
04:00 PM	140	0	0	140	3	202	0	205	0	0	0	0	345
04:15 PM	143	2	0	145	1	198	0	199	0	1	0	1	345
04:30 PM	137	0	0	137	4	246	0	250	1	2	0	3	390
04:45 PM	154	2	0	156	6	227	0	233	0	6	0	6	395
Total	574	4	0	578	14	873	0	887	1	9	0	10	1475
05:00 PM	180	0	0	180	7	200	0	207	1	2	0	3	390
05:15 PM	154	1	0	155	1	235	0	236	3	4	0	7	398
05:30 PM	173	0	0	173	5	199	0	204	0	5	0	5	382
05:45 PM	129	1	0	130	2	210	0	212	0	4	0	4	346
Total	636	2	0	638	15	844	0	859	4	15	0	19	1516
Grand Total	1210	6	0	1216	29	1717	0	1746	5	24	0	29	2991
Apprch %	99.5	0.5	0		1.7	98.3	0		17.2	82.8	0		
Total %	40.5	0.2	0	40.7	1	57.4	0	58.4	0.2	0.8	0	1	

	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	137	0	137	4	246	250	1	2	3	390
04:45 PM	154	2	156	6	227	233	0	6	6	395
05:00 PM	180	0	180	7	200	207	1	2	3	390
05:15 PM	154	1	155	1	235	236	3	4	7	398
Total Volume	625	3	628	18	908	926	5	14	19	1573
% App. Total	99.5	0.5		1.9	98.1		26.3	73.7		
PHF	.868	.375	.872	.643	.923	.926	.417	.583	.679	.988

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File Name : 2-Oakland Rd. & Richmond Rd. PM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Truck

Start Time	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				Int. Total
	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	
04:00 PM	6	0	0	6	0	6	0	6	0	0	0	0	12
04:15 PM	2	0	0	2	0	4	0	4	0	0	0	0	6
04:30 PM	2	0	0	2	0	6	0	6	0	0	0	0	8
04:45 PM	4	2	0	6	0	9	0	9	1	1	0	2	17
Total	14	2	0	16	0	25	0	25	1	1	0	2	43
05:00 PM	1	0	0	1	1	8	0	9	0	0	0	0	10
05:15 PM	2	0	0	2	0	3	0	3	1	0	0	1	6
05:30 PM	1	0	0	1	0	2	0	2	0	0	0	0	3
05:45 PM	2	0	0	2	0	2	0	2	0	0	0	0	4
Total	6	0	0	6	1	15	0	16	1	0	0	1	23
Grand Total	20	2	0	22	1	40	0	41	2	1	0	3	66
Apprch %	90.9	9.1	0		2.4	97.6	0		66.7	33.3	0		
Total %	30.3	3	0	33.3	1.5	60.6	0	62.1	3	1.5	0	4.5	

	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	6	0	6	0	6	6	0	0	0	12
04:15 PM	2	0	2	0	4	4	0	0	0	6
04:30 PM	2	0	2	0	6	6	0	0	0	8
04:45 PM	4	2	6	0	9	9	1	1	2	17
Total Volume	14	2	16	0	25	25	1	1	2	43
% App. Total	87.5	12.5		0	100		50	50		
PHF	.583	.250	.667	.000	.694	.694	.250	.250	.250	.632

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File Name : 2-Oakland Rd. & Richmond Rd. PM

Site Code :

Start Date : 10/10/2017

Page No : 1

Groups Printed- Car - Truck

	Richmond Rd Eastbound				Richmond Rd Westbound				Oakland Dr Northbound				
Start Time	Thru	Right	Peds	App. Total	Left	Thru	Peds	App. Total	Left	Right	Peds	App. Total	Int. Total
04:00 PM	146	0	0	146	3	208	0	211	0	0	0	0	357
04:15 PM	145	2	0	147	1	202	0	203	0	1	0	1	351
04:30 PM	139	0	0	139	4	252	0	256	1	2	0	3	398
04:45 PM	158	4	0	162	6	236	0	242	1	7	0	8	412
Total	588	6	0	594	14	898	0	912	2	10	0	12	1518
05:00 PM	181	0	0	181	8	208	0	216	1	2	0	3	400
05:15 PM	156	1	0	157	1	238	0	239	4	4	0	8	404
05:30 PM	174	0	0	174	5	201	0	206	0	5	0	5	385
05:45 PM	131	1	0	132	2	212	0	214	0	4	0	4	350
Total	642	2	0	644	16	859	0	875	5	15	0	20	1539
Grand Total	1230	8	0	1238	30	1757	0	1787	7	25	0	32	3057
Apprch %	99.4	0.6	0		1.7	98.3	0		21.9	78.1	0		
Total %	40.2	0.3	0	40.5	1	57.5	0	58.5	0.2	0.8	0	1	
Car	1210	6	0	1216	29	1717	0	1746	5	24	0	29	2991
% Car	98.4	75	0	98.2	96.7	97.7	0	97.7	71.4	96	0	90.6	97.8
Truck	20	2	0	22	1	40	0	41	2	1	0	3	66
% Truck	1.6	25	0	1.8	3.3	2.3	0	2.3	28.6	4	0	9.4	2.2

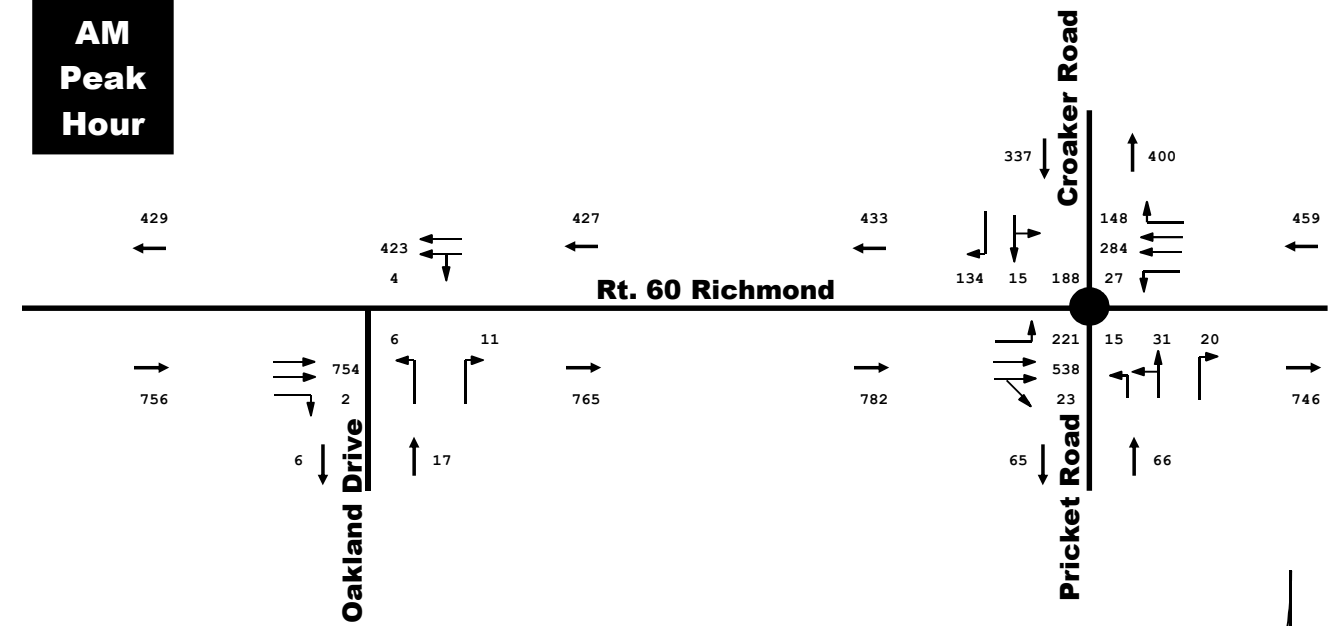
	Richmond Rd Eastbound			Richmond Rd Westbound			Oakland Dr Northbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	139	0	139	4	252	256	1	2	3	398
04:45 PM	158	4	162	6	236	242	1	7	8	412
05:00 PM	181	0	181	8	208	216	1	2	3	400
05:15 PM	156	1	157	1	238	239	4	4	8	404
Total Volume	634	5	639	19	934	953	7	15	22	1614
% App. Total	99.2	0.8		2	98		31.8	68.2		
PHF	.876	.313	.883	.594	.927	.931	.438	.536	.688	.979

TRUCK % 1 40 5 3 29 7

Date:	10/10/2017	Observer: K. Leigh
Intersection Name: Croaker Rd. & US60 Eastbound Left Queue		
AM Shift: 7:00-9:00 AM		
	Approach: US60 EB	
	Left (1 lane)	
Time:	# veh	distance (feet)
7:00	5	125
	6	150
	7	175
	5	125
	4	100
	8	250
	6	200
	4	100
	8	200
	5	125
	8	225
7:15	4	150
	9	250
	7	200
	6	175
	10	250
	4	100
	6	150
	5	125
	4	125
	3	75
7:30	1	25
	3	75
	2	50
	1	25
	3	100
	5	125
	3	75
	3	75
	8	250
	4	125
	4	125
	5	175
7:45	2	50
	2	50
	2	50
	2	50
	4	100
	3	100
	1	25
	1	25
	1	25
Average	4	121
PM Peak 50th Percentile	4	125
PM Peak 95th Percentile	8	250
		Exhibit C1

Date:	10/10/2017	Observer: K. Leigh
Intersection Name:		
PM SHIFT 4:00-6:00 PM		
	Approach: US60 EB	
	Left (1 lane)	
Time:	# veh	distance (feet)
4:45	1	25
	4	100
	7	175
	3	75
	1	75
	4	100
	4	100
	1	25
	5	150
5:00	7	175
	6	150
	5	125
	6	150
	2	50
	4	100
5:15	4	100
	5	125
	5	125
	2	50
	3	75
	4	100
	3	75
	3	75
5:30	1	25
	4	100
	3	75
	2	50
	2	50
	2	50
	2	50
	5	125
	4	100
Average	3	91
AM Peak 50th Percentile	4	100
AM Peak 95th Percentile	6	161
		Exhibit C2

**AM
Peak
Hour**



TO →

**PM
Peak
Hour**

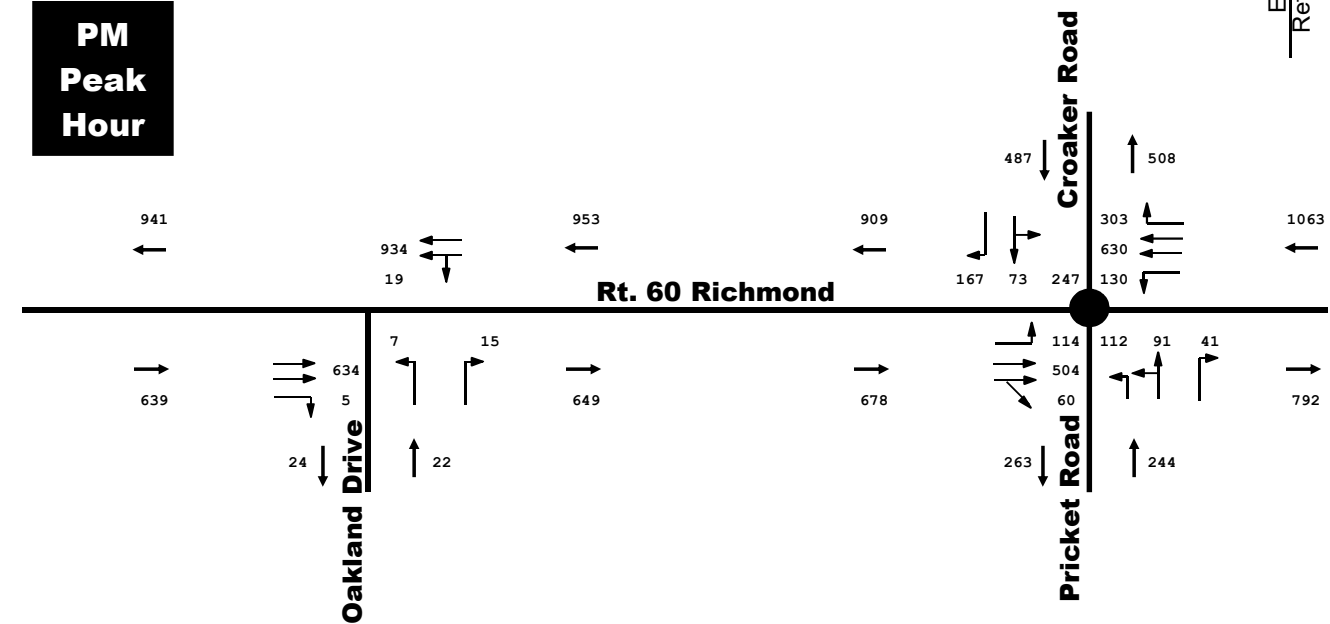


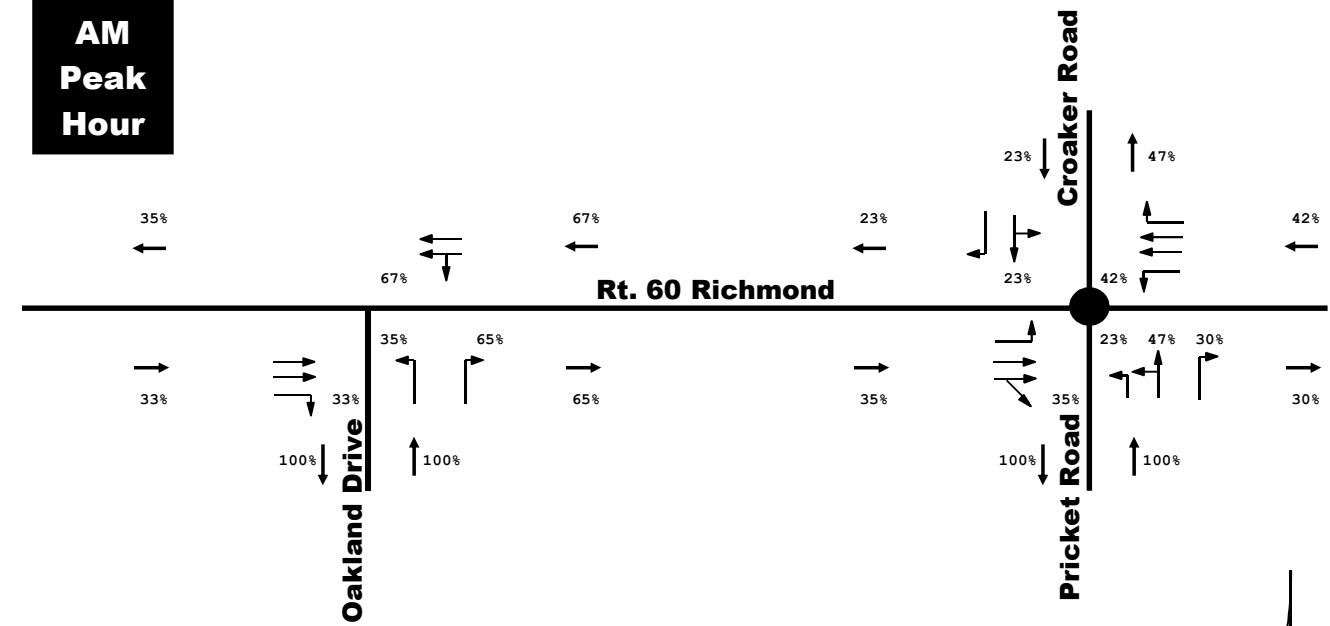
Exhibit
Reference

2017 PEAK HOUR COUNTS
WITHOUT BALANCE

DRW Consultants, LLC
804-794-7312

Exhibit D

**AM
Peak
Hour**



TO →

**PM
Peak
Hour**

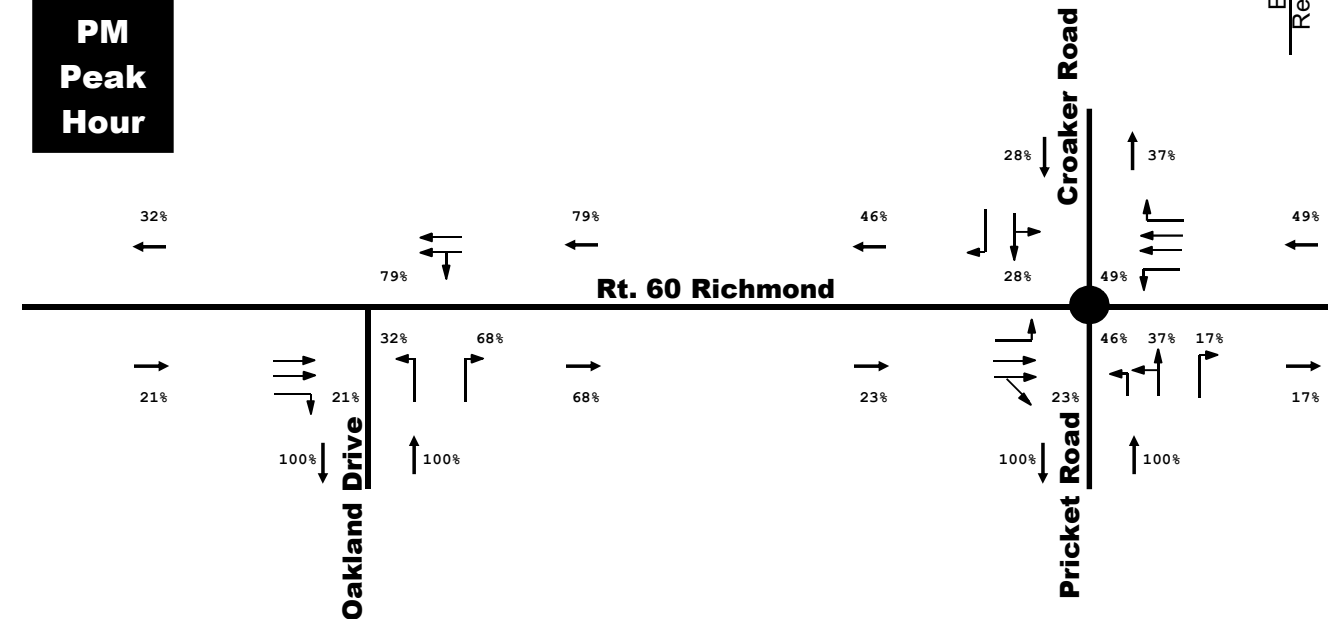


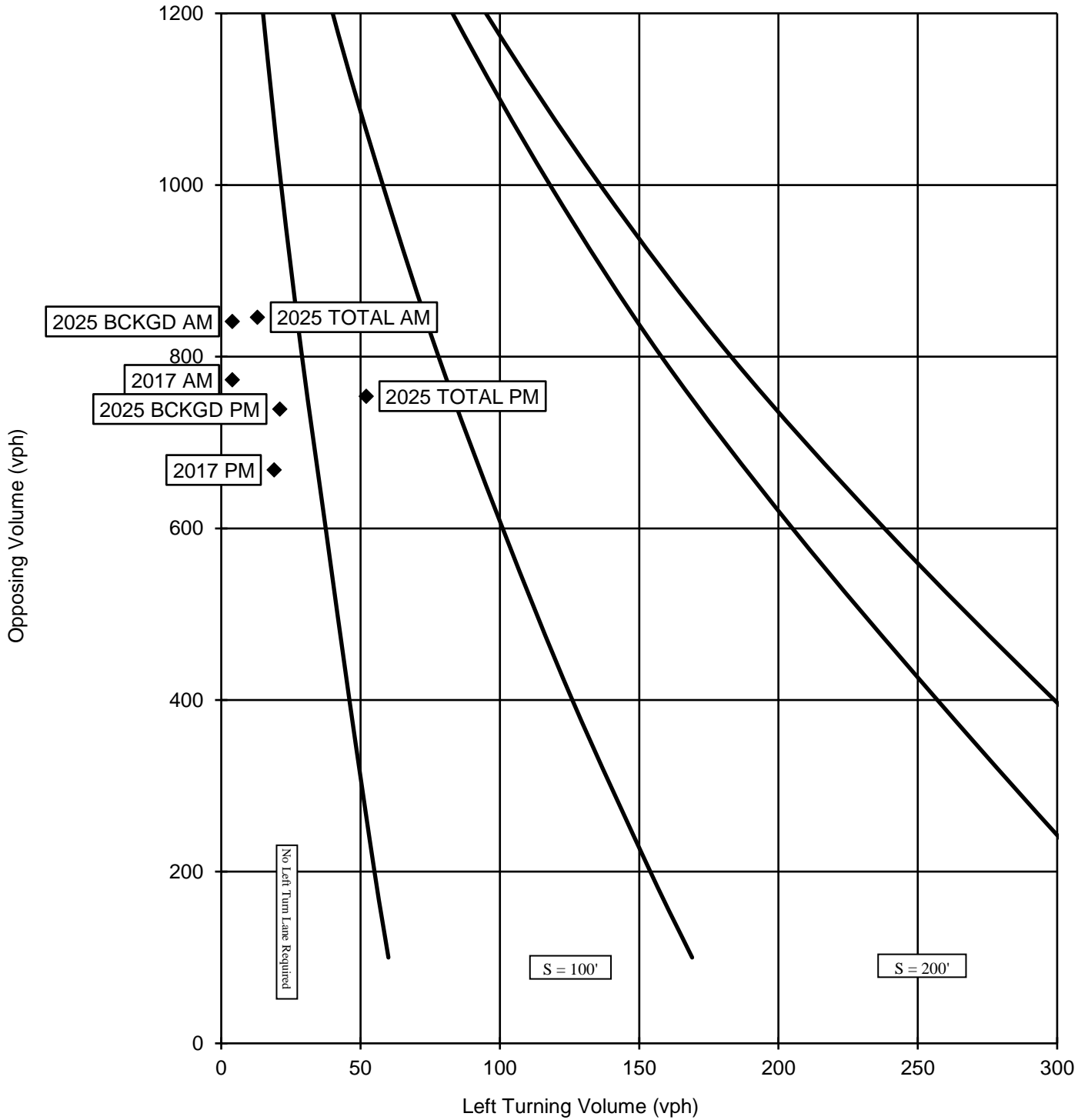
Exhibit
Reference

2017 PEAK HOUR COUNTS
TRIP DISTRIBUTION

DRW Consultants, LLC
804-794-7312

Exhibit E

LEFT TURN LANE WARRANT
FOUR LANE HIGHWAY
DIVIDED
S = Left Turn Storage



Source: VDOT Road Design Manual, Appendix C, derived from Highway Research Record Number 211
























VDOT LEFT TURN LANE WARRANT
WESTBOUND LEFT TURN ON RT. 60
AT OAKLAND DRIVE

DRW Consultants, LLC
804-794-7312

Exhibit F
























HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	538	23	27	284	148	15	31	20	188	15	134
Future Volume (vph)	221	538	23	27	284	148	15	31	20	188	15	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1671	3438	1282	3155	3438	1509	1429	1556	1615		1727	1455
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1671	3438	1282	3155	3438	1509	1429	1556	1615		1727	1455
Peak-hour factor, PHF	0.86	0.86	0.86	0.87	0.87	0.87	0.75	0.75	0.75	0.83	0.83	0.83
Adj. Flow (vph)	257	626	27	31	326	170	20	41	27	227	18	161
RTOR Reduction (vph)	0	0	16	0	0	127	0	0	25	0	0	134
Lane Group Flow (vph)	257	626	11	31	326	43	20	41	2	0	245	27
Heavy Vehicles (%)	8%	5%	26%	11%	5%	7%	20%	16%	0%	4%	20%	11%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	15.4	34.6	34.6	1.8	21.5	21.5	5.5	5.5	5.5		14.3	14.3
Effective Green, g (s)	15.4	34.6	34.6	1.8	21.5	21.5	5.5	5.5	5.5		14.3	14.3
Actuated g/C Ratio	0.18	0.41	0.41	0.02	0.25	0.25	0.06	0.06	0.06		0.17	0.17
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	303	1404	523	67	872	383	92	101	104		291	245
v/s Ratio Prot	c0.15	c0.18		0.01	0.09		0.01	c0.03			c0.14	
v/s Ratio Perm			0.01			0.03			0.00			0.02
v/c Ratio	0.85	0.45	0.02	0.46	0.37	0.11	0.22	0.41	0.02		0.84	0.11
Uniform Delay, d1	33.5	18.1	14.9	41.0	26.1	24.3	37.6	38.0	37.1		34.1	29.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	18.6	0.3	0.0	1.8	0.3	0.2	0.4	1.0	0.0		18.6	0.1
Delay (s)	52.1	18.4	15.0	42.8	26.4	24.4	38.0	39.0	37.1		52.7	29.9
Level of Service	D	B	B	D	C	C	D	D	D		D	C
Approach Delay (s)		27.8			26.7			38.2			43.7	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			31.3									
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			84.7									
Intersection Capacity Utilization			60.1%									
Analysis Period (min)			15									
c Critical Lane Group												





























HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	114	504	60	130	674	303	112	92	41	247	73	167
Future Volume (vph)	114	504	60	130	674	303	112	92	41	247	73	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1815	1509
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1815	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.95	0.95	0.95
Adj. Flow (vph)	124	548	65	141	733	329	123	101	45	260	77	176
RTOR Reduction (vph)	0	0	45	0	0	234	0	0	40	0	0	138
Lane Group Flow (vph)	124	548	20	141	733	95	123	101	5	0	337	38
Heavy Vehicles (%)	2%	2%	0%	2%	2%	1%	1%	1%	2%	1%	0%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	9.6	30.0	30.0	7.1	28.0	28.0	10.3	10.3	10.3		20.9	20.9
Effective Green, g (s)	9.6	30.0	30.0	7.1	28.0	28.0	10.3	10.3	10.3		20.9	20.9
Actuated g/C Ratio	0.10	0.31	0.31	0.07	0.29	0.29	0.11	0.11	0.11		0.22	0.22
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	175	1096	500	251	1023	462	180	190	168		391	325
v/s Ratio Prot	c0.07	0.15		0.04	c0.21		c0.07	0.06			c0.19	
v/s Ratio Perm			0.01			0.06			0.00			0.03
v/c Ratio	0.71	0.50	0.04	0.56	0.72	0.21	0.68	0.53	0.03		0.86	0.12
Uniform Delay, d1	42.2	27.3	23.3	43.3	30.8	26.0	41.7	41.0	38.8		36.6	30.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	10.2	0.4	0.0	1.7	2.5	0.3	8.2	1.4	0.0		16.9	0.1
Delay (s)	52.5	27.7	23.4	45.1	33.3	26.3	49.9	42.4	38.8		53.5	30.6
Level of Service	D	C	C	D	C	C	D	D	D		D	C
Approach Delay (s)		31.5			32.8			45.2			45.6	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			36.1				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			96.8				Sum of lost time (s)			28.5		
Intersection Capacity Utilization			66.6%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												
























HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 		 	 			 			 	
Traffic Volume (vph)	239	581	31	36	307	160	33	47	42	203	21	145
Future Volume (vph)	239	581	31	36	307	160	33	47	42	203	21	145
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1671	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1671	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455
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)	260	632	34	39	334	174	36	51	46	221	23	158
RTOR Reduction (vph)	0	0	21	0	0	132	0	0	43	0	0	131
Lane Group Flow (vph)	260	632	13	39	334	42	36	51	3	0	244	27
Heavy Vehicles (%)	8%	5%	26%	11%	5%	7%	20%	16%	0%	4%	20%	11%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	15.4	32.4	32.4	2.8	20.3	20.3	5.7	5.7	5.7		14.3	14.3
Effective Green, g (s)	15.4	32.4	32.4	2.8	20.3	20.3	5.7	5.7	5.7		14.3	14.3
Actuated g/C Ratio	0.18	0.39	0.39	0.03	0.24	0.24	0.07	0.07	0.07		0.17	0.17
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	307	1330	496	105	833	365	97	105	109		294	248
v/s Ratio Prot	c0.16	c0.18		0.01	0.10		0.03	c0.03			c0.14	
v/s Ratio Perm			0.01			0.03			0.00			0.02
v/c Ratio	0.85	0.48	0.03	0.37	0.40	0.12	0.37	0.49	0.03		0.83	0.11
Uniform Delay, d1	33.0	19.3	15.9	39.6	26.6	24.7	37.3	37.6	36.4		33.5	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	18.3	0.3	0.0	0.8	0.4	0.2	0.9	1.3	0.0		16.6	0.1
Delay (s)	51.3	19.6	15.9	40.4	27.0	24.9	38.2	38.9	36.5		50.1	29.4
Level of Service	D	B	B	D	C	C	D	D	D		D	C
Approach Delay (s)		28.3			27.3			37.8			42.0	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			31.4				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.70									
Actuated Cycle Length (s)			83.7				Sum of lost time (s)		28.5			
Intersection Capacity Utilization			62.3%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
























1: Croaker Road & Rt. 60/Richmond Road

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	123	544	65	140	729	327	121	98	44	267	79	180
Future Volume (vph)	123	544	65	140	729	327	121	98	44	267	79	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	7.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1815	1509
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1815	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.95	0.95	0.95
Adj. Flow (vph)	134	591	71	152	792	355	132	107	48	281	83	189
RTOR Reduction (vph)	0	0	49	0	0	241	0	0	43	0	0	169
Lane Group Flow (vph)	134	591	22	152	792	114	132	107	5	0	364	20
Heavy Vehicles (%)	2%	2%	0%	2%	2%	1%	1%	1%	2%	1%	0%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	custom
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			4
Actuated Green, G (s)	10.2	32.0	32.0	7.5	29.8	29.8	10.8	10.8	10.8		23.2	10.8
Effective Green, g (s)	10.2	32.0	32.0	7.5	29.8	29.8	10.8	10.8	10.8		23.2	10.8
Actuated g/C Ratio	0.10	0.31	0.31	0.07	0.29	0.29	0.11	0.11	0.11		0.23	0.11
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	7.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	177	1110	506	252	1033	467	179	189	167		412	159
v/s Ratio Prot	c0.08	0.17		0.04	c0.22		c0.08	0.06			c0.20	
v/s Ratio Perm			0.01			0.07			0.00			0.01
v/c Ratio	0.76	0.53	0.04	0.60	0.77	0.24	0.74	0.57	0.03		0.88	0.13
Uniform Delay, d1	44.7	28.8	24.4	45.8	32.9	27.5	44.2	43.4	40.9		38.1	41.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	15.0	0.6	0.0	2.8	3.6	0.3	12.7	2.3	0.0		19.1	0.1
Delay (s)	59.7	29.4	24.4	48.6	36.5	27.8	57.0	45.7	40.9		57.1	41.5
Level of Service	E	C	C	D	D	C	E	D	D		E	D
Approach Delay (s)		34.1			35.5			50.1			51.8	
Approach LOS		C			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			39.6				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			102.0				Sum of lost time (s)			28.5		
Intersection Capacity Utilization			70.1%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road
























09/24/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (vph)	251	599	31	36	312	160	33	47	42	203	21	149	
Future Volume (vph)	251	599	31	36	312	160	33	47	42	203	21	149	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00	
Satd. Flow (prot)	1687	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00	
Satd. Flow (perm)	1687	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455	
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)	273	651	34	39	339	174	36	51	46	221	23	162	
RTOR Reduction (vph)	0	0	21	0	0	132	0	0	43	0	0	134	
Lane Group Flow (vph)	273	651	13	39	339	42	36	51	3	0	244	28	
Heavy Vehicles (%)	7%	5%	26%	11%	5%	7%	20%	16%	0%	4%	20%	11%	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm	
Protected Phases	5	2		1	6		4	4		3	3		
Permitted Phases			2			6			4			3	
Actuated Green, G (s)	15.4	32.5	32.5	2.8	20.4	20.4	5.7	5.7	5.7		14.4	14.4	
Effective Green, g (s)	15.4	32.5	32.5	2.8	20.4	20.4	5.7	5.7	5.7		14.4	14.4	
Actuated g/C Ratio	0.18	0.39	0.39	0.03	0.24	0.24	0.07	0.07	0.07		0.17	0.17	
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0	
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2	
Lane Grp Cap (vph)	309	1331	496	105	835	366	97	105	109		295	249	
v/s Ratio Prot	c0.16	c0.19		0.01	0.10		0.03	c0.03			c0.14		
v/s Ratio Perm			0.01			0.03			0.00			0.02	
v/c Ratio	0.88	0.49	0.03	0.37	0.41	0.12	0.37	0.49	0.03		0.83	0.11	
Uniform Delay, d1	33.4	19.4	15.9	39.7	26.7	24.7	37.4	37.7	36.5		33.5	29.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	23.8	0.3	0.0	0.8	0.4	0.2	0.9	1.3	0.0		16.3	0.1	
Delay (s)	57.2	19.8	15.9	40.5	27.0	24.9	38.3	39.0	36.6		49.9	29.4	
Level of Service	E	B	B	D	C	C	D	D	D		D	C	
Approach Delay (s)		30.3			27.3			37.9			41.7		
Approach LOS		C			C			D			D		
Intersection Summary													
HCM 2000 Control Delay			32.2									HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.71										
Actuated Cycle Length (s)			83.9									Sum of lost time (s)	28.5
Intersection Capacity Utilization			62.9%									ICU Level of Service	B
Analysis Period (min)			15										
c Critical Lane Group													

HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road
























09/25/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	555	83	162	748	327	132	107	58	267	94	192
Future Volume (vph)	130	555	83	162	748	327	132	107	58	267	94	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1819	1509
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1819	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95
Adj. Flow (vph)	141	603	90	176	813	355	143	116	63	281	99	202
RTOR Reduction (vph)	0	0	63	0	0	230	0	0	56	0	0	153
Lane Group Flow (vph)	141	603	27	176	813	125	143	116	7	0	380	49
Heavy Vehicles (%)	2%	2%	0%	2%	2%	1%	1%	1%	2%	1%	0%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	10.4	31.2	31.2	8.0	29.3	29.3	11.1	11.1	11.1		23.9	23.9
Effective Green, g (s)	10.4	31.2	31.2	8.0	29.3	29.3	11.1	11.1	11.1		23.9	23.9
Actuated g/C Ratio	0.10	0.30	0.30	0.08	0.29	0.29	0.11	0.11	0.11		0.23	0.23
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	179	1075	490	267	1009	456	183	193	171		423	351
v/s Ratio Prot	c0.08	0.17		0.05	c0.23		c0.08	0.06			c0.21	
v/s Ratio Perm			0.02			0.08			0.00			0.03
v/c Ratio	0.79	0.56	0.06	0.66	0.81	0.27	0.78	0.60	0.04		0.90	0.14
Uniform Delay, d1	45.1	30.0	25.3	46.0	34.1	28.5	44.6	43.7	41.0		38.2	31.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	18.7	0.7	0.1	4.4	4.9	0.4	17.9	3.6	0.0		20.7	0.1
Delay (s)	63.8	30.7	25.4	50.5	39.0	28.8	62.5	47.3	41.1		59.0	31.3
Level of Service	E	C	C	D	D	C	E	D	D		E	C
Approach Delay (s)		35.7			37.8			52.8			49.4	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			41.0				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			102.7				Sum of lost time (s)			28.5		
Intersection Capacity Utilization			71.8%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road





























09/24/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	251	599	31	36	312	160	33	47	42	203	21	149
Future Volume (vph)	251	599	31	36	312	160	33	47	42	203	21	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1687	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1687	3438	1282	3155	3438	1509	1429	1556	1615		1723	1455
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)	273	651	34	39	339	174	36	51	46	221	23	162
RTOR Reduction (vph)	0	0	20	0	0	131	0	0	43	0	0	134
Lane Group Flow (vph)	273	651	14	39	339	43	36	51	3	0	244	28
Heavy Vehicles (%)	7%	5%	26%	11%	5%	7%	20%	16%	0%	4%	20%	11%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	16.7	35.0	35.0	2.7	21.5	21.5	5.6	5.6	5.6		15.0	15.0
Effective Green, g (s)	16.7	35.0	35.0	2.7	21.5	21.5	5.6	5.6	5.6		15.0	15.0
Actuated g/C Ratio	0.19	0.40	0.40	0.03	0.25	0.25	0.06	0.06	0.06		0.17	0.17
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	324	1386	516	98	851	373	92	100	104		297	251
v/s Ratio Prot	c0.16	c0.19		0.01	0.10		0.03	c0.03			c0.14	
v/s Ratio Perm			0.01			0.03			0.00			0.02
v/c Ratio	0.84	0.47	0.03	0.40	0.40	0.12	0.39	0.51	0.03		0.82	0.11
Uniform Delay, d1	33.8	19.1	15.6	41.3	27.3	25.3	39.0	39.3	38.1		34.6	30.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	17.1	0.3	0.0	1.0	0.4	0.2	1.0	1.8	0.0		15.8	0.1
Delay (s)	50.8	19.4	15.6	42.2	27.6	25.5	40.0	41.1	38.1		50.4	30.4
Level of Service	D	B	B	D	C	C	D	D	D		D	C
Approach Delay (s)		28.2			28.0			39.8			42.4	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			31.7				HCM 2000 Level of Service			C		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			86.8				Sum of lost time (s)		28.5			
Intersection Capacity Utilization			62.9%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

1: Croaker Road & Rt. 60/Richmond Road

09/25/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 		 	 			 			 	
Traffic Volume (vph)	130	555	83	162	748	327	132	107	58	267	94	192
Future Volume (vph)	130	555	83	162	748	327	132	107	58	267	94	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95	1.00	0.95	0.95	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (prot)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1819	1509
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.96	1.00
Satd. Flow (perm)	1770	3539	1615	3433	3539	1599	1698	1787	1583		1819	1509
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.95	0.95	0.95
Adj. Flow (vph)	141	603	90	176	813	355	143	116	63	281	99	202
RTOR Reduction (vph)	0	0	62	0	0	233	0	0	56	0	0	153
Lane Group Flow (vph)	141	603	28	176	813	122	143	116	7	0	380	49
Heavy Vehicles (%)	2%	2%	0%	2%	2%	1%	1%	1%	2%	1%	0%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases			2			6			4			3
Actuated Green, G (s)	10.2	31.6	31.6	8.1	30.0	30.0	11.0	11.0	11.0		24.0	24.0
Effective Green, g (s)	10.2	31.6	31.6	8.1	30.0	30.0	11.0	11.0	11.0		24.0	24.0
Actuated g/C Ratio	0.10	0.31	0.31	0.08	0.29	0.29	0.11	0.11	0.11		0.23	0.23
Clearance Time (s)	7.0	6.0	6.0	7.5	6.0	6.0	7.0	7.0	7.0		8.0	8.0
Vehicle Extension (s)	0.2	3.5	3.5	0.2	3.5	3.5	0.2	0.2	0.2		0.2	0.2
Lane Grp Cap (vph)	174	1083	494	269	1028	464	180	190	168		423	350
v/s Ratio Prot	c0.08	0.17		0.05	c0.23		c0.08	0.06			c0.21	
v/s Ratio Perm			0.02			0.08			0.00			0.03
v/c Ratio	0.81	0.56	0.06	0.65	0.79	0.26	0.79	0.61	0.04		0.90	0.14
Uniform Delay, d1	45.6	29.9	25.3	46.2	33.7	28.1	45.0	44.1	41.4		38.4	31.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	22.9	0.7	0.1	4.3	4.3	0.4	19.7	4.0	0.0		20.7	0.1
Delay (s)	68.5	30.6	25.3	50.5	38.1	28.5	64.7	48.1	41.4		59.2	31.5
Level of Service	E	C	C	D	D	C	E	D	D		E	C
Approach Delay (s)		36.5			37.2			54.2			49.6	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			41.1				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.83									
Actuated Cycle Length (s)			103.2				Sum of lost time (s)			28.5		
Intersection Capacity Utilization			71.8%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

Intersection						
Int Delay, s/veh	0.3					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑	↑	↑
Traffic Vol, veh/h	771	2	4	429	6	11
Future Vol, veh/h	771	2	4	429	6	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	61	61
Heavy Vehicles, %	7	5	0	7	17	0
Mvmt Flow	907	2	5	505	10	18
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	909	0	1170	454
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	263	-
Critical Hdwy	-	-	4.1	-	7.14	6.9
Critical Hdwy Stg 1	-	-	-	-	6.14	-
Critical Hdwy Stg 2	-	-	-	-	6.14	-
Follow-up Hdwy	-	-	2.2	-	3.67	3.3
Pot Cap-1 Maneuver	-	-	757	-	165	559
Stage 1	-	-	-	-	320	-
Stage 2	-	-	-	-	714	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	757	-	164	559
Mov Cap-2 Maneuver	-	-	-	-	259	-
Stage 1	-	-	-	-	317	-
Stage 2	-	-	-	-	714	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		14.4	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	259	559	-	-	757	-
HCM Lane V/C Ratio	0.038	0.032	-	-	0.006	-
HCM Control Delay (s)	19.4	11.7	-	-	9.8	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑	↑	↑
Traffic Vol, veh/h	663	5	19	934	7	15
Future Vol, veh/h	663	5	19	934	7	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	93	93	69	69
Heavy Vehicles, %	1	40	5	3	29	7
Mvmt Flow	753	6	20	1004	10	22

Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	759	0	1295	377
Stage 1	-	-	-	-	753	-
Stage 2	-	-	-	-	542	-
Critical Hdwy	-	-	4.2	-	7.38	7.04
Critical Hdwy Stg 1	-	-	-	-	6.38	-
Critical Hdwy Stg 2	-	-	-	-	6.38	-
Follow-up Hdwy	-	-	2.25	-	3.79	3.37
Pot Cap-1 Maneuver	-	-	829	-	122	607
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	477	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	829	-	115	607
Mov Cap-2 Maneuver	-	-	-	-	230	-
Stage 1	-	-	-	-	342	-
Stage 2	-	-	-	-	477	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	14.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	230	607	-	-	829	-
HCM Lane V/C Ratio	0.044	0.036	-	-	0.025	-
HCM Control Delay (s)	21.4	11.2	-	-	9.5	0.2
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑	↑	↑
Traffic Vol, veh/h	839	2	4	481	6	12
Future Vol, veh/h	839	2	4	481	6	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	7	5	0	7	17	0
Mvmt Flow	912	2	4	523	7	13
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	914	0	1182	456
Stage 1	-	-	-	-	912	-
Stage 2	-	-	-	-	270	-
Critical Hdwy	-	-	4.1	-	7.14	6.9
Critical Hdwy Stg 1	-	-	-	-	6.14	-
Critical Hdwy Stg 2	-	-	-	-	6.14	-
Follow-up Hdwy	-	-	2.2	-	3.67	3.3
Pot Cap-1 Maneuver	-	-	754	-	162	557
Stage 1	-	-	-	-	318	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	754	-	161	557
Mov Cap-2 Maneuver	-	-	-	-	257	-
Stage 1	-	-	-	-	316	-
Stage 2	-	-	-	-	708	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		14.2	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	257	557	-	-	754	-
HCM Lane V/C Ratio	0.025	0.023	-	-	0.006	-
HCM Control Delay (s)	19.4	11.6	-	-	9.8	0
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection						
Int Delay, s/veh	0.5					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑	↑	↑
Traffic Vol, veh/h	716	5	21	1009	8	16
Future Vol, veh/h	716	5	21	1009	8	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	100	-	-	0	0
Veh in Median Storage, #	0	-	-	0	1	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	40	5	3	29	7
Mvmt Flow	778	5	23	1097	9	17
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	783	0	1373	389
Stage 1	-	-	-	-	778	-
Stage 2	-	-	-	-	595	-
Critical Hdwy	-	-	4.2	-	7.38	7.04
Critical Hdwy Stg 1	-	-	-	-	6.38	-
Critical Hdwy Stg 2	-	-	-	-	6.38	-
Follow-up Hdwy	-	-	2.25	-	3.79	3.37
Pot Cap-1 Maneuver	-	-	812	-	108	596
Stage 1	-	-	-	-	350	-
Stage 2	-	-	-	-	445	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	812	-	100	596
Mov Cap-2 Maneuver	-	-	-	-	212	-
Stage 1	-	-	-	-	325	-
Stage 2	-	-	-	-	445	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.5		15	
HCM LOS					C	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	212	596	-	-	812	-
HCM Lane V/C Ratio	0.041	0.029	-	-	0.028	-
HCM Control Delay (s)	22.7	11.2	-	-	9.6	0.3
HCM Lane LOS	C	B	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

HCM 6th TWSC
2: Oakland Drive/Crossover & Rt. 60

09/24/2018




Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗					↑	↗		↗	
Traffic Vol, veh/h	0	839	7	0	0	0	0	21	42	0	13	0
Future Vol, veh/h	0	839	7	0	0	0	0	21	42	0	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16983	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	7	5	0	7	2	0	17	0	2	2	2
Mvmt Flow	0	912	8	0	0	0	0	23	46	0	14	0
Major/Minor	Major1						Minor1			Minor2		
Conflicting Flow All	-	0	0				-	912	456	468	920	-
Stage 1	-	-	-				-	912	-	0	0	-
Stage 2	-	-	-				-	0	-	468	920	-
Critical Hdwy	-	-	-				-	6.84	6.9	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-				-	5.84	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-				-	4.17	3.3	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-				0	247	557	478	269	0
Stage 1	0	-	-				0	318	-	-	-	0
Stage 2	0	-	-				0	-	-	545	348	0
Platoon blocked, %		-	-									
Mov Cap-1 Maneuver	-	-	-				-	247	557	414	269	-
Mov Cap-2 Maneuver	-	-	-				-	316	-	414	269	-
Stage 1	-	-	-				-	318	-	-	-	-
Stage 2	-	-	-				-	-	-	464	348	-
Approach	EB						NB			SB		
HCM Control Delay, s	0						13.8			19.1		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	SBLn1							
Capacity (veh/h)	316	557	-	-	269							
HCM Lane V/C Ratio	0.072	0.082	-	-	0.053							
HCM Control Delay (s)	17.3	12	-	-	19.1							
HCM Lane LOS	C	B	-	-	C							
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0.2							

HCM 6th TWSC 3: Crossover & WB Rt. 60

09/24/2018

Intersection

Int Delay, s/veh 0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	13	481	21	0
Future Vol, veh/h	0	0	13	481	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	0	7	17	2
Mvmt Flow	0	0	14	523	23	0

Major/Minor	Major2	Minor1
Conflicting Flow All	0	0 290 -
Stage 1	-	- 0 -
Stage 2	-	- 290 -
Critical Hdwy	4.1	- 7.14 -
Critical Hdwy Stg 1	-	- - -
Critical Hdwy Stg 2	-	- 6.14 -
Follow-up Hdwy	2.2	- 3.67 -
Pot Cap-1 Maneuver	-	- 637 0
Stage 1	-	- - 0
Stage 2	-	- 691 0
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	- 637 -
Mov Cap-2 Maneuver	-	- 637 -
Stage 1	-	- - -
Stage 2	-	- 691 -

Approach	WB	NB
HCM Control Delay, s		10.9
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	637	-	-
HCM Lane V/C Ratio	0.036	-	-
HCM Control Delay (s)	10.9	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-

HCM 6th TWSC
2: Oakland Drive/Crossover & Rt. 60

09/25/2018

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗					↑	↗		↗	
Traffic Vol, veh/h	0	734	20	0	0	0	0	17	34	0	52	0
Future Vol, veh/h	0	734	20	0	0	0	0	17	34	0	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16983	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	92	69	92	92	92	92	92
Heavy Vehicles, %	2	1	40	5	3	2	2	29	7	5	5	2
Mvmt Flow	0	798	22	0	0	0	0	18	37	0	57	0
Major/Minor	Major1						Minor1			Minor2		
Conflicting Flow All	-	0	0				-	798	399	408	820	-
Stage 1	-	-	-				-	798	-	0	0	-
Stage 2	-	-	-				-	0	-	408	820	-
Critical Hdwy	-	-	-				-	7.08	7.04	7.6	6.6	-
Critical Hdwy Stg 1	-	-	-				-	6.08	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	6.6	5.6	-
Follow-up Hdwy	-	-	-				-	4.29	3.37	3.55	4.05	-
Pot Cap-1 Maneuver	0	-	-				0	271	587	521	303	0
Stage 1	0	-	-				0	338	-	-	-	0
Stage 2	0	-	-				0	-	-	583	380	0
Platoon blocked, %		-	-									
Mov Cap-1 Maneuver	-	-	-				-	271	587	467	303	-
Mov Cap-2 Maneuver	-	-	-				-	328	-	467	303	-
Stage 1	-	-	-				-	338	-	-	-	-
Stage 2	-	-	-				-	-	-	516	380	-
Approach	EB						NB			SB		
HCM Control Delay, s	0						13.2			19.6		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	SBLn1							
Capacity (veh/h)	328	587	-	-	303							
HCM Lane V/C Ratio	0.056	0.063	-	-	0.187							
HCM Control Delay (s)	16.6	11.5	-	-	19.6							
HCM Lane LOS	C	B	-	-	C							
HCM 95th %tile Q(veh)	0.2	0.2	-	-	0.7							




HCM 6th TWSC

3: Crossover & WB Rt. 60

09/25/2018

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	52	1020	17	0
Future Vol, veh/h	0	0	52	1020	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	40	5	3	29	7
Mvmt Flow	0	0	57	1109	18	0

Major/Minor	Major2	Minor1
Conflicting Flow All	0	0 669 -
Stage 1	-	- 0 -
Stage 2	-	- 669 -
Critical Hdwy	4.2	- 7.38 -
Critical Hdwy Stg 1	-	- - -
Critical Hdwy Stg 2	-	- 6.38 -
Follow-up Hdwy	2.25	- 3.79 -
Pot Cap-1 Maneuver	-	- 336 0
Stage 1	-	- - 0
Stage 2	-	- 404 0
Platoon blocked, %	-	-
Mov Cap-1 Maneuver	-	- 336 -
Mov Cap-2 Maneuver	-	- 336 -
Stage 1	-	- - -
Stage 2	-	- 404 -

Approach	WB	NB
HCM Control Delay, s		16.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	336	-	-
HCM Lane V/C Ratio	0.055	-	-
HCM Control Delay (s)	16.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-

HCM 6th TWSC
2: Oakland Drive/Crossover & Rt. 60

09/24/2018

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗					↑	↗		↗	
Traffic Vol, veh/h	0	839	7	0	0	0	0	21	42	0	13	0
Future Vol, veh/h	0	839	7	0	0	0	0	21	42	0	13	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16983	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	7	5	0	7	2	0	17	0	2	2	2
Mvmt Flow	0	912	8	0	0	0	0	23	46	0	14	0
Major/Minor	Major1						Minor1			Minor2		
Conflicting Flow All	-	0	0				-	912	456	468	920	-
Stage 1	-	-	-				-	912	-	0	0	-
Stage 2	-	-	-				-	0	-	468	920	-
Critical Hdwy	-	-	-				-	6.84	6.9	7.54	6.54	-
Critical Hdwy Stg 1	-	-	-				-	5.84	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-				-	4.17	3.3	3.52	4.02	-
Pot Cap-1 Maneuver	0	-	-				0	247	557	478	269	0
Stage 1	0	-	-				0	318	-	-	-	0
Stage 2	0	-	-				0	-	-	545	348	0
Platoon blocked, %		-	-									
Mov Cap-1 Maneuver	-	-	-				-	247	557	414	269	-
Mov Cap-2 Maneuver	-	-	-				-	316	-	414	269	-
Stage 1	-	-	-				-	318	-	-	-	-
Stage 2	-	-	-				-	-	-	464	348	-
Approach	EB						NB			SB		
HCM Control Delay, s	0						13.8			19.1		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	SBLn1							
Capacity (veh/h)	316	557	-	-	269							
HCM Lane V/C Ratio	0.072	0.082	-	-	0.053							
HCM Control Delay (s)	17.3	12	-	-	19.1							
HCM Lane LOS	C	B	-	-	C							
HCM 95th %tile Q(veh)	0.2	0.3	-	-	0.2							

HCM 6th TWSC

3: Crossover & WB Rt. 60

09/24/2018

Intersection						
Int Delay, s/veh	0.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations			↱	↱↱	↱	
Traffic Vol, veh/h	0	0	13	481	21	0
Future Vol, veh/h	0	0	13	481	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	0	7	17	2
Mvmt Flow	0	0	14	523	23	0
Major/Minor		Major2		Minor1		
Conflicting Flow All		0	0	290	-	-
Stage 1		-	-	0	-	-
Stage 2		-	-	290	-	-
Critical Hdwy		4.1	-	7.14	-	-
Critical Hdwy Stg 1		-	-	-	-	-
Critical Hdwy Stg 2		-	-	6.14	-	-
Follow-up Hdwy		2.2	-	3.67	-	-
Pot Cap-1 Maneuver		-	-	637	0	-
Stage 1		-	-	-	0	-
Stage 2		-	-	691	0	-
Platoon blocked, %		-	-	-	-	-
Mov Cap-1 Maneuver		-	-	637	-	-
Mov Cap-2 Maneuver		-	-	637	-	-
Stage 1		-	-	-	-	-
Stage 2		-	-	691	-	-
Approach		WB		NB		
HCM Control Delay, s				10.9		
HCM LOS				B		
Minor Lane/Major Mvmt	NBLn1	WBL	WBT			
Capacity (veh/h)	637	-	-			
HCM Lane V/C Ratio	0.036	-	-			
HCM Control Delay (s)	10.9	-	-			
HCM Lane LOS	B	-	-			
HCM 95th %tile Q(veh)	0.1	-	-			

HCM 6th TWSC

2: Oakland Drive/Crossover & Rt. 60

09/25/2018

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↗					↑	↗		↗	
Traffic Vol, veh/h	0	734	20	0	0	0	0	17	34	0	52	0
Future Vol, veh/h	0	734	20	0	0	0	0	17	34	0	52	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	100	-	-	-	-	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	16983	-	-	1	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	93	93	92	69	92	92	92	92	92
Heavy Vehicles, %	2	1	40	5	3	2	2	29	7	5	5	2
Mvmt Flow	0	798	22	0	0	0	0	18	37	0	57	0
Major/Minor	Major1						Minor1			Minor2		
Conflicting Flow All	-	0	0				-	798	399	408	820	-
Stage 1	-	-	-				-	798	-	0	0	-
Stage 2	-	-	-				-	0	-	408	820	-
Critical Hdwy	-	-	-				-	7.08	7.04	7.6	6.6	-
Critical Hdwy Stg 1	-	-	-				-	6.08	-	-	-	-
Critical Hdwy Stg 2	-	-	-				-	-	-	6.6	5.6	-
Follow-up Hdwy	-	-	-				-	4.29	3.37	3.55	4.05	-
Pot Cap-1 Maneuver	0	-	-				0	271	587	521	303	0
Stage 1	0	-	-				0	338	-	-	-	0
Stage 2	0	-	-				0	-	-	583	380	0
Platoon blocked, %		-	-									
Mov Cap-1 Maneuver	-	-	-				-	271	587	467	303	-
Mov Cap-2 Maneuver	-	-	-				-	328	-	467	303	-
Stage 1	-	-	-				-	338	-	-	-	-
Stage 2	-	-	-				-	-	-	516	380	-
Approach	EB						NB			SB		
HCM Control Delay, s	0						13.2			19.6		
HCM LOS							B			C		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBT	EBR	SBLn1						
Capacity (veh/h)	328		587	-	-	303						
HCM Lane V/C Ratio	0.056		0.063	-	-	0.187						
HCM Control Delay (s)	16.6		11.5	-	-	19.6						
HCM Lane LOS	C		B	-	-	C						
HCM 95th %tile Q(veh)	0.2		0.2	-	-	0.7						




HCM 6th TWSC

3: Crossover & WB Rt. 60

09/25/2018

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	52	1020	17	0
Future Vol, veh/h	0	0	52	1020	17	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	40	5	3	29	7
Mvmt Flow	0	0	57	1109	18	0












Major/Minor	Major2	Minor1
Conflicting Flow All	0	0 669 -
Stage 1	-	- 0 -
Stage 2	-	- 669 -
Critical Hdwy	4.2	- 7.38 -
Critical Hdwy Stg 1	-	- - -
Critical Hdwy Stg 2	-	- 6.38 -
Follow-up Hdwy	2.25	- 3.79 -
Pot Cap-1 Maneuver	-	- 336 0
Stage 1	-	- - 0
Stage 2	-	- 404 0
Platoon blocked, %		-
Mov Cap-1 Maneuver	-	- 336 -
Mov Cap-2 Maneuver	-	- 336 -
Stage 1	-	- - -
Stage 2	-	- 404 -

Approach	WB	NB
HCM Control Delay, s		16.3
HCM LOS		C

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	336	-	-
HCM Lane V/C Ratio	0.055	-	-
HCM Control Delay (s)	16.3	-	-
HCM Lane LOS	C	-	-
HCM 95th %tile Q(veh)	0.2	-	-

Queues

1: Croaker Road & Rt. 60/Richmond Road

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	257	626	27	31	326	170	20	41	27	245	161
v/c Ratio	0.79	0.41	0.04	0.15	0.45	0.37	0.15	0.28	0.09	0.78	0.40
Control Delay	52.3	20.0	0.1	41.0	31.3	6.6	40.1	42.6	0.6	48.9	7.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	20.0	0.1	41.0	31.3	6.6	40.1	42.6	0.6	48.9	7.9
Queue Length 50th (ft)	123	101	0	7	76	0	9	20	0	117	0
Queue Length 95th (ft)	#286	208	0	23	127	40	29	49	0	189	36
Internal Link Dist (ft)	1267			1429			615			808	
Turn Bay Length (ft)	200		10	200		200	165		150		200
Base Capacity (vph)	327	1616	700	598	1528	773	280	305	457	519	553
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.39	0.04	0.05	0.21	0.22	0.07	0.13	0.06	0.47	0.29












Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Croaker Road & Rt. 60/Richmond Road

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	124	548	65	141	733	329	123	101	45	337	176
v/c Ratio	0.71	0.50	0.10	0.57	0.72	0.47	0.69	0.53	0.14	0.87	0.38
Control Delay	67.2	29.8	0.3	55.9	36.7	5.8	64.8	55.3	0.9	61.9	8.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	67.2	29.8	0.3	55.9	36.7	5.8	64.8	55.3	0.9	61.9	8.5
Queue Length 50th (ft)	78	147	0	45	219	0	82	66	0	205	0
Queue Length 95th (ft)	150	220	0	85	323	66	157	132	0	#422	59
Internal Link Dist (ft)	1267			1429			615			808	
Turn Bay Length (ft)	200		10	200		200	165		150		200
Base Capacity (vph)	279	1314	716	523	1264	782	267	281	396	439	498
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.42	0.09	0.27	0.58	0.42	0.46	0.36	0.11	0.77	0.35












Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Croaker Road & Rt. 60/Richmond Road

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	260	632	34	39	334	174	36	51	46	244	158
v/c Ratio	0.80	0.45	0.05	0.19	0.46	0.37	0.26	0.34	0.15	0.78	0.40
Control Delay	53.7	22.2	0.2	41.8	31.5	6.9	42.8	44.4	1.0	49.8	7.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	53.7	22.2	0.2	41.8	31.5	6.9	42.8	44.4	1.0	49.8	7.7
Queue Length 50th (ft)	125	137	0	9	78	0	17	25	0	117	0
Queue Length 95th (ft)	#321	227	0	28	136	47	54	70	0	214	45
Internal Link Dist (ft)	1267			1429			615			808	
Turn Bay Length (ft)	200		10	200		200	165		150		200
Base Capacity (vph)	326	1583	690	595	1521	770	278	303	456	515	552
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.80	0.40	0.05	0.07	0.22	0.23	0.13	0.17	0.10	0.47	0.29












Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Croaker Road & Rt. 60/Richmond Road

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	134	591	71	152	792	355	132	107	48	364	189
v/c Ratio	0.76	0.53	0.11	0.61	0.77	0.50	0.74	0.57	0.15	0.89	0.58
Control Delay	72.9	31.1	0.4	58.7	39.5	6.7	70.2	57.6	1.0	64.7	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	72.9	31.1	0.4	58.7	39.5	6.7	70.2	57.6	1.0	64.7	14.2
Queue Length 50th (ft)	89	165	0	52	248	7	92	73	0	242	0
Queue Length 95th (ft)	162	241	0	90	353	79	168	138	0	#470	67
Internal Link Dist (ft)	1267			1429			615			808	
Turn Bay Length (ft)	200		10	200		200	165		150		200
Base Capacity (vph)	262	1250	690	492	1191	764	252	265	384	413	384
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.47	0.10	0.31	0.66	0.46	0.52	0.40	0.13	0.88	0.49

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Croaker Road & Rt. 60/Richmond Road

09/24/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	273	651	34	39	339	174	36	51	46	244	162
v/c Ratio	0.83	0.46	0.05	0.19	0.46	0.37	0.26	0.34	0.15	0.78	0.41
Control Delay	57.3	22.4	0.2	42.0	31.5	6.8	43.0	44.6	1.0	49.7	8.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.3	22.4	0.2	42.0	31.5	6.8	43.0	44.6	1.0	49.7	8.1
Queue Length 50th (ft)	132	143	0	9	80	0	17	25	0	117	0
Queue Length 95th (ft)	#341	234	0	28	138	46	54	71	0	215	48
Internal Link Dist (ft)		943			1429			615		808	
Turn Bay Length (ft)	400		10	200		200	165		150		200
Base Capacity (vph)	328	1580	689	594	1518	769	278	303	455	514	551
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.41	0.05	0.07	0.22	0.23	0.13	0.17	0.10	0.47	0.29

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Queues

1: Croaker Road & Rt. 60/Richmond Road

09/25/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	141	603	90	176	813	355	143	116	63	380	202
v/c Ratio	0.79	0.57	0.15	0.66	0.81	0.52	0.79	0.61	0.19	0.90	0.40
Control Delay	77.9	33.9	0.5	60.7	43.1	8.4	76.4	60.7	1.3	65.5	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	77.9	33.9	0.5	60.7	43.1	8.4	76.4	60.7	1.3	65.5	7.6
Queue Length 50th (ft)	99	186	0	63	282	17	105	84	0	260	1
Queue Length 95th (ft)	#193	262	0	102	377	98	#208	151	0	#422	60
Internal Link Dist (ft)		654			1429			615		808	
Turn Bay Length (ft)	300		10	200		200	165		150		200
Base Capacity (vph)	228	1173	659	374	1104	720	227	238	363	522	576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.51	0.14	0.47	0.74	0.49	0.63	0.49	0.17	0.73	0.35

Intersection Summary

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

Queues

1: Croaker Road & Rt. 60/Richmond Road

09/24/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	273	651	34	39	339	174	36	51	46	244	162
v/c Ratio	0.80	0.45	0.05	0.19	0.47	0.34	0.27	0.34	0.12	0.78	0.36
Control Delay	51.5	21.6	0.2	46.7	35.0	2.6	48.0	49.5	0.7	52.0	3.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	21.6	0.2	46.7	35.0	2.6	48.0	49.5	0.7	52.0	3.2
Queue Length 50th (ft)	133	145	0	9	83	0	18	26	0	120	0
Queue Length 95th (ft)	269	239	0	32	166	10	63	81	0	247	11
Internal Link Dist (ft)	943			1429			615			808	
Turn Bay Length (ft)	400		10	200		200	165		150		200
Base Capacity (vph)	658	2013	827	225	939	594	167	182	402	605	661
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.41	0.32	0.04	0.17	0.36	0.29	0.22	0.28	0.11	0.40	0.25

Intersection Summary

Queues

1: Croaker Road & Rt. 60/Richmond Road

09/25/2018



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBT	SBR
Lane Group Flow (vph)	141	603	90	176	813	355	143	116	63	380	202
v/c Ratio	0.82	0.56	0.15	0.66	0.80	0.51	0.80	0.61	0.19	0.90	0.40
Control Delay	82.0	33.7	0.5	61.1	41.9	7.7	78.4	61.7	1.3	65.8	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	82.0	33.7	0.5	61.1	41.9	7.7	78.4	61.7	1.3	65.8	7.6
Queue Length 50th (ft)	101	188	0	65	285	14	107	85	0	266	1
Queue Length 95th (ft)	#205	260	0	102	370	91	#214	152	0	#422	60
Internal Link Dist (ft)		654			1429			615		808	
Turn Bay Length (ft)	300		10	200		200	165		150		200
Base Capacity (vph)	209	1194	667	368	1151	741	217	229	355	520	574
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.51	0.13	0.48	0.71	0.48	0.66	0.51	0.18	0.73	0.35

Intersection Summary

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

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	229	109	112	25	5	44	111	67	66	8	52	13
Average Queue (ft)	144	69	66	6	1	20	75	43	36	2	27	7
95th Queue (ft)	254	119	126	27	9	55	120	80	70	14	67	20
Link Distance (ft)		1278	1278				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			10	200	200			200	165		150
Storage Blk Time (%)	7		22	1								
Queuing Penalty (veh)	18		5	1								

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	174	58
Average Queue (ft)	120	31
95th Queue (ft)	186	65
Link Distance (ft)	797	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)	2	
Queuing Penalty (veh)	3	

Intersection: 2: Oakland Drive & Rt. 60

Movement	NB	NB
Directions Served	L	R
Maximum Queue (ft)	19	19
Average Queue (ft)	4	7
95th Queue (ft)	21	22
Link Distance (ft)	1186	1186
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 27

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	162	153	151	52	59	127	257	237	147	196	240	41
Average Queue (ft)	72	91	87	20	16	64	146	120	61	53	125	15
95th Queue (ft)	126	140	141	46	44	111	222	203	109	157	208	34
Link Distance (ft)		1278	1278				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			10	200	200			200	165		150
Storage Blk Time (%)	0		37	4			2	0	0	0	9	
Queuing Penalty (veh)	0		22	9			2	1	0	0	9	

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	842	831
Average Queue (ft)	733	541
95th Queue (ft)	986	1145
Link Distance (ft)	797	797
Upstream Blk Time (%)	60	42
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Oakland Drive & Rt. 60

Movement	WB	NB	NB
Directions Served	LT	L	R
Maximum Queue (ft)	56	36	31
Average Queue (ft)	11	4	9
95th Queue (ft)	40	21	26
Link Distance (ft)	1278	1186	1186
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 45

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	LT	R	LT
Maximum Queue (ft)	221	152	150	42	57	94	70	68	12	84	27	302
Average Queue (ft)	177	102	98	18	27	69	41	48	3	50	14	197
95th Queue (ft)	273	213	159	57	60	104	72	81	14	93	33	434
Link Distance (ft)		1278	1278			1450	1450			618		797
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			10	200			200	165		150	
Storage Blk Time (%)	19	0	37	2								16
Queuing Penalty (veh)	55	1	12	5								23

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB
Directions Served	R
Maximum Queue (ft)	118
Average Queue (ft)	66
95th Queue (ft)	248
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Oakland Drive & Rt. 60

Movement	WB	NB	NB
Directions Served	LT	L	R
Maximum Queue (ft)	5	26	20
Average Queue (ft)	2	9	9
95th Queue (ft)	14	44	25
Link Distance (ft)	1278	1186	1186
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 95

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	158	190	208	88	110	150	233	204	178	197	251	158
Average Queue (ft)	76	108	105	25	20	71	149	122	69	60	139	26
95th Queue (ft)	136	172	175	62	65	122	216	191	131	172	225	90
Link Distance (ft)		1278	1278				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			10	200	200			200	165		150
Storage Blk Time (%)	0	0	42	4		0	1	0	0	0	12	
Queuing Penalty (veh)	0	0	27	12		0	2	1	1	0	12	

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	835	828
Average Queue (ft)	782	701
95th Queue (ft)	950	1146
Link Distance (ft)	797	797
Upstream Blk Time (%)	81	58
Queuing Penalty (veh)	0	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 2: Oakland Drive & Rt. 60

Movement	WB	WB	NB	NB
Directions Served	LT	T	L	R
Maximum Queue (ft)	86	43	47	44
Average Queue (ft)	16	3	8	10
95th Queue (ft)	59	29	32	31
Link Distance (ft)	1278	1278	1186	1186
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 55

Queuing and Blocking Report

Baseline

09/24/2018

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	313	122	112	48	3	58	130	103	65	36	112	24
Average Queue (ft)	232	83	87	13	1	28	89	53	42	8	61	12
95th Queue (ft)	409	132	122	47	5	63	153	118	75	51	119	29
Link Distance (ft)		948	948				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400			10	200	200			200	165		150
Storage Blk Time (%)	2		32	1			0				1	
Queuing Penalty (veh)	5		10	4			0				1	

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	241	105
Average Queue (ft)	169	54
95th Queue (ft)	290	206
Link Distance (ft)	797	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)	7	
Queuing Penalty (veh)	11	

Intersection: 2: Oakland Drive/Crossover & Rt. 60

Movement	NB	NB	SB
Directions Served	T	R	LT
Maximum Queue (ft)	27	17	30
Average Queue (ft)	11	12	11
95th Queue (ft)	32	24	34
Link Distance (ft)	1212	1212	24
Upstream Blk Time (%)			2
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Baseline

09/24/2018

Intersection: 3: Crossover & WB Rt. 60

Movement	NB
Directions Served	L
Maximum Queue (ft)	34
Average Queue (ft)	14
95th Queue (ft)	41
Link Distance (ft)	24
Upstream Blk Time (%)	2
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Rt. 60 & WB Rt. 60

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 30

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	214	174	184	91	126	153	249	220	154	219	283	162
Average Queue (ft)	92	108	105	30	34	85	155	130	72	60	141	32
95th Queue (ft)	170	165	161	64	89	138	226	204	123	171	235	109
Link Distance (ft)		659	659				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			10	200	200			200	165		150
Storage Blk Time (%)			43	7			1	0	0	0	11	0
Queuing Penalty (veh)			36	18			2	1	0	0	14	0

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	846	365
Average Queue (ft)	793	332
95th Queue (ft)	948	499
Link Distance (ft)	797	
Upstream Blk Time (%)	84	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		200
Storage Blk Time (%)	93	1
Queuing Penalty (veh)	179	2

Intersection: 2: Oakland Drive/Crossover & Rt. 60

Movement	EB	EB	NB	NB	SB
Directions Served	T	T	T	R	LT
Maximum Queue (ft)	15	10	74	44	60
Average Queue (ft)	0	0	17	14	27
95th Queue (ft)	8	7	50	32	51
Link Distance (ft)	1052	1052	1212	1212	24
Upstream Blk Time (%)					8
Queuing Penalty (veh)					4
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 3: Crossover & WB Rt. 60

Movement	WB	NB
Directions Served	L	L
Maximum Queue (ft)	43	71
Average Queue (ft)	8	20
95th Queue (ft)	33	57
Link Distance (ft)		24
Upstream Blk Time (%)		4
Queuing Penalty (veh)		1
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rt. 60 & WB Rt. 60

Movement	EB
Directions Served	T
Maximum Queue (ft)	11
Average Queue (ft)	0
95th Queue (ft)	8
Link Distance (ft)	256
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 258

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	312	228	200	44	14	57	104	75	71	5	104	23
Average Queue (ft)	233	119	95	11	3	32	80	42	44	1	51	13
95th Queue (ft)	413	349	258	42	15	69	131	92	78	10	116	29
Link Distance (ft)		948	948				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400			10	200	200			200	165		150
Storage Blk Time (%)	7	0	28	1							0	
Queuing Penalty (veh)	21	0	9	4							0	

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	178	41
Average Queue (ft)	136	24
95th Queue (ft)	212	47
Link Distance (ft)	797	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)	1	
Queuing Penalty (veh)	2	

Intersection: 2: Oakland Drive/Crossover & Rt. 60

Movement	NB	NB	SB
Directions Served	T	R	LT
Maximum Queue (ft)	30	25	24
Average Queue (ft)	9	14	9
95th Queue (ft)	31	33	32
Link Distance (ft)	1212	1212	24
Upstream Blk Time (%)			3
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 3: Crossover & WB Rt. 60

Movement	NB
Directions Served	L
Maximum Queue (ft)	33
Average Queue (ft)	10
95th Queue (ft)	34
Link Distance (ft)	24
Upstream Blk Time (%)	2
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Rt. 60 & WB Rt. 60

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Network Summary

Network wide Queuing Penalty: 36

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	T	T	R	L	L	T	T	R	L	LT	R
Maximum Queue (ft)	190	181	192	114	111	129	249	239	185	240	322	196
Average Queue (ft)	85	105	102	30	26	74	155	133	74	68	149	35
95th Queue (ft)	156	163	165	73	68	119	227	212	133	185	255	121
Link Distance (ft)		659	659				1450	1450			618	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	300			10	200	200			200	165		150
Storage Blk Time (%)			42	6			2	1	0	0	14	
Queuing Penalty (veh)			35	17			3	3	0	1	17	

Intersection: 1: Croaker Road & Rt. 60/Richmond Road

Movement	SB	SB
Directions Served	LT	R
Maximum Queue (ft)	849	365
Average Queue (ft)	784	328
95th Queue (ft)	969	499
Link Distance (ft)	797	
Upstream Blk Time (%)	82	
Queuing Penalty (veh)	0	
Storage Bay Dist (ft)		200
Storage Blk Time (%)	91	0
Queuing Penalty (veh)	175	0

Intersection: 2: Oakland Drive/Crossover & Rt. 60

Movement	EB	EB	NB	NB	SB
Directions Served	T	T	T	R	LT
Maximum Queue (ft)	15	4	60	45	48
Average Queue (ft)	1	0	14	15	24
95th Queue (ft)	8	3	42	34	46
Link Distance (ft)	1052	1052	1212	1212	24
Upstream Blk Time (%)					6
Queuing Penalty (veh)					3
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report

Baseline

09/25/2018

Intersection: 3: Crossover & WB Rt. 60

Movement	WB	NB
Directions Served	L	L
Maximum Queue (ft)	48	68
Average Queue (ft)	6	17
95th Queue (ft)	28	50
Link Distance (ft)		24
Upstream Blk Time (%)		3
Queuing Penalty (veh)		1
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rt. 60 & WB Rt. 60

Movement	B11
Directions Served	T
Maximum Queue (ft)	6
Average Queue (ft)	0
95th Queue (ft)	4
Link Distance (ft)	659
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Network Summary

Network wide Queuing Penalty: 256

Level of Service Information

Richmond Road and Oakland Drive Intersection

	2025 No Buildout		2025 Buildout		2025 Buildout, with Optimized Signal Timing Adjustment at the Richmond and Croaker/Pricket intersection	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Northbound Through	B	B	C	C	C	C
Northbound Right	n/a (included in the northbound through movement)	n/a (included in the northbound through movement)	B	B	B	B
Southbound Left/Through	n/a (included in the westbound left movement)	n/a (included in the westbound left movement)	C	C	C	C
Westbound Left	A	A	n/a (free- flow movement into median)	n/a (free- flow movement into median)	n/a (free- flow movement into median)	n/a (free- flow movement into median)
Northbound Left	C	C	B	C	B	C

Level of Service Information

Richmond Road at the Croaker Road/Pricket Road Intersection

	2025 No Buildout		2025 Buildout		2025 Buildout, with Optimized Signal Timing Adjustment	
	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour	A.M. Peak Hour	P.M. Peak Hour
Overall Intersection	C	D	C	D	C	D
Eastbound Left	D	E	E	E	D	E
Eastbound Through	B	C	B	C	B	C
Eastbound Right	B	C	B	C	B	C
Westbound Left	D	D	D	D	D	D
Westbound Through	C	D	C	D	C	D
Westbound Right	C	C	C	C	C	C
Northbound Left	D	E	D	E	D	E
Northbound Left/Through	D	D	D	D	D	D
Northbound Right	D	D	D	D	D	D
Southbound Left/Through	D	E	D	E	D	E
Southbound Right	C	D	C	C	C	C

How Low-Income Housing Tax Credits work

THERE ARE 907 actively leasing properties (84,921 apartments) in Virginia that were funded by the federal Low-Income Housing Tax Credit (LIHTC) program. The credits are allocated by the Virginia Housing Development Authority (VHDA). The apartments serve low-income families, people with disabilities, the elderly and the homeless in urban and rural Virginia. These credits are often the foundation for revitalizing neglected neighborhoods and catalysts for stimulating local economies.

Here's how the program works.

1. Federal regulations allow each state's housing finance agency to work within broad guidelines and tailor the LIHTC program to best address that state's needs. The LIHTC program encourages investors to finance apartments for low-income residents at restricted rents. Each year, each state gets a per capita allocation of housing tax credits. For Virginia in 2013, the allocation was \$2.25 per capita for a total of \$18.4 million. In addition, a state may request a share of the national pool of unused credits from other states. The credits generate approximately twice their value in additional investment.

Eligible development types and corresponding credit rates include: 9 percent for new construction or substantial rehabilitation of developments not federally subsidized or financed with tax-exempt bonds; 4 percent for new construction, substantial rehabilitation or acquisition of developments that are federally subsidized with tax-exempt bonds. The actual tax credit rate, recalculated monthly by the IRS based on Treasury Department interest rates, is set at the prevailing rate either when the developer signs the contract with the housing finance agency or when the finished project is ready for occupancy. That rate represents the percentage of qualified project costs investors can claim against their tax liability each year for 10 years.

2. Each state's housing finance agency – VHDA in Virginia – develops a qualified allocation plan (QAP) to give priority to its most pressing low-income housing needs. It then holds public hearings on the QAP and coordinates priorities with other housing programs.

3. VHDA evaluates which apartment developments, among the many proposed, best meet the QAP. Virginia's QAP establishes a competitive system centered on the allocation of points earned for meeting various criteria. Points are awarded for a variety of housing needs characteristics that include readiness; location of the proposed development in a Qualified Census Tract and revitalization area; development characteristics such as EarthCraft or LEED green building certification; resident population characteristics; sponsor's experience;

and efficient use of resources.

In addition, bonus points are awarded for a commitment to impose income and rent limits on the low-income housing units throughout – as well as beyond – the 30-year extended use period. Even when all applicants meet the QAP standards, fewer than half are able to be funded, with about a third of all housing tax credits awarded to non-profit organizations.

4. VHDA scrutinizes costs and financing estimates in the proposals it selects, and limits developer and builder profit, providing only enough housing tax credits to make it possible to rent the apartments to low-income families at restricted rents.

5. After adjusting the developer's estimates, VHDA allocates the LIHTCs to the developer, who then sells the credits for cash to investors who want to reduce their federal taxes.


6. Developers use professional tax credit syndication firms to market housing tax credits to the largest possible number of investors to get the highest possible price. (Non-profit organizations syndicate a third of all housing tax credits.)

7. Money from selling housing tax credits acts as the developer's equity in the property and reduces the mortgage needed to build or renovate the apartment complex. These savings are what make restricted, lower rents for low-income residents possible.

8. The developer uses the cash from the LIHTC sale and mortgage proceeds to buy materials and hire labor for construction. VHDA ensures that developers begin construction promptly and finish within a specified time or require that the credits be returned for re-allocation.

9. When the apartment complex is ready to be occupied, VHDA reviews the costs and funding sources again, and reduces LIHTCs if fewer credits are needed than were first approved.

10. In order to ensure the ongoing quality of the rental property, as well as compliance with the LIHTC program, VHDA continuously checks resident rents and incomes, inspects property conditions and notifies the IRS about any ineligible residents, excessive rents or significant physical defects. The IRS can recover any LIHTCs claimed by investors on apartments that are out of compliance.

Investors have a strong stake in keeping an apartment complex in compliance. They can claim the LIHTC for 10 years, but only as long as their apartments remain in good condition and are rented to low-income residents at restricted rents. However, most developers in Virginia agree to hold rents at affordable levels for 30 years. 



Jose Ribeiro

From: John Risinger
Sent: Tuesday, November 27, 2018 4:21 PM
To: Jose Ribeiro
Subject: FW: Oakland Pointe

From: Francis Ryan
Sent: Tuesday, November 27, 2018 3:45 PM
To: Planning
Subject: Oakland Pointe

To whom it may concern,

My name is Francis Ryan and I am a resident of Toano in the Hunter's Creek Neighborhood. I'd like to strongly voice my concern about the Oakland Pointe Apartments . My wife and I decided to purchase our first home in James City County (specifically Toano) to get away from the congestion and growing population in Williamsburg. We bought this home with the plan of staying for a long time and raising a family. Allowing a large scale apartment complex is the exact type of thing that would shorten our stay in James City County. The committee needs to consider why people move to the outer rim of the county in the first place and that is for the more rural type of setting it offers. There's already been so much development in the area with Candle Station, expanding White Hall, and even adding the O Rielly Auto Parts right in the same area as the proposed site. This is the first step in developing this area which will only continue. My family would strongly consider moving to surrounding counties that offer the type of environment we are looking for. I hope you take this into consideration with your planning. I plan on attending the town meeting to also voice my displeasure. Thanks, have a great day!

--

Francis Ryan
7621 Turlington Rd
Toano, VA 23168

Jose Ribeiro

From: John Risinger
Sent: Tuesday, November 27, 2018 8:13 AM
To: Jose Ribeiro
Subject: FW: Oakland Point

-----Original Message-----

From: Karen Toone Stemann <ktstemann@aol.com>
Sent: Monday, November 26, 2018 7:11 PM
To: Planning <planning@jamescitycountyva.gov>
Subject: Oakland Point

Vote no on Oakland Point.
Sent from my iPhone

Paul Holt

From: Stephen Koval <stepdonnahan@msn.com>
Sent: Monday, November 26, 2018 6:40 PM
To: Ruth Larson; Sue Sadler; Heath Richardson; Beth Klapper; Paul Holt; Board Only; Jim Icenhour; John McGlennon; Michael Hipple; Planning; Jose Ribeiro; PlanComm; Community Development
Cc: Donna Koval; info@wydaily.com; letters@vagazette.com
Subject: Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe
Attachments: Koval Concerns 26Nov18-Oakland Pointe.pdf

Dear JCC Board of Supervisors, Planning Commission and Community Development Members:

Please see attached concerns of subject case to add to community input bin.

Don't hesitate to contact us if necessary.

Sincerely,
Stephen & Donna Koval

Stephen & Donna Koval
102 Crescent Drive
Williamsburg, VA 23188

November 26, 2018

James City County Board of Supervisors, Planning Commission and Community
Development
101 Mounts Bay Road
Building D, F & A
Williamsburg, VA 23185

Subject: Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-
2008) Oakland Pointe

Dear James City County (JCC) Board of Supervisors, Planning Commission and Community
Development Members:

Thank you for the responses to our request for a Dec 05 Planning Commission deferment
of subject proposal. Please add our following frustrations to your citizen input file:

The Planning Commission is derelict in their duties, NOT following procedures outlined
for rezoning Master Plans. As detailed on JCC website:

Additionally, a sign will be placed on the property indicating that an application has been
filed. This sign will be posted 2 weeks before the Planning Commission public hearing.
An advertisement for a public hearing will be run in a local newspaper both 2 weeks and
1 week before the Planning Commission public hearing. Also, written notice will be sent
to all adjacent property owners at least 1 week prior to the Planning Commission public
hearing.

As of today, Nov 26, (9 days before Dec 05 hearing) there is NO sign in sight of Richmond
Rd and Oakland Dr.

This neighborhood believes after 14 months of accommodating the landowner/developer,
this proposal is now being rammed through during the holidays to minimize our ability to
organize and diminish public participation. To counter our arguments and 'educate' upper
James City County, we see the County is full-press promoting their pro-affordable housing
campaign with WY Daily articles; tweets and FB posts. It's our turn.

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject: FW: Oakland Pointe Meeting

Subject: Important Oakland Pointe meeting at the Norge Library 28 November at 7pm.

Happy Thanksgiving all. Hope it was peaceful.

As you are aware the Oakland Point issue is ramping up quickly even as we plan for and celebrate the holidays with our families. Thanks to all of you who have contacted the Planning Commission and Board of Supervisors with your comments. As you know, most recently we have requested a delay of the Planning Commission vote on Oakland Pointe to get us through the holidays peacefully and give opportunity for the county to become better informed. As of now it appears they will not delay and the topic "must be opened" at the 5 December meeting.

To that end; we are planning a joint community meeting for those opposed to Oakland Pointe at the Norge Public Library, in the Grace and Stanley Kitzinger Room at 7pm on November 28th. We will be updating the community on current actions and strategies as well as other initiatives.

I know, its awful hard to get worked up about something like this during the holiday season. The Oakland Pointe legal team and developers know this. They know the easiest path for approval of Oakland Pointe is to get it done during the holiday period which began this week. I'll say this, that of the meetings we've had this year, this one by far is the most important one to attend. It is only through a coordinated county wide resident effort that we will be able to slow and stop Oakland Pointe from becoming a reality. To make that happen we need everyone focused, everyone committed, everyone there. The meeting on the 28th will be designed for that.

We normally blind copy everyone on these E-Mails to provide privacy. Know that this E-Mail is reaching well over 70 homes in the county; some of whom will forward to other members in their community/organizations. We are growing, so take hope in that. The county will not ignore a large public turn out, and a strong focused opposition at its meetings. Spread the word in your neighborhoods and bring friends and neighbors on the 28th.

Paul Holt

Subject:

FW: Marston Property Proposal

On Nov 26, 2018, at 12:19 PM, Allison <aotey@lawsonenterprisesinc.com> wrote:

To All Concerned,

We are property owners in Oakland Estates and would like to see the above proposal pushed back to February, 2019. Since the property owners (Marston's)/developers have been afforded this courtesy for several months now, we do not feel that this is an unreasonable request. Thank you for your consideration.

Allison H. Otey

Vice President

Lawson Enterprises, Inc.

1310 Garrison Drive

Williamsburg, VA 23185

(757) 229-6047

Paul Holt

Subject: FW: Oakland & Upper County Growth

From: Dee Sulenski <puffinroost@me.com>
Date: November 21, 2018 at 9:45:38 AM EST
To: sue.sadler@jamescitycountyva.gov
Subject: Oakland & Upper County Growth

Good morning & wishes for a Happy Thanksgiving to you & yours,

I am writing to express my concerns over the apartment complex being discussed for Oakland. Please, please, please vote to help maintain the rural character of our little hamlet of Toano. Specifically, my concern is the traffic that will be created and the very dangerous situation that will be, permanently, in place with many cars needing to make U-turns in both directions on Route 60.

Also, please register my aversion, distaste & horror at wanting further "grow" our rural community! Williamsburg is already building a complex that mirrors one on Jefferson Ave. in Newport News. Please do not allow greed to permanently damage what remains of our eco-environment! Water is ready an issue, with citizens being asked to conserve (believe me, water conservation is a way of life in this household), while golf courses continue to waste water and developments are built with sprinkler systems assumed. Trees produce needed oxygen!

People who move into this area decades ago did so because we love the rural character; please preserve this for the citizens who are already here and worry less about luring others. We all know there are empty business spaces in the county, already plenty of houses for sale, and apartments available. Instead of wanting to expand and build why not focus on increasing services for those already here? There is a need for affordable housing, yet the county seems to focus only on the development of more "luxury" housing.

Please do not allow the destruction of this small piece of the county that remains rural & quiet!

Sincerely,
Dee Sulenski

Sent from my iPad

Jose Ribeiro

From: Patrick McCaffery <patrickmccaffery@msn.com>
Sent: Tuesday, November 20, 2018 1:56 PM
To: Jose Ribeiro
Subject: Re: Marston Project - Oakland Pointe

Hello Jose- your favorite Norge Resident had some additional questions.

1. Who within James City County is responsible for enforcement of the Easement Agreement terms? Is that cost included in the calculation for the net costs of the development to the County (around \$450K from what I remember). To ensure there are funds available to remediate the property if the Easement Agreement is violated, is the developer required to post a surety? If not, where would those funds come from if the developer does not pay?
2. Under the Federal Low Income Housing Tax Credit Program (LIHTC) administered by VHDA in the Commonwealth, the overall development costs are lowered by "selling" tax credits to investors. Question- does JCC know who these investors are? Do you know where I could find out?

Thanks Jose. As you probably know, we have asked for a postponement on the vote from the Planning Commission. According to the Commission's requirements, that won't happen if the application is complete. As a result, it looks like we are heading for the December 5 vote. This doesn't give us a lot of time to get the word out in the community.

Best Regards,

Patrick McCaffery

From: Patrick McCaffery
Sent: Saturday, October 27, 2018 5:00 PM
To: Jose Ribeiro
Subject: Marston Project - Oakland Pointe

Hello Jose- as promised, i have reviewed the available documents, and had some questions i was hoping you could help me with:

1. Did i miss the Easement Agreement? I didn't see it on the site with the revised proposal.
2. One of the issues concerns the fact that the Multi-Use Field is partially located in the 75' Buffer. It states that this will require Planning Director approval. Who is that, and what criteria will they use for this decision?
3. In calculating the unit density, I am unclear on a couple of numbers. The overall parcel size is 14.54 acres. The Net Developable Area is 12.93. The Gross Developable area is 10.02 (with 20% of the Gross Developable Area as 2.91). The Net Non-Developable Area is listed at 4.52 acres, which is also the same as the RPA Buffers (4.52). It looks like the proposed density is at 9.75, which is derived from the 126 units divided by Net Developable Area at 12.93. Question- if the RPA Buffers will "consume" 4.52 acres, why isn't the Unit Density calculated off the 10.02 number? This would seem logical, especially since a

Jose Ribeiro

From: Frank Polster
Sent: Sunday, November 18, 2018 9:03 AM
To: Jose Ribeiro
Cc: Paul Holt; Ellen Cook; John Haldeman; Richard Krapf; Tim OConnor; Danny Schmidt; Heath Richardson; Julia Leverenz
Subject: Oakland Pointe
Attachments: Koval Environment Soil Stormwater Final Concerns-Oakland Pointe Z-18-0004 HW-18-0002.pdf; Koval Traffic Concerns-Oakland Pointe Z-18-0004 HW-18-0002.pdf

Mr. Riberio,

I have several questions on the Koval's two emails dated 9 and 11 November; Subject: Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe. (attached)

The concerns expressed were on the Yarmouth Creek Watershed and traffic congestion, delays, and safety. I would appreciate staffs or the appropriate agency comments on the following -

1. Yarmouth Creek Watershed -

a. The Kovals state, "They propose Special Stormwater Criteria measures of forebays other potential VRRM requirements to protect the ecosystems and waterways; but will that be enough? "

The question for staff is will it be enough and what are the other conditions in the proposed rezoning proposal that will mitigate and protect the ecosystem?

b. I notice that a third forebay was added to the proposal. What was the reasoning for the additional forebay?

c. Viewing the watershed as an ecosystem (Yarmouth Creek subwatershed 103), what role will the existing and planned stormwater management facilities adjacent to Oakland Pointe located at Norge Village at Candle Station and CrossWalk Church At Norge contribute to ecosystem's protection and is it enough?

d. Will the addition of Oakland Pointe with the Village at Candle Station and the CrossWalk Church At Norge potentially exacerbate the current degradation of the Yarmouth Creek subwatershed 103? Is the Yarmouth Creek subwatershed 103 degraded currently?

e. Will the removal or disturbance of the Oakland Point soils lead to further erosion and impact the Chesapeake Bay Preservation and stormwater pollution prevention plans? Are there currently erosion and sediment issue in the Yarmouth Creek subwatershed 103?

f. On the subject of the "Oakland Estates Stream Stabilization Drainage Improvements" project (referenced by the Kovals) in the Yarmouth Creek subwatershed 103, did it occur that the "filling up with silt and debris" was attributable to new developments" and if so was it attributable to the Norge Village at Candle Station, or CrossWalk Church at Norge or the CVS and Food Lion projects or for some other reason like Oakland Estates?

2. Traffic congestion, delays, and safety.

Paul Holt

Subject:

FW: Oakland Pointe Apartment Proposal Meeting

From: "Susan J. Grainer (sjgrainer)" <sjgrainer@henrico.k12.va.us>

Date: November 16, 2018 at 1:45:03 PM EST

To: "ruth.larson@jamescitycountyva.gov" <ruth.larson@jamescitycountyva.gov>,
"james.icenhour@jamescitycountyva.gov" <james.icenhour@jamescitycountyva.gov>,
"john.mcglennon@jamescitycountyva.gov" <john.mcglennon@jamescitycountyva.gov>,
"michael.hipple@jamescitycountyva.gov" <michael.hipple@jamescitycountyva.gov>,
"sue.sadler@jamescitycountyva.gov" <sue.sadler@jamescitycountyva.gov>

Subject: Oakland Pointe Apartment Proposal Meeting

Good afternoon.

My name is Susan Grainer and I live at 111 Crescent Drive within the Oakland Estates subdivision. My neighborhood sits adjacent to the Marston property, which has been proposed for re-zoning from A-1 General Agriculture to R-5 Multi-family Residential District for the purpose of developing the property into a 126-unit apartment complex. Over the last 9 months or so, multiple JCC Planning Commission meetings have been scheduled for consideration but changed due to changes in the initial proposal and rezoning considerations. As I understand the information that I have received most recently about a revised proposal, this potential apartment complex is being suggested to enter and exit through the same intersection as my Oakland Estates neighborhood, which is located at Richmond Road/Oakland Drive (JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe). I mention that I'm getting this information from neighbors, but I have yet to see a proposed rezoning sign attached to this identified land for the apartment access. If I'm to understand the proposal(s) at this point, there is now 2 rezoning aspects to consider, the actual land for the apartment complex and the land for the entrance/exit to the property. Again, I have not seen any actual JCC Rezoning signage to date at either site.

In discussions with various members of the community in the past week, we have become increasingly concerned with the timing of this application. This Oakland Pointe proposal has been scheduled for consideration at multiple Planning Commission meetings. We understand that it will again be scheduled for a vote by the JCC Planning Commission at the December 5th meeting, but again, there has been no signage confirming this proposal review. Our concerns with this scheduling is two-fold. First, it takes a fair amount of time and effort to raise community awareness for participation at Planning Commission meetings, and this challenge has been heightened by the number of "false starts" on this application. Considering the complexities involved, as well as the number of reviews and analyses that must be completed, we understand that these postponements are inherent in the process. However, it has caused many in the community to take a "wait and see" attitude on scheduling, and we understand that the official agenda for the December 5th meeting won't be publicized until next week. That means that we will have two weeks to communicate the importance of the meeting with the broader community, with the announcement itself falling on the week of Thanksgiving. Secondly, many of us in the community are wondering about the limited notice and lack of official signage. If the proposed schedule were to follow the predicted Commission and Supervisor meetings. i.e. Dec Planning Commission followed by early January Supervisor meeting, then considering that we are entering the holiday season, this timing will no doubt have the potential to adversely affect community involvement in each of these meetings.

For these reasons, we request that the Planning Commission set a February date for review of the Oakland Pointe proposal. I am told that there is some precedent for this action, as the Planning Commission has moved review dates in the past to accommodate community requests.

Paul Holt

Subject: FW: Oakland Pointe Rezoning Consideration

From: Jane Marioneaux <jmarioneaux@cox.net>

Date: November 16, 2018 at 10:06:28 AM EST

To: <ruth.larson@jamescitycountyva.gov>, <james.icenhour@jamescitycountyva.gov>, <john.mcglennon@jamescitycountyva.gov>, <michael.hipple@jamescitycountyva.gov>, <sue.sadler@jamescitycountyva.gov>

Subject: Oakland Pointe Rezoning Consideration

I support moving the Planning Commission consideration of the Oakland Pointe proposal to February of 2019 to ensure the community has the opportunity to be heard. Having it on the agenda in December means that residents who are against the proposal will not be able to attend due to factors such as inadequate time to notify all of the many people who oppose this and the fact that the meeting was placed in the middle of the holiday season when opponents will be unable to attend even if notified. Almost everyone in all of the surrounding neighborhoods opposes this proposition and we feel that the December date is a political move to divide and weaken our presence.

Thank you for your work as our elected Representatives.

Jane Marioneaux

Resident – Oakland Estates

Paul Holt

Subject: FW: Oakland Pointe

From: thompsonsgang@aol.com

Date: November 16, 2018 at 9:14:13 AM EST

To: ruth.larson@jamescitycountyva.gov,
james.icenhour@jamescitycountyva.gov, john.mcglennon@jamescitycountyva.gov, michael.hipple@jamescitycountyva.gov, sue.sadler@jamescitycountyva.gov

Subject: Oakland Pointe

Dear Board of Supervisors,

We live at 101 Woodmont Place in Oakland Subdivision. We are requesting that the Marston Rezoning for Oakland Pointe Apts be scheduled for vote in February/March 2019. We have been encouraged as a community to participate and come out to the meetings. On 3 occasions we have spoke with others in the surrounding neighborhoods who will also be effected by the increase in traffic etc and encourage them to come out only for those meeting to be postponed. With the holidays where families are preoccupied, we feel like December and January will make for less community involvement in the meetings. For these reasons, we would very much appreciate if the Planning Commission would set a February date for review of the Oakland Pointe proposal.

Sincerely,

Gary and Melonie Thompson

Paul Holt

Subject:

FW: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

On Nov 16, 2018, at 9:15 AM, Stephen Koval <stepdonnahren@msn.com> wrote:

Dear Board of Supervisors:

Please petition the Planning Commission to defer the Oakland Pointe plan from Dec 2018 until their Feb 2019 meeting. I have contacted them directly but also wanted to alert you to our dilemma.

My fellow Oakland neighbors and other communities require additional time to raise awareness of revised proposal. In addition, the Feb 2019 timeframe will enable maximum community participation after the holidays.

Thank you for your time and consideration in this matter.

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject: FW: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

From: Stephen Koval <stepdonnahren@msn.com>

Date: November 16, 2018 at 9:15:00 AM EST

To: "board@jamescitycountyva.gov" <board@jamescitycountyva.gov>, "ruth.larson@jamescitycountyva.gov" <ruth.larson@jamescitycountyva.gov>, "james.icenhour@jamescitycountyva.gov" <james.icenhour@jamescitycountyva.gov>, "john.mcglennon@jamescitycountyva.gov" <john.mcglennon@jamescitycountyva.gov>, "michael.hipple@jamescitycountyva.gov" <michael.hipple@jamescitycountyva.gov>, "sue.sadler@jamescitycountyva.gov" <sue.sadler@jamescitycountyva.gov>

Cc: Donna Koval <donstephenna@msn.com>

Subject: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

Dear Board of Supervisors:

Please petition the Planning Commission to defer the Oakland Pointe plan from Dec 2018 until their Feb 2019 meeting. I have contacted them directly but also wanted to alert you to our dilemma.

My fellow Oakland neighbors and other communities require additional time to raise awareness of revised proposal. In addition, the Feb 2019 timeframe will enable maximum community participation after the holidays.

Thank you for your time and consideration in this matter.

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject: FW: Oakland Pointe Apartment Proposal Meeting

From: Susan J. Grainer (sjgrainer) <sjgrainer@henrico.k12.va.us>

Sent: Thursday, November 15, 2018 10:25 AM

To: Danny Schmidt; Heath Richardson; Tim OConnor; Julia Leverenz; John Haldeman; Frank Polster; Richard Krapf

Subject: Oakland Pointe Apartment Proposal Meeting

Good morning Honorable Chairman, Vice-Chairman, and Members of the Planning Commission:

My name is Susan Grainer and I live at 111 Crescent Drive within the Oakland Estates subdivision. My neighborhood sits adjacent to the Marston property, which has been proposed for re-zoning from A-1 General Agriculture to R-5 Multi-family Residential District for the purpose of developing the property into a 126-unit apartment complex. As I understand the information that I have received about the revised proposal, this potential apartment complex is being suggested to access through the same intersection as Oakland Estates, which is located at Richmond Road/Oakland Drive (JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe). I mention that I'm getting this information from neighbors, but I have yet to see a proposed rezoning sign attached to this identified land for the apartment access.

In discussions with various members of the community in the past week, we have become increasingly concerned with the timing of this application. This Oakland Pointe proposal has been scheduled for consideration at multiple Planning Commission meetings. We understand that it will again be scheduled for a vote by the Commission at the December 5th meeting, but again, there has been no signage confirming this proposal review. Our concerns with this scheduling are two-fold. First, it takes a fair amount of time and effort to raise community awareness for participation at Planning Commission meetings, and this challenge has been heightened by the number of "false starts" on this application. Considering the complexities involved, as well as the number of reviews and analyses that must be completed, we understand that these postponements are inherent in the process. However, it has caused many in the community to take a "wait and see" attitude on scheduling, and we understand that the official agenda for the December 5th meeting won't be publicized until next week. That means that we will have two weeks to communicate the importance of the meeting with the broader community, with the announcement itself falling on the week of Thanksgiving. Many of us in the community are wondering about the limited notice and lack of official signage. If the proposed schedule were to follow the predicted Commission and Supervisor meetings. i.e. Dec Planning Commission followed by early January Supervisor meeting, then considering that we are entering the holiday season, this timing will no doubt have the potential to adversely affect community involvement in each of these meetings.

Jose Ribeiro

From: Adrienne <adrienne-gary@cox.net>
Sent: Thursday, November 15, 2018 10:09 AM
To: Tim OConnor; Julia Leverenz; Richard Krapf; Heath Richardson; John Haldeman; Danny Schmidt; Frank Polster
Cc: Jose Ribeiro
Subject: Oakland Pointe

Dear JCC Planning Commission,

I understand that the Oakland Pointe apartment complex proposal is on the Planning Commission's agenda for December 5th. I am very concerned to hear this.

In order to find out about the agenda, I had to search through documents on the JCC website, and found a letter to Arch Marston. This was not easy to find for someone who is unfamiliar with the process.

I was under the impression that a **red rezoning sign** would be posted for the community to see the location of a proposed development. I have not seen a rezoning sign.

I do not feel that adequate notice has been given. How is the community able to respond to significant development proposals when they do not know about them?

Please postpone the hearing for a few months so that adequate notice can be given to the community. Please post a sign on Route 60 and Oakland Drive, and provide adequate notice of the hearing date.

Thank you

Adrienne Frank

114 Crescent Drive, Williamsburg VA 23188

Paul Holt

Subject: FW: Oakland Pointe

From: jack lubore <jalubore@widomaker.com>
Sent: Thursday, November 15, 2018 11:04 AM
To: Heath Richardson
Cc: Richard Krapf; Danny Schmidt; Tim OConnor; Julia Leverenz; John Haldeman; Frank Polster
Subject: Oakland Pointe

Mr. Chairman, Mr. Vice Chairman, Members Planning Commission

My name is Jack Lubore i live at 208 Crescent Dr. Williamsburg. It is my understanding the Oakland Pointe project may be on the Planning Commission's Dec. agenda. I respectfully request to delay this hearing until after the holidays.

As you are aware this is an important issue to many who will be affected. The timing for the Dec. meeting after many delays and a subsequent hearing by the Board of Supervisors right after the holidays may not afford some citizens to fully participate in the process. I have already witnessed the boards efforts to be transparent in this and other projects and it is appreciated. With that in mind, I also understand this is now considered a new zoning app however to my knowledge no new zoning sign has been posted.

I am not one to normally write to my representatives in fact this may be my first time but feel certain this project, while noble, is not at all well suited for this location. Traffic congestion, while a given problem, and will get worse, traffic safety is an overriding concern of mine. My career has allowed me some knowledge of auto accidents, their creation and results and I feel strongly we could create a very unsafe condition for Oakland, and potentially Oakland Pointe residences alike.

Last point while I am at it. I have lived in Oakland Estates for over 27 years and one of a few who's property borders what I believe is called the Yarmouth Creek or watershed. Only in the last couple of years the water is visible during the winter just standing from our deck on a sunny day. While not scientific it does give us concern the effect of development and future development will have on what I have come to understand is an important area. I know the county or someone spent a sizable sum to manage the watershed behind our neighborhood some years ago. I hope this was not for naught or will again need further investment and mitigation.

Respectfully

Jack Lubore

Paul Holt

Subject:

FW: Oakland Pointe Apartment Proposal Meeting

From: Susan J. Grainer (sjgrainer) <sjgrainer@henrico.k12.va.us>

Sent: Thursday, November 15, 2018 10:25 AM

To: Danny Schmidt; Heath Richardson; Tim OConnor; Julia Leverenz; John Haldeman; Frank Polster; Richard Krapf

Subject: Oakland Pointe Apartment Proposal Meeting

Good morning Honorable Chairman, Vice-Chairman, and Members of the Planning Commission:

My name is Susan Grainer and I live at 111 Crescent Drive within the Oakland Estates subdivision. My neighborhood sits adjacent to the Marston property, which has been proposed for re-zoning from A-1 General Agriculture to R-5 Multi-family Residential District for the purpose of developing the property into a 126-unit apartment complex. As I understand the information that I have received about the revised proposal, this potential apartment complex is being suggested to access through the same intersection as Oakland Estates, which is located at Richmond Road/Oakland Drive (JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe). I mention that I'm getting this information from neighbors, but I have yet to see a proposed rezoning sign attached to this identified land for the apartment access.

In discussions with various members of the community in the past week, we have become increasingly concerned with the timing of this application. This Oakland Pointe proposal has been scheduled for consideration at multiple Planning Commission meetings. We understand that it will again be scheduled for a vote by the Commission at the December 5th meeting, but again, there has been no signage confirming this proposal review. Our concerns with this scheduling are two-fold. First, it takes a fair amount of time and effort to raise community awareness for participation at Planning Commission meetings, and this challenge has been heightened by the number of "false starts" on this application. Considering the complexities involved, as well as the number of reviews and analyses that must be completed, we understand that these postponements are inherent in the process. However, it has caused many in the community to take a "wait and see" attitude on scheduling, and we understand that the official agenda for the December 5th meeting won't be publicized until next week. That means that we will have two weeks to communicate the importance of the meeting with the broader community, with the announcement itself falling on the week of Thanksgiving. Many of us in the community are wondering about the limited notice and lack of official signage. If the proposed schedule were to follow the predicted Commission and Supervisor meetings. i.e. Dec Planning Commission followed by early January Supervisor meeting, then considering that we are entering the holiday season, this timing will no doubt have the potential to adversely affect community involvement in each of these meetings.

For these reasons, we request that the Planning Commission set a February date for review of the Oakland Pointe proposal. I am told that there is some precedent for this action, as the Planning Commission has moved review dates in the past to accommodate community requests.

Paul Holt

Subject: FW: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

From: Stephen Koval <stepdonnahren@msn.com>

Sent: Thursday, November 15, 2018 9:32:28 AM

To: Planning; Heath Richardson; Danny Schmidt

Cc: Donna Koval

Subject: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

Dear Planning Commission Members:

Please defer the Oakland Pointe plan until your Feb 2019 meeting. My fellow Oakland neighbors and other communities require additional time to raise awareness of revised proposal. In addition, the Feb 2019 timeframe will enable maximum community participation after the holidays.

Thank you for your time and consideration in this matter.

Sincerely,
Stephen & Donna Koval

Paul Holt

Subject: FW: Oakland Pointe

From: Adrienne <adrienne-gary@cox.net>

Sent: Thursday, November 15, 2018 10:08:31 AM

To: Tim OConnor; Julia Leverenz; Richard Krapf; Heath Richardson; John Haldeman; Danny Schmidt; Frank Polster

Cc: Jose Ribeiro

Subject: Oakland Pointe

Dear JCC Planning Commission,

I understand that the Oakland Pointe apartment complex proposal is on the Planning Commission's agenda for December 5th. I am very concerned to hear this.

In order to find out about the agenda, I had to search through documents on the JCC website, and found a letter to Arch Marston. This was not easy to find for someone who is unfamiliar with the process.

I was under the impression that a **red rezoning sign** would be posted for the community to see the location of a proposed development. I have not seen a rezoning sign.

I do not feel that adequate notice has been given. How is the community able to respond to significant development proposals when they do not know about them?

Please postpone the hearing for a few months so that adequate notice can be given to the community. Please post a sign on Route 60 and Oakland Drive, and provide adequate notice of the hearing date.

Thank you

Adrienne Frank

114 Crescent Drive, Williamsburg VA 23188

Paul Holt

Subject: FW: Oakland Pointe

From: Adrienne <adrienne-gary@cox.net>
Sent: Thursday, November 15, 2018 10:08:31 AM
To: Tim OConnor; Julia Leverenz; Richard Krapf; Heath Richardson; John Haldeman; Danny Schmidt; Frank Polster
Cc: Jose Ribeiro
Subject: Oakland Pointe

Dear JCC Planning Commission,

I understand that the Oakland Pointe apartment complex proposal is on the Planning Commission's agenda for December 5th. I am very concerned to hear this.

In order to find out about the agenda, I had to search through documents on the JCC website, and found a letter to Arch Marston. This was not easy to find for someone who is unfamiliar with the process.

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Please postpone the hearing for a few months so that adequate notice can be given to the community. Please post a sign on Route 60 and Oakland Drive, and provide adequate notice of the hearing date.

Thank you

Adrienne Frank

114 Crescent Drive, Williamsburg VA 23188

Paul Holt

Subject:

FW: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

From: Stephen Koval <stepdonnahan@msn.com>

Sent: Thursday, November 15, 2018 9:32:28 AM

To: Planning; Heath Richardson; Danny Schmidt

Cc: Donna Koval

Subject: Deferment Request for Oakland Pointe Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)

Dear Planning Commission Members:

Please defer the Oakland Pointe plan until your Feb 2019 meeting. My fellow Oakland neighbors and other communities require additional time to raise awareness of revised proposal. In addition, the Feb 2019 timeframe will enable maximum community participation after the holidays.

Thank you for your time and consideration in this matter.

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject: FW: Marston Property Rezoning

From: thompsonsgang@aol.com <thompsonsgang@aol.com>

Sent: Wednesday, November 14, 2018 9:57 PM

To: Danny Schmidt; Heath Richardson

Subject: Marston Property Rezoning

Mr. Schmidt and Mr Richardson,

We live at 101 Woodmont Place in Oakland Subdivision. We are requesting that the Marston Rezoning issue be scheduled for vote in February 2019. We have been encouraged as a community to participate and come out to the meetings. On 3 occasions we have spoke with others in the surrounding neighborhoods who will also be effected by the increase in traffic etc and encourage them to come out only for those meeting to be postponed. With the holidays where families are preoccupied, we feel like December and January will make for less community involvement in the meetings. For these reasons, we would very much appreciate if the Planning Commission would set a February date for review of the Oakland Pointe proposal.

Sincerely,

Gary and Melonie Thompson

Paul Holt

Subject: FW: JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe

From: Patrick McCaffery <patrickmccaffery@msn.com>

Sent: Wednesday, November 14, 2018 9:00 PM

To: Heath Richardson; Danny Schmidt; Richard Krapf; Tim OConnor; Julia Leverenz; John Haldeman; Frank Polster; Adrienne; laexa1103@aol.com

Subject: JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe

Mr. Chairman, Vice-Chairman, and Members of the Planning Commission:

Good evening. My name is Patrick McCaffery, I live at 124 Crescent Drive within the Oakland Estates subdivision. As you know, this subdivision is in close proximity to the Marston property, which has been proposed for re-zoning from A-1 General Agriculture to R-5 Multi-family Residential District for the purpose of developing the property into a 126-unit apartment complex. According to the revised proposal, this complex will access the same entrance/egress intersection as Oakland Estates, which is located at Richmond Road/Oakland Drive (JCC Planning Commission case Z-18-0004/HW-18-0002 Oakland Pointe).

In discussions with various members of the community in the past week, we have become increasingly concerned with the timing of this application. This Oakland Pointe proposal has been scheduled for consideration at a number of Planning Commission meetings (at least three by my count). We understand that it will again be scheduled for a vote by the Commission at the December 5th meeting. Our concerns with this scheduling are two-fold. First, it takes a fair amount of time and effort to raise community awareness for participation at Planning Commission meetings, and this challenge has been heightened by the number of "false starts" on this application. Considering the complexities involved, as well as the number of reviews and analyses that must be completed, we understand that these postponements are inherent in the process. However, it has caused many in the community to take a "wait and see" attitude on scheduling, and we understand that the official agenda for the December 5th meeting won't be publicized until next week. That means that we will have two weeks to communicate the importance of the meeting with the broader community, with the announcement itself falling on the week of Thanksgiving. In addition, according to this schedule, the proposal will be heard on December 5th by the Planning Commission, and then in early January by the Board of Supervisors. Considering that we are entering the holiday season, we believe this timing will also adversely affect community involvement in each of these meetings.

For these reasons, we request that the Planning Commission set a February date for review of the Oakland Pointe proposal. I understand that there is some precedent for this action, as the Planning Commission has moved review dates in the past to accommodate community requests.

I hope you will seriously consider this request. At the February 7, 2018 Planning Commission meeting (which I believe was the first scheduled review as well as the first postponement of the Oakland Pointe matter), many of the members of the community that attended the meeting were heartened at the statements of the Commission members on the importance for the community to attend and have their voices heard. I have referenced these comments many times in the months since in various community settings where this matter was discussed. Unfortunately, after a number of delays and postponements, and with the holidays approaching, I feel that the meeting will not be as well attended by the community as it should be, and that the Planning Commission will thereby not be afforded an accurate reflection of the community's concerns. As a result, we request that the Planning Commission schedule the proposal for review in

Paul Holt

Subject: FW: Final Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe
Attachments: Koval Environment Soil Stormwater Final Concerns-Oakland Pointe Z-18-0004 HW-18-0002.pdf

From: Stephen Koval <stepdonnahan@msn.com>

Sent: Monday, November 12, 2018 7:54 AM

To: Board Only; Ruth Larson; Jim Icenhour; John McGlennon; Michael Hipple; Sue Sadler; Planning; Heath Richardson; Jose Ribeiro

Cc: Donna Koval

Subject: Final Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear JCC Board of Supervisors and Planning Commission Members:

Please see attached document explaining our environmental and water runoff concerns, as well as our final observation.

Thank you for listening.

Sincerely,
Stephen & Donna Koval

Stephen & Donna Koval
102 Crescent Drive
Williamsburg, VA 23188

November 11, 2018

James City County Board of Supervisors
James City County Planning Commission
101 Mounts Bay Road
Building D & F
Williamsburg, VA 23185

Subject: Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear James City County (JCC) Board of Supervisors and Planning Commission Members:

In addition to our previous letters of traffic concerns and fiscal impacts, please analyze the proposed remediation of storm water management issues; the environmental impact to the Yarmouth Creek Watershed and our Final Observation:

1) Water Runoff

The developer will be clearing and land-disturbing woods; natural ground cover and native soils. They propose Special Storm water Criteria measures of forebays and other potential VRRM requirements to protect the ecosystems and waterways; but will that be enough? Compounding this dire situation is drainage from recent developments i.e., Village at Candle Station; Crosswalk Church parking lot expansion; Norge Station; Norge Center and the Candle factory shopping center. Runoff from the proposed largest high-rise apartment complex in this area will potentially exacerbate current degradation of the Yarmouth Creek watershed. Please reaffirm your commitment to the 2035 Comprehensive Plan Environment to improve the quality of water in County watersheds, wetlands and waterways.

2) Soil

A considerable amount of Hydrosol Group A & B will be removed or disturbed, leading to further erosion and impact to the Chesapeake Bay Preservation and storm water pollution prevention plans.

Paul Holt

Subject: FW: Additional Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe
Attachments: Koval Fiscal School Easement HW Concerns-Oakland Pointe Z-18-0004 HW-18-0002.pdf

From: Stephen Koval <stepdonnahan@msn.com>

Sent: Saturday, November 10, 2018 9:16 AM

To: Board Only; Ruth Larson; Jim Icenhour; John McGlennon; Michael Hipple; Sue Sadler; Planning; Heath Richardson; Jose Ribeiro

Cc: Donna Koval

Subject: Additional Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear JCC Board of Supervisors and Planning Commission Members:

Please see attached document detailing our fiscal, easement and height waiver concerns with subject case.

Don't hesitate to contact us if necessary.

Sincerely,
Stephen & Donna Koval

Stephen & Donna Koval
102 Crescent Drive
Williamsburg, VA 23188

November 10, 2018

James City County Board of Supervisors
James City County Planning Commission
101 Mounts Bay Road
Building D & F
Williamsburg, VA 23185

Subject: Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear James City County (JCC) Board of Supervisors and Planning Commission Members:

In addition to our previous letter of traffic concerns, please scrutinize details of the fiscal burden to James City County; impacts to public facilities and services; easement assurances and height waiver specifics:

1) Fiscal Impact Study

The alarming annual fiscal impact to JCC taxpayers has been revised downward from \$636k to \$464k (a reduction of 27%). The total non-school expenses dropped by \$157k and per student total expenses by \$15k. However, the number of apartments (126) and the total of estimated students (39.06) have not changed so I am confounded by this reduction.

A comparable development nearby, the Station at Norge, reportedly has 39 students for 104 apartments. Calculating the comparison of 17%, Oakland Pointe would generate 46 students (39 plus 17%) for 126 apartments. The fiscal impact to JCC taxpayers would range from \$744k (original \$636k plus 17%) to \$543k (revised \$464k plus 17%).

2) Schools

The proposal states students will attend Norge Elementary School, Toano Middle School and Warhill High School. They also report all of these schools are currently operating below capacity. According to the WJCC School Board 2018/19 enrollment % of building capacity, two of the three schools are over capacity (Toano 110% and Warhill 92%) with Norge nearing capacity at 86%. Building of a new middle school

Paul Holt

Subject: FW: Our Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/
HW-0004-2017/ LU-0041-2008) Oakland Pointe

Attachments: Koval Traffic Concerns-Oakland Pointe Z-18-0004 HW-18-0002.pdf; ATT00001.htm

From: Stephen Koval <stepdonnahren@msn.com>

Date: November 9, 2018 at 8:00:14 PM EST

To: "board@jamescitycountyva.gov" <board@jamescitycountyva.gov>, "ruth.larson@jamescitycountyva.gov" <ruth.larson@jamescitycountyva.gov>, "james.icenhour@jamescitycountyva.gov" <james.icenhour@jamescitycountyva.gov>, "john.mcglennon@jamescitycountyva.gov" <john.mcglennon@jamescitycountyva.gov>, "michael.hipple@jamescitycountyva.gov" <michael.hipple@jamescitycountyva.gov>, "sue.sadler@jamescitycountyva.gov" <sue.sadler@jamescitycountyva.gov>, "planning@jamescitycountyva.gov" <planning@jamescitycountyva.gov>, "heath.richardson@jamescitycountyva.gov" <heath.richardson@jamescitycountyva.gov>, "Jose.Ribeiro@jamescitycountyva.gov" <Jose.Ribeiro@jamescitycountyva.gov>

Cc: Donna Koval <donstephenna@msn.com>

Subject: Our Concerns with Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear JCC Board of Supervisors and Planning Commission Members:

Please see attached document detailing our traffic concerns with subject case.

Don't hesitate to contact us if necessary.

Sincerely,

Stephen & Donna Koval

Stephen & Donna Koval
102 Crescent Drive
Williamsburg, VA 23188

November 09, 2018

James City County Board of Supervisors
James City County Planning Commission
101 Mounts Bay Road
Building D & F
Williamsburg, VA 23185

Subject: Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Dear James City County (JCC) Board of Supervisors and Planning Commission Members:

My wife and I urge the commission to deny the rezoning application/ height waiver request of subject cases from A-1 to R-5 for (126) 3-story affordable apartment units. We have owned a home nearby for approximately 20 years and echo the concerns of our Oakland Estate neighbors adamantly opposing Oakland Pointe.

Please scrutinize troubling matters of traffic congestion, delays and safety concerns:

1) Richmond Road and Oakland Drive un-signalized intersection

- a.) The "improvements" in the latest proposal is to widen this crossover; add yield bars and a double yellow centerline. Don't be VDOH-fooled! This type of crossover works fine at other locations along Richmond Road because the road is level at these locations and there are no obstructions in the median impeding your sightline. At our intersection, westbound Richmond Road has an incline approaching crossover and the median is heavily wooded. See Photo 1 Eastbound Richmond Road median has obstructions of high grass and woods near Olive Branch Christian Church in the background. See Photo 2
- b.) Virginia Department of Transportation (VDOT)'s "comment letter" dated 12/22/17 confirmed current delays Oakland Estates residents currently experience turning left from Oakland Drive onto Richmond Road. Add to that proposed Oakland Pointe residents and delays will turn into accidents. VDOT also questioned whether the developer's traffic study captures drivers waiting in the median to turn left onto Richmond Road.



Photo 2

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject: FW: Oakland Pointe Apartments

From: <hguinn@cox.net>

Date: November 6, 2018 at 4:01:34 PM EST

To: "sue.sadler@jamescitycountyva.gov" <sue.sadler@jamescitycountyva.gov>

Subject: Oakland Pointe Apartments

Dear Ms. Sadler:

My husband and I are residents of Toano Woods and would like to express our concern regarding the proposed the potential building of Oalkand Pointe Apartments. As we are sure that you are aware, the addition of this one-hundred-and-twenty six unit complex will not only overcrowd roadways along Route 60 and Croaker Road, it will also put at risk many who are residents of Oakland, which is situated

My husband and I are residents of Toano Woods and would like to express our concern regarding the proposed building of the Oakland Pointe complex. As we are sure that you are aware, the addition of this one-hundred-and-twenty-six-unit complex will not only overcrowd roadways along Route 60 and Croaker Road, it will also put at risk many who are residents of Oakland Estates in their attempt to both enter and exit this development. As one who has lived in Toano Woods since 1994, I have watched our traffic grow exponentially from a sleepy two-lane road to one where it is, at times, bordering on a racetrack. Ms. Sadler, I am asking you to please take this matter under advisement and to vote "no" to yet another complex.

I thank you for your time and your consideration.

Sincerely,
Hope and Shawn Guinn
7648 Thacher Drive, Toano, VA 23168

Paul Holt

Subject: FW: Oakland Point Opposition

From: Brad <bradstewart71@gmail.com>
Date: November 2, 2018 at 9:03:11 AM EDT
To: Sue Sadler <Sue.Sadler@jamescitycountyva.gov>
Cc: Planning <planning@jamescitycountyva.gov>
Subject: Oakland Point Opposition

Hi Sue,

You knocked on my door when you were originally running for your position, and the personal touch impressed me, which is why I voted for you.

I'm asking for more of that personal touch now, with the upcoming discussions on the Oakland Point development.

Since arriving in Williamsburg in 2003 from my hometown of Pittsburgh, I knew I wanted to live in Williamsburg and raise a family when I graduated from William and Mary. Williamsburg was not crowded and overrun like suburban Pittsburgh is, and we love this area, especially the rural part of Toano and previously Croaker.

After graduation, I stayed in town and my wife and I have now started our family and grown roots here with our 15 month old son, Levi. We lived in Ware Creek Manor from 2011 to 2016, and we now live in Toano Woods, and have to get off of exit 231 each day to head towards Richmond Road. This commute is already getting longer and longer with the increased population from Candle Station Townes development and I fear would be multiplied exponentially with more traffic from Oakland Point.

I am VERY concerned that this development will make this intersection not only worse, but more dangerous. On my morning commute I frequently see people pushing the limits to beat the light in an effort to get to work on time. The added traffic will only make this worse.

I've attached a few photos from our commute last Friday, where it took almost 12 minutes to get from the Rochambeau stoplight/Croaker Library to Richmond road. There was no accident on 64 to cause this backup, and we've encountered it more frequently in the past few years. (I was not nearly as frustrated as my wife was since Levi was crying and screaming in the back seat of our van, since I was alone ahead of her in our pickup truck!)

I understand the concern the county has for affordable housing for all of our citizens, but the infrastructure in this area will not accommodate this concentration of additional residents. I've seen the traffic monitors and cars studying the traffic, but those are isolated studies and do not take into account daily traffic variations, let alone summer traffic incidents spilling over from I-64. There must be somewhere else to place Oakland Point.

I'm asking for your help to stop this development. Please help us by opposing this. I plan on being at the November 7th meeting to echo my sentiments once more, and please let me know if I can help voice my opposition in any other constructive way. I know my neighbors share my opinion, but I fear they won't take the time to write to you or the planning board, who I've copied on this email.

Thank you for your time in reading this and your support for our community.



Brad Stewart
3633 Marlbrook Drive
Toano, VA 23168
757-667-1560

Paul Holt

Subject: FW: Oakland Pointe Apartment Complex

From: Brent Forys <bforys@vt.edu>

Date: October 31, 2018 at 12:06:57 PM EDT

To: <planning@jamescitycountyva.gov>, <sue.sadler@jamescitycountyva.gov>

Subject: Oakland Pointe Apartment Complex

Greetings,

I would like to voice my disapproval of the proposed Oakland Pointe Apartment Complex. The two primary reasons are as follows:

- Financial burden to the county of over \$460K. Any proposed developments should be at worst, close to revenue neutral and ideally a net gain for the county. The additional taxpayer funds required to support this complex could potentially be used as a pretext to raise taxes in the county. This would be unacceptable in my opinion.
- Public Safety would be negatively affected with the additional traffic at the intersection leading into the complex from Route 60. This is a dangerous intersection for that volume of traffic. I do not think a traffic light would be appropriate as it would restrict the flow of traffic unnecessarily. It would make more sense if the entrance to the complex was from the area behind the Food Lion where recent townhouses have already been constructed. This would provide a safer, more orderly crossing of Rt 60.

Another objection is that a height waiver should not be granted when no similar structures are in the vicinity. The structure would look out of place in the context of the surrounding area.

Thank you for your consideration.

Regards,

Brent Forys

Jose Ribeiro

From: Adrienne <adrienne-gary@cox.net>
Sent: Friday, October 26, 2018 7:45 PM
To: Jose Ribeiro
Subject: Oakland Pointe

Dear Mr. Jose Ribeiro:

Please do not recommend that the Oakland Pointe apartment complex receive rezoning. I have looked through the developer's documents, and I do not see a significant difference in their plans since the last submission. They have created a new entrance on Oakland drive, but have not reduced the number of apartments (126 units) nor vehicular trips (887).

The location of the complex is a major concern, primarily due to the hazardous Route 60 and Oakland intersections. The developer's new plan has removed continuous U-Turns but crossing the median is the more significant hazard. The intersection cannot withstand more than 1000 turning vehicles per day, even with the proposed tapers.

Currently, residents from the Oakland Neighborhood find the intersections unsafe, and four times as many trips per day will certainly increase traffic accidents. In addition, traffic from growth farther out in the county will only increase the traffic burden over time. The intersection needs improvement now, even without additional traffic.

Route 60 is a major corridor for commuters. During rush hour, the cars speed and hug the left lane making it very difficult to enter or exit Oakland Drive. My husband and I have been lucky not to have an accident, but we have had a few close ones.

The huge increase in vehicle trips across Route make the intersection unacceptable. The amount of turns through the Route 60 median should be enough to deny the application for rezoning.

Sincerely,

Adrienne Frank

114 Crescent Drive

Williamsburg, VA 23188

Jose Ribeiro

From: John Risinger
Sent: Thursday, October 25, 2018 8:22 AM
To: Jose Ribeiro
Subject: FW: NO!!!!!!!!!!

From: watersedge@cox.net
Sent: Wednesday, October 24, 2018 9:06 PM
To: Planning
Subject: NO!!!!!!!!!!

No to the Oakland apartment complex I have live here all my life and have seen what apt. complexes can do and end up as. On Centerville road the county ended up tearing down due to drug infested apartments and then taking taxpayers monies to rebuilding it.. I don't think we are any better than anyone else but look back and do some research and reasoning in this situation.

No !!!!!!!

Jose Ribeiro

From: John Risinger
Sent: Tuesday, October 23, 2018 8:13 AM
To: Jose Ribeiro
Subject: FW: No to Oakland Pointe

From: Libby Tabor
Sent: Monday, October 22, 2018 6:23 PM
To: Sue Sadler ; Ruth Larson ; Jim Icenhour ; john.mcglennon@jamescitycounty.gov; mike.hipple@jamescitycounty.gov; Planning
Subject: No to Oakland Pointe

I oppose this housing development. I don't think this is the right property for this. It will increase traffic at an already dangerous intersection. It has the potential to negatively affect an environmentally sensitive area, Yarmouth Creek. I hope you vote no. Thank you.

Libby Tabor

Jose Ribeiro

From: John Risinger
Sent: Tuesday, October 23, 2018 10:40 AM
To: Jose Ribeiro
Subject: FW: Oakland Pointe

From: Lobus, Mike
Sent: Tuesday, October 23, 2018 9:40 AM
To: Planning ; Sue Sadler
Subject: Oakland Pointe

Good morning!

In the end of 1997, my family and I relocated to the area and bought a home in Hunters Creek in little ole Toano Va. We used be able come home at night with little to no traffic. Locals said that seven mile ride to Williamsburg was waaaay too long.

Fast forward to 2018. Just pulling onto Rte. 60 reminds you of being on 64. This small tranquil community is starting to match the Tidewater area. Do we really want that in James City County? Do we really want to see crop lands become apartments? What about that nice community right behind there? Do they deserve to be rewarded with apartments in their front yards? Those are nice homes! It would be different if that field in question would be an extension of that neighborhood with more nice homes.

What about the roads and volume of traffic? I can hear the sirens of police cars and fire trucks more than ever when I'm outside. Rte. 60 can't support 126 unit complex and that side road and intersection will now be an accident and death trap.

Folks, this is a lovely area and a fantastic place to raise a family. Adding an apartment complex full of renters does nothing to improve it. Nothing! Myself and many others are asking you to not allow this to go forward.

Mike Lobus
Area Sales Manager
Schmidt's Baking Company
MLobus@schmidt baking.com
Cell Phone: 757-817-6215



Jose Ribeiro

From: John Risinger
Sent: Tuesday, October 23, 2018 8:14 AM
To: Jose Ribeiro
Subject: FW: No to Oakland Apartments

From: Maria Paluzsay
Sent: Monday, October 22, 2018 9:41 PM
To: Planning
Subject: No to Oakland Apartments

Dear Planning Commission:

I urge you to vote no to the Oakland Apartments. As a JCC native and a local Realtor for 20+ years, I understand the need for affordable housing. James City has done an excellent job of continuing the situation we have always had, with our labor coming from outside the county. Unfortunately, this apartment complex will not relieve that, as hourly wage workers still won't be able to afford them, and will still come from CC, Surry, and NN. As a rental situation, it does nothing to promote upward mobility or pride of homeownership. Add to that that it requires a height variance - let's leave the tall ugly buildings to Monticello, please - and cannot support the infrastructure it requires.

There is no reason to support these apartments, and that is coming from a Stewart Taylor-styled land rights native. Please vote no.

Sincerely,

Maria R. Paluzsay
128 Shellbank Drive

Maria R. Paluzsay
757-871-4667
Associate Broker
RE/MAX Capital
1166 Jamestown Road
Williamsburg, VA 23185
licensed Realtor in Virginia

Paul Holt

Subject:

FW: VOTE NO

From: James Kennedy <jimkennedy1@me.com>

Date: October 22, 2018 at 2:42:35 PM EDT

To: JCC Board <JCCBoard@jamescitycountyva.gov>

Subject: VOTE NO

VOTE NO ON THE OAKLAND POINTE APARTMENTS...If you keep raising taxes, and increasing spending at the current rate you'll need to raise real estate taxes again in 2 years.....the annual net losses should be an indicator this is not the right project, and the area has traffic issues already.

Jim Kennedy

Stonehouse District

Jose Ribeiro

From: John Risinger
Sent: Monday, October 22, 2018 1:07 PM
To: Jose Ribeiro
Subject: FW: Oakland Pointe Apartments Objection

From: Dawn T
Sent: Monday, October 22, 2018 12:26 PM
To: Planning ; Ruth Larson ; Sue Sadler ; Jim Icenhour ; john.mclennon@jamescitycountyva.gov;
mike.hipple@jamescitycountyva.gov
Subject: Oakland Pointe Apartments Objection

As a James City County tax payer and homeowner in the Villages of Candle Station, I'm writing to express my strong objection to the building of the Oakland Pointe Apartments for the following reasons:

- Traffic congestion at the Rt. 60/Croaker Rd. intersection
- Increased crime
- Decreased property values
- Impact to environment, specifically the Yarmouth Creek watershed
- Increased cost to taxpayers for additional educational support (\$464K annually per county planners.)
- Decreased green space in the upper county

Thank you for your consideration when voting "NO" to this proposed construction.

Dawn Taylor
757-404-0211
7428 Wicks Rd.
Williamsburg VA 23188

Jose Ribeiro

From: John Risinger
Sent: Monday, October 22, 2018 1:58 PM
To: Jose Ribeiro
Subject: FW: Oakland Pointe Apartments

-----Original Message-----

From: amstanley77@gmail.com <amstanley77@gmail.com>
Sent: Monday, October 22, 2018 1:42 PM
To: Planning <planning@jamescitycountyva.gov>; Ruth Larson <Ruth.Larson@jamescitycountyva.gov>; Sue Sadler <Sue.Sadler@jamescitycountyva.gov>; Jim Icenhour <Jim.Icenhour@jamescitycountyva.gov>; john.mclennon@jamescitycountyva.gov; mike.hipple@jamescitycountyva.gov
Subject: Oakland Pointe Apartments

As a James City County tax payer and homeowner in the Villages of Candle Station, I'm writing to express my strong objection to the building of the Oakland Pointe Apartments for the following reasons:

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- Increased crime
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- Increased cost to taxpayers for additional educational support (\$464K annually per county planners.)
- Decreased green space in the upper county

Thank you for your consideration when voting "NO" to this proposed construction.
Sent from my iPhone

AnnMarie Stanley
7523 Tealight Way
Williamsburg VA 23188

Paul Holt

Subject:

FW: Traffic Hazards Associated With Oakland Pointe Apartments Development and Zoning Change

From: Ferrell McClain <ferrellmclain@gmail.com>

Date: October 21, 2018 at 1:21:16 PM EDT

To: board@jamescitycountyva.gov

Subject: Traffic Hazards Associated With Oakland Pointe Apartments Development and Zoning Change

Traffic Hazards Associated With Oakland Pointe Apartments Development and Zoning Change

I moved to the Oakland community earlier this year. Having worked in Fairfax County for thirty years, I chose the Norge/Toano because of the rural environment with the advantage of being close to the amenities of Williamsburg. I was not aware of the proposal to rezone two parcels, adjacent to Oakland, of agricultural land to allow for high-density apartments.

I have several significant concerns regarding traffic safety. First of all is the intersection of Oakland Rd and Rt 60. The Oakland neighborhood was developed in the early 80s and the intersection was more capable of handling traffic than it is now. From the stop sign at the end of Oakland Drive at Rt 60,

(1) visibility to the left, the lanes coming from Toano, is reduced due to a hill and dip as well as shadows that shade the road.

(2) To turn from Oakland Drive to go toward Toano, visibility of traffic headed westbound is zero. In fact, one must proceed into the crossover and sneak a peek to the right back toward Norge to determine if there is any traffic coming westbound. And to make matters worse, if a car headed westbound on Rt 60 intends to turn left into the crossover to get into Oakland, that driver has zero visibility of cars coming out of Oakland into the crossover. In the short time I have lived here I have had several close calls just due to this design deficiency.

The households in the proposed apartments will quadruple the volume of traffic exiting Oakland Dr onto Rt 60.

Another deficiency of the crossover is that the distance between eastbound and westbound Rt 60 is only big enough for two cars or one truck or one small truck with trailer in tow.

Any additional cars intending to turn left into Oakland Dr from westbound Rt 60 have to stop in the travel lanes of westbound Rt 60. There is no deceleration turn lane, so they are stuck blocking traffic on RT 60 in front of other vehicles, which are accelerating away from the traffic light at Croaker Rd.

R. Ferrell McLain
122 Crescent Drive
804-580-0307

Paul Holt

Subject: FW: Oakland Pointe apartments

From: Caroline Whiteed <carol.whiteed@gmail.com>

Date: October 19, 2018 at 7:43:19 PM EDT

To: sue.sadler@jamescitycountyva.gov

Subject: Oakland Pointe apartments

My husband and I recently purchased property in Oakland Estates to build our retirement home. We love the rural setting and were so pleased to find a community that suited our needs. We are so disappointed to learn of the proposed apartment complex that will turn beautiful green space into a development that will cause extra traffic and share the only access to this neighborhood.

Please vote NO on this apartment complex to keep the rural atmosphere of this portion of James City County.

Thank you.

Caroline Whiteed

Jose Ribeiro

From: John Risinger
Sent: Thursday, October 18, 2018 12:41 PM
To: Jose Ribeiro
Subject: FW: Please vote no:

-----Original Message-----

From: Karen Toone Stemmann <ktstemann@aol.com>
Sent: Thursday, October 18, 2018 11:31 AM
To: Planning <planning@jamescitycountyva.gov>
Subject: Please vote no:

No on Oakland Point development. Thank you.

Sent from my iPhone

Jose Ribeiro

From: John Risinger
Sent: Thursday, October 18, 2018 12:41 PM
To: Jose Ribeiro
Subject: FW: Please Vote NO on the Oakland Pointe complex

-----Original Message-----

From: k.i.beaumont@cox.net <k.i.beaumont@cox.net>
Sent: Thursday, October 18, 2018 10:35 AM
To: Planning <planning@jamescitycountyva.gov>; Sue Sadler <Sue.Sadler@jamescitycountyva.gov>
Subject: Please Vote NO on the Oakland Pointe complex

This area has traffic issues already and this would exacerbate it. There are often bicyclist riding in marathons in the summer the police have to patrol the intersection. Just this simple thing backs up traffic all the way into Toano. Now you want to add another left turn across the median?

Even without something like that or traffic stopped on the interstate the traffic is very heavy. I moved into a rural area, I pay taxes here because I wanted a rural community. You keep adding more people and that brings with it urban issues. Please use common sense a vote no on this.

Unless destroying the rural beauty of the area is what your going for.

Jose Ribeiro

From: John Risinger
Sent: Thursday, October 18, 2018 8:13 AM
To: Jose Ribeiro
Subject: FW: please vote NO on Oakland Pointe proposal

From: Lynne Groeger
Sent: Wednesday, October 17, 2018 5:44 PM
To: Planning
Subject: please vote NO on Oakland Pointe proposal

Dear Planning Commission Members,

I am opposed to the proposal to build a 126 unit apartment complex on Richmond Road near Croaker Road.

County planners say it will generate 887 car trips per day in and out of the complex, increasing the traffic volume at the Croaker and Route 60 intersection. Each trip will require crossing the Route 60 median onto Oakland Drive, a highly dangerous intersection due to fast-moving cars and poor visibility. I am very concerned about the traffic impact and the safety of drivers in the area.

The proposed cost to taxpayers is estimated at \$464,000+ annually. This is just one of several proposals (the building near TK Antiquities on Jamestown Road is another) that will increase our tax burden.

This proposed development will also decrease green space while creating environmental problems. Oakland Farm property has an earthen dam that drains into the environmentally sensitive Yarmouth Creek. Construction on the site and continual run-off will adversely impact this watershed.

I understand that Williamsburg/James City County needs low to moderate income housing but this is not a good location at all for it. In addition to the traffic safety concerns, it is too far from the major employers of lower paying jobs such as the hotel area, Colonial Williamsburg, and the College of William and Mary, whose employees may depend on public transit. It could take an hour or more by bus to get to those jobs.

I sincerely hope you will take these concerns into consideration.

Thank you for your attention.

Lynne Groeger

Paul Holt

From: Adrienne <adrienne-gary@cox.net>
Sent: Monday, December 31, 2018 7:58 PM
To: Paul Holt
Subject: Affordable housing

Dear Mr. Holt,

Yes, I do agree that the county should set aside funds for affordable housing.
JCC should also consider the best locations for that housing.

The best housing in my opinion is 5-20% of each new housing development.
For instance, developments like the Candle Station townhouses should have a few units that are affordable.

That would be a much better solution than building the proposed 126-unit complex of all affordable units of Oakland Pointe at the Croaker intersection.

Sincerely
Adrienne Frank
114 Crescent Drive
23188

Paul Holt

Subject:

FW: Oakland Point Apartments

From: stacy vanlelived <stacyvanl@msn.com>

Date: December 21, 2018 at 1:59:52 PM EST

To: "planning@jamescitycountyva.gov" <planning@jamescitycountyva.gov>,
"sue.sadler@jamescitycountyva.gov" <sue.sadler@jamescitycountyva.gov>

Subject: Oakland Point Apartments

Unfortunately we were unable to attend the meeting that was held on December 5 regarding the Oakland Point Apartment complex, but I wanted to be sure to express my feelings on this project before it was too late.

We have lived in Lake Toano Estates for almost 30 years. We have only one road into this development, Church Lane. My husband and I are retired so on any given day at any given time we may be leaving our home. Just this past Wednesday, at about 2:40 in the afternoon we left our house and when we got to Richmond Road we were going to turn left, heading towards Andersons Corner. We sat at the intersection for a little over 5 minutes waiting for the traffic to free up enough for us to cross the lane and get on our way. We even thought maybe there was a problem on Interstate 64 and the traffic had been diverted down Rt 60. That was not the case, it was just normal, regular, every day traffic going up and down the road. The last thing we need is another estimated 800 plus cars travelling Richmond Road out at this end of the county.

It seems there is a motion underway to "restore" Toano back to it's old self, that will never be able to happen with additional vehicles running up and down the Route 60. Before too long there will have to be traffic lights put up at Church Lane, Forge Road, Chickahominy Road and maybe even Bush Springs Road. If you put in an apartment complex at Oakland Estates, they too may need a traffic light. That intersection is already a hazard because of the trees.

We all moved out here because of the rural feel, it was appealing. Still is. We certainly understand progress, growth, and the well being for economic development. But we also understand the fact that all of that costs money. The growth in the past 10 years or so in Williamsburg/James City County is a drain on our water source, tearing up our roads that the state and county cannot repair fast enough, over flowing the schools, causing additional ones to be built. This area is already more expensive to live in than the surrounding areas. Let's not make it worse! Colonial Williamsburg is struggling, tourism must be down, so that

income stream is drying up! Let's not make the residents pay for the over growth that the Planning Commission and Board of Supervisors will cause by approving this apartment complex.

Please, PLEASE do not approve the Oakland Pointe Apartment complex! Let's maintain our little piece of heaven out in this end of the county and leave it as it is!!

Thank you for your time,

Stacy vanLeliveld

December 11, 2018

To: Susan Sadler; sue.sadler@jamescitycountyva.gov

From: Norman P David, Licensed Real Estate Agent/assistant

Subject: Oakland Point

The Planning commission meeting was very long the other night but I sat and listened up to the recess. I did not sign up to speak at the meeting because I wanted to hear what other people had to say before making a comment.

Being a RE Agent I have a little different prospective on the situation. Although I don't deal with homeless people on a daily basis. I am aware of their situation and am empathic and My REALTOR Wife and I specialize in working with entry level homes. She was not at the meeting or had no part in writing this opinion.

Although I live in Elmwood Subdivision which is up Croker Rd behind the 7-11 store, we have connections to Oakland Estates in that my wife has a listing in that subdivision. The homes in Oakland are in the One Half Million Dollar range. That's a lot of tax dollars to the county from the people who live there. I think that's a huge consideration, as from experience a low-income housing area tends to bring down property values of nearby homes. There has been very little interest in our listing in the last 5 months. It may be the listing itself or something else. I'll leave that answer to someone else.

Another point is that there is another apartment complex just around the corner on Croaker Road. I don't know if that considered low income or subsidized housing or not, but as was mentioned by other speakers last night the people who will live in these apartments usually can't afford their own transportation. I have noticed many times at the entrance to the apartments on Croaker, people trying to walk from the driveway of these apartments down to Rt.60. There is no sidewalk so they put themselves in danger from the fast-moving traffic on Croaker. I even saw one woman fall because there is no Pedestrian walk there only rough ground.

The same is true of the Oakland Point project. There is no sidewalks from roughly the crosswalk church To the Toano Middle school on either side of Richmond road. How are people who can't afford transportation, as was mentioned several times at the PC meeting, supposed to get to Food Lion, CVS or even worse Farm Fresh without sidewalks.

In addition, there is no pedestrian crosswalks or traffic stopping pedestrian lights at the croaker/ Rich. Rd. intersection. Maybe the redesign of that Intersection in 4 or 5 years will include them? I don't know.

That would have to change if people are expected to walk to the grocery store or to the pharmacy or anywhere else. So, who pays for that? Probably the county and ultimately the tax payers. Please consider all the options before voting on this project.

Thank you for your time and allowing me to make my point.

Norman P David

101 Birch Circle

Williamsburg, VA 23188

Jose Ribeiro

From: John Risinger
Sent: Tuesday, December 11, 2018 8:45 AM
To: Jose Ribeiro
Subject: FW: Oakland Pointe-Work Force Housing

-----Original Message-----

From: Eileen Abate <abate4@verizon.net>
Sent: Tuesday, December 11, 2018 8:30 AM
To: Planning <planning@jamescitycountyva.gov>; Sue Sadler <Sue.Sadler@jamescitycountyva.gov>; Ruth Larson <Ruth.Larson@jamescitycountyva.gov>; Jim Icenhour <Jim.Icenhour@jamescitycountyva.gov>; John McGlennon <John.McGlennon@jamescitycountyva.gov>; mike.hipple@jamescitycountyva.gov
Subject: Oakland Pointe-Work Force Housing

We are strongly against the captioned proposal for the following:

- increased traffic on an already busy rural road
- loss of the rural character. We don't want to look like Newport News
- a 124 apartment complex & outbuildings is too large for 14 acres
- this many add'l folks can put a burden on local schools & facilities
- no objection to helping the needy but when it comes to using tax payer dollars, let's build condominiums where they can take pride in ownership not just another endless cycle of paying rent.

Very truly yours,
Anthony & Eileen Abate

Jose Ribeiro

From: Stephen Koval <stepdonnahen@msn.com>
Sent: Saturday, December 08, 2018 12:30 PM
To: Paul Holt; Sue Sadler; Ruth Larson; Jim Icenhour; John McGlennon; Michael Hipple; Board Only; Heath Richardson; Beth Klapper; PlanComm
Cc: Koval, Donna; Ellen Cook; Jose Ribeiro
Subject: Re: Concerns Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe

Mr. Holt:

Thank you for the detailed explanation.

Please reconsider creating a link to the Public Hearing Notices of all JCC Boards and Commissions as a supplement to the State Code requirement. Many municipalities in Virginia follow this procedure and as you may know, readership of the hard copy Virginia Gazette has dwindled.

In fact, JCC is currently posting Public Hearing Notices for the Board of Supervisors (see below) so I don't understand why it can't be standardized for the Planning Commission and other boards and commissions.

Public Hearing Notices

Current Public Hearing Notice (PDF)

There is no price for transparency and maximum public participation in the future of James City County.

Thank you again for listening to our procedural concerns.

Respectfully,
Stephen & Donna Koval

From: Paul Holt
Sent: Wednesday, December 5, 2018 2:13 PM
To: 'Stephen Koval'; Sue Sadler; Ruth Larson; Jim Icenhour; John McGlennon; Michael Hipple; Board Only; Heath Richardson; Beth Klapper; PlanComm
Cc: Koval, Donna; Ellen Cook; Jose Ribeiro
Subject: RE: Concerns Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008) Oakland Pointe
Good afternoon.

The legal advertising requirements for a land use case are set forth by the Code of Virginia which mandates publication in a newspaper that is published or having general circulation in the locality. The ad for the Oakland Pointe case ran in the Va. Gazette on November 21 and November 28. Unfortunately, publishing these ads on an online forum/format would not satisfy the State Code requirement. There are similar notification requirements for many Boards and Commissions that advertise for a public hearing and where public notice is required, including but not limited to, the Board of Supervisors, the Board of Zoning Appeals, the Wetlands and Chesapeake Bay Boards, etc.

Because these ad's are published, this format also provides the county with an opportunity to review and approve the Proof Set from the newspaper to ensure accuracy. For consistency and transparency across all public notices for all Board and Commissions, having all of these ads appear with the same place/format helps to provide reliability for James City County citizens. Also for consistency and reliability, Agendas, staff reports, minutes and attachments to staff reports are all posted on the James City County website (via the "Novus" link).

There is no automatic function with the Agenda software where this material is pushed out via an account subscription.

Publishing the ads in additional and various other locations would represent additional costs that would be incurred by the county and is not set forth in any current county policy.

- Paul Holt

From: Stephen Koval

Sent: Tuesday, December 4, 2018 12:20 PM

To: Sue Sadler ; Ruth Larson ; Jim Icenhour ; John McGlennon ; Michael Hipple ; Board Only ; Planning ; Heath Richardson ; Paul Holt ; Beth Klapper

Cc: Koval, Donna

Subject: Concerns Z-18-0004/ HW-18-0002 (formerly, Z-0003-2017/ HW-0004-2017/ LU-0041-2008)
Oakland Pointe

Dear JCC Board of Supervisors, Planning Commission and Community Development Members:

Please see attached procedural concerns of subject case.

Thank you for the time and patience.

Sincerely,

Stephen & Donna Koval

Paul Holt

Subject:

FW: Oakland

From: Adrienne <adrienne-gary@cox.net>

Date: December 6, 2018 at 12:07:33 PM EST

To: <sue.sadler@jamescitycountyva.gov>

Subject: Oakland

Dear Supervisor Sadler:

I attended the Planning Commission meeting last night and was very impressed by commissioner Haldeman's presentation at the end of the meeting. Mr. Haldeman has been a member of the Affordable Housing Workforce committee and knows well the difficult issues that the county is facing. Before you make your decision about the Oakland Pointe apartment complex, I implore you to listen to his comments.

The Oakland Pointe complex is proposed to offer affordable "workforce" housing. The proposed rents are not affordable for the people most in need in our community. A single mother working at Food Lion would not be able to afford to live there.

Last night, there were a number of comments made, about the need for housing. Those comments were made by homeless advocates, food pantries, and churches serving the most needy. The people with the greatest need are not helped by "workforce" housing. Our community needs to provide adequate housing for this population!

As Mr. Haldeman stated, a large majority of people of working force age, moving to the Williamsburg Area are people who commute in the direction of Richmond or Newport News. Who is to say that people working in our community will actually live in the proposed apartments?

In addition, we need diverse housing opportunities distributed throughout developments and neighborhoods. The James City County Housing Opportunity Policy states that a percentage of each new development should be allotted to affordable housing. Perhaps, all new developments should be required to set aside 20% for affordable units.

Please carefully consider this complex and future comprehensive planning to address these difficult issues.

Adrienne Frank

114 Crescent Drive

Williamsburg, VA 23188

Jose Ribeiro

From: John Risinger
Sent: Thursday, December 06, 2018 3:23 PM
To: Jose Ribeiro
Subject: FW: Oakland

From: Donna Dodd
Sent: Thursday, December 6, 2018 3:22 PM
To: Planning
Subject: Oakland

Dear Supervisors,

Please vote NO on this apartment complex at Oakland. It will disturb and interrupt the environmental green space and the way of life in this area. We sure do not need to add that many more people to the area. There is already a lot of added homes at the Norge Village apartments and the Candle Station town homes. Please just no more.

Thank you,
Donna Dodd

Jose Ribeiro

From: John Risinger
Sent: Wednesday, December 05, 2018 3:58 PM
To: Jose Ribeiro
Subject: FW: Oakland Pointe

From: Lee Alexander
Sent: Wednesday, December 5, 2018 3:01 PM
To: Planning ; Board Only
Subject: Oakland Pointe

My name is Lee Alexander and I live in Oakland Estates. I ask that you do not approve the rezoning of Oakland Farm for the purposes of building Oakland Pointe.

Oakland Pointe may be a noble effort to bring affordable housing to the county, but I do not feel it works in the best interest of its citizens.

It does not improve the situation of those who drive in the area. The congestion on the road in this area has been getting steadily worse for years. Locating Oakland Pointe near the intersection of Richmond Road and Croaker will only aggravate the traffic congestion. The proposed changes to the intersection of Richmond Road and Oakland Drive will actually decrease the turning median there, which is barely big enough for a school bus now. If we add that turning lane on west bound Richmond Road it will reduce that median by another 12 feet or so making the median roughly 40-42 feet wide. A standard school bus, like the ones who travel our neighborhood, is 40 feet long. There is no room for error for buses carrying children to school. I would think we would want a safety margin. In addition, because of the topography to the southeast, including a wooded area atop a hillock, this median becomes a blind turn onto west bound Richmond Road toward Toano. Are we going to level that area also so as to provide drivers a clear look at the traffic on west bound 60 and in the proposed turning lane? At what expense would that be, and to what lengths are we willing to modify the landscape to make this proposal a reality? If we truly need affordable housing, there are other places where it would work without impacting highway safety as it does in this proposed location.

Oakland Pointe does not work in the best interest of those residents who cherish the rural nature of our county. JCC Strategic vision 2035 talks about affordable housing but it also calls for the protection of community character. In the upper county that means rural character. Oakland Pointe does not work to protect the rural character of the area. It is indeed another step to diminish it. Another step to change the very thing many in the upper county moved here for.

Oakland Pointe does not work in the interest of residents who are concerned that we are putting too much pressure on the Yarmouth Creek watershed. Called a treasure at one time, the water shed in this area has seen almost continual growth the past several years. Oakland Pointe, with the amount of water run-off from its roofs, parking lots and other impervious surfaces only adds more pressure to the watershed. The retention ponds and other tools being used look good on the plan, but how does that stand up to a category 1 hurricane? What will be their effectiveness 10-15-20 years out? I'm thinking about the future here, and decisions you make now will impact the future generations who live here. We only get one chance with Yarmouth Creek, and sub-watershed 103 of Yarmouth Creek who's headwaters rise on Oakland Farm is, I believe, under stress from over development now.

Oakland Pointe does not work in the interests of the tax payers of James City County. We think we know what the cost is according to a formula, but we do not know how we will pay for it. Where is the formula for that? I ask you sincerely, do you willing go into personal debt, before having some idea how you can afford it. How many of our county households and businesses go into debt before they know and discuss how they will pay for it. How we pay for affordable housing is a debate that needs to take place; however, we should wait and hear from the Affordable Housing Task Force before we approve affordable housing on this site or any other site in the county. I think the taxpayers of the county deserve that.

I am not against growth and change. It should be smart growth and smart change that works for the citizens of the county. This is neither. Why do we want to approve a project like this, in this particular location, that puts such a heavy footprint on the land, and potentially adds to the tax burden of the citizens of the county? Oakland Pointe as proposed is not in the best interest of the citizens of JCC.

Once again, thank you for your service to the county.

For the Public Record

Best Regards

Lee

3137 Pristine View

Williamsburg, Virginia 23188

December 1, 2018

The James City County Planning Commission

P.O. Box 8784

Williamsburg, Virginia 23187

Dear Sir or Madam:

We write to express our opposition to the proposed Oakland Pointe Apartment Complex. At 126 units, this complex will be one of the largest in our area and will require a height waiver from the James City County Planning Commission.

Not only will the construction of this complex add a hefty additional \$464,000 cost to our county taxpayers, it will decrease green space for those living in this area.

County planners also recognize the fact that this complex will create environmental problems. The Oakland Farm property has an earthen dam that drains into the Yarmouth Creek, an environmentally sensitive area. Construction on the site and long-term run-off will adversely affect this watershed.

The upper section of James City County has been the last vestige of the rural nature of our county and allowing this development opens the door to the loss of farmland and destroys the pastoral character of the upper county.

The intersection near the proposed complex will become most hazardous and is reason enough to refuse this development.

It appears that the only party that will gain from this complex is the developer and the taxpayer stands to lose in every regard.

Therefore, we urge you not to go forward with the proposed Oakland Pointe Apartment Complex.



Donald G. Kauffman



Susan H. Kauffman

Letter to Editor (1/25/19)

The Yarmouth Creek (YC) Watershed, which runs into the Chickahominy River, is a natural treasure in Upper James City County (JCC). Yet, the Stormwater Director, Fran Geissler (2009) described it as having "fragile and highly erodible soils." There have been several erosion and run-off issues in the recent past, for example, uncontrolled run-off during construction of the apartments at Norge Station, uncontrolled run-off from farms, and a major erosion issue on a tract of land behind the Oakland Neighborhood. As noted in the 2016, the YC Watershed "Water Quality Report" the DEQ listed 3 primary areas of concern:

- In 2000, all 9 of the sub-watersheds that make up YC were considered sensitive. In 2009, water quality had been degraded in one of these sub-watersheds, and more likely to become impacted in the future. The YC runs a risk of becoming degraded from construction activities.
 - Headwater streams are showing signs of deterioration due to increased development. Unchecked stormwater run-off has eroded stream channels and created severe headcuts in upstream areas. Sediment pushed downstream chokes aquatic vegetation and water drainage capabilities.
 - Aging stormwater infrastructure is in need of maintenance and/or repair. Failing stormwater management systems need to be upgraded to prevent further flooding and erosion impacts.
- Although YC may seem insignificant, it drains into Cranston's Mill Pond, and eventually into the Little Creek Reservoir – a major source of drinking water!

The proposed 126-unit Oakland Pointe Apartment Complex poses a threat to the Watershed during construction, from storm run-off, from salt and other chemicals from Route 60, and from litter. The development will continue to pose a threat to the YC after construction, based on the high density of the development, and the fact that the developer stated that the finished complex will contain no undisturbed, protected forest or open space. Total Daily Maximum Load (TDML) calculations for this project appear to be accurate; however, they are singular for this development alone and do not account for the cumulative impact to YC from all projects in the area, which will most certainly force further degradation of the YCW area!

In 2007, JCC bought a 100-acre farm (now referred to as the DeBord Tract), along with an adjacent 23-acre conservation easement, using \$1.36 million of green space funds, according to county records. JCC completed a \$240,000 channel restoration project behind the Oakland neighborhood due to heavy erosion and sedimentation scouring the headwaters of Yarmouth Creek. As stated by the Board of Supervisors in June 2007, the county was purchasing the DeBord Tract and the conservation easement on the adjoining property to "preserve the property's rural landscape and farmland." JCC has invested considerable effort to prevent erosion on the DeBord Tract. It would be a shame not to continue to protect the DeBord Tract and the rest of the watershed from erosion and pollution.

Townhouses and single-family homes are continuing to be built near the Croaker Intersection (Village at Candle Station). The developer has created large catchment ponds on top of the ravine to protect the watershed. However, there is a culvert near Crosswalk Church where street run-off drains directly into the watershed, and it is full of litter. Neighbors living downstream have noticed a change in the ravine behind their homes. Three (3) Forebays are required for the apartment complex project, along with a 4' Mulch Trail and "rain gardens, dry swales and the like" to protect the watershed area. Over time, these measures will all fail, specifically:

- Forebays require regular maintenance (cleaning) because they fill up with sediment and debris and, if not cleaned out, will fail and pollute the creek.
- Any type of mulch trail will wash out (especially with the severe rain events that will occur) and will fail and wash into the creek.
- Rain gardens provide some relief, provided they are properly maintained.
- Dry swales require constant attention to be effective.
- "And the like" provides no direction to the Developer to do...anything?

The bigger issue here is who will manage, maintain and bear the cost for all these countermeasures -- the Taxpayers?

There is an earthen dam on the Oakland Farm property. The Planning Commission requested drainage ponds that would protect against a 100-year flood, but we've been having flooding in Yarmouth that is attuned to a 500-year flood. More clearing and land disturbance at the proposed apartment site will affect the watershed. More impervious paved space and potentially inadequate drainage ponds could be devastating. At some point in the foreseeable future, the dam will fail and will require repairs -- similar in nature (and cost) to other dam failures around the entire County!

Adrienne Frank, James City County



Oakland Pointe

Fiscal Impact Study

James City County, Virginia

Prepared by

Ted Figura Consulting

for

Connelly Development

Lexington, South Carolina

Submitted January 19, 2019

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Oakland Pointe: Fiscal Impact Analysis

Executive Summary

The applicant, Connelly Development, is seeking a rezoning of 14.54 acres along Richmond Road, south of Oakland Drive in James City County (the “County”) from General Agricultural (A-1) to Multi-family Residential (R-5) zoning to permit the development of an affordable multi-family residential development consisting of 126 two and three-bedroom units (“Oakland Pointe” or “the proposed development”).

As proposed, this development is projected to have a somewhat positive fiscal impact on the County over the total five-year analysis period when its General Fund, Virginia Public Assistance Fund and James City Service Authority (“JCSA”) funds are combined.¹ This is because, over the five-year analysis period, net revenues (revenues minus costs) received by the JCSA, particularly one-time development fees, offset the negative net revenues experienced by the County’s General Fund and Virginia Public Assistance Fund during this period. When only the County’s General Fund and Virginia Public Assistance Fund are considered, the fiscal impact is negative over this five-year period.

The fiscal impact of the proposed development for the combined three funds in the proposed development’s stabilization year is also negative. This is because one-time revenues are no longer present in the stabilization year. However, the fiscal impact of the proposed development on the JCSA remains highly positive in the stabilization year.

The negative fiscal impacts are to be expected, given the lower income of Oakland Pointe households and the lower than market rate rent. However, using a variable cost approach and refining the fiscal impact analysis to correctly measure the costs and revenues associated with the parameters of this particular development produces a fiscal impact on the County that is considerably less negative than the fiscal impact measure calculated using the County’s average cost-based, one-size-fits-all fiscal impact formula.

Average household incomes at Oakland Pointe were estimated based on proposed rents and HUD income limits applicable to the proposed development, which will be tax credit financed. The average household income at Oakland Pointe is expected to be about \$30,725 and range from about \$16,475 to \$50,825 depending on occupancy of a two or three-bedroom apartment and household size. Household size is expected to average 2.97 persons per household, which is almost 25% higher than the County’s estimated average household size.

The number of students projected to be generated by the proposed development was calculated using the County’s student generation formula. The County’s student generation formula predicts 39 students will be added to the Williamsburg-James City County Public Schools due to the proposed development.

¹ These funds are accounted for separately in the County’s *Budget*.

Using a more accurate variable cost/variable revenue approach, the proposed development is expected to generate an annual cash flow deficit for the County of about -\$124,300 for all funds combined. Over the five-year analysis period, total net revenue is projected to be positive, generating a revenue surplus of \$220,650. However, as stated above, cumulative cash flow over the analysis period is expected to be negative for the County's General Fund and Virginia Public Assistance Fund.

The table below summarizes the fiscal impact measures for the proposed development, using both student generation formulas.

Oakland Pointe Fiscal Impact Measures, Combined General and Enterprise Funds	
Stabilization Period	
Annual Revenues	\$ 215,375
Annual Costs	\$ 339,700
Cash Flow	\$(124,325)
Benefit-to-Cost Ratio	0.63-to-1
Cumulative Measures	
Total Revenues	\$1,262,300
Total Costs	\$1,041,650
Cumulative Cash Flow	\$ 220,650
Benefit-to-Cost Ratio	1.21-to-1

Figures rounded to the nearest \$25

SGF = Student generation formula

While not quantifiable, Oakland Pointe will have positive impacts for economic development in James City County. The County has identified the lack of affordable housing as a serious problem. The lack of housing stock that is affordable to the County's lower paid workforce is particularly felt by the County's business community. Employers in the County, including those in the tourist industry—a major component of the County's economic base—find that many of their workers cannot afford to live in the County. They must pay a wage premium to induce workers living outside the County to commute into the County or lose workers to competing businesses located outside the County. Thus, expanding the stock of affordable housing in the County will benefit businesses in the County and help the County to attract and retain businesses in the future.

A more detailed analysis follows.

Background

Connelly Development has proposed an affordable multi-family residential development consisting of 126 units in five three-story buildings. Oakland Pointe will be located on a 14.54 acre parcel located at 7581 Richmond Road south of Oakland Drive in the James City County (the “Site”). The Site is comprised of Parcel # 2310100002 currently owned by Lisa P. Marston Trustee. The applicant is requesting a rezoning of the site from the existing General Agricultural (A-1) zoning to Multifamily Residential (R-5) zoning in order to construct the development.

Oakland Pointe is proposed as a tax-credit financed development consisting of six model types. These models consist of two-bedroom and three-bedroom units, each with income limits set at 40% of Area Median Income (AMI), 50% AMI and 60% AMI. Rent levels for these models are expected to be \$495 per month for a two-bedroom 40% AMI unit (10 units), \$550 per month for a two-bedroom 50% AMI unit (32 units), \$820 per month for a two-bedroom 60% AMI unit (24 units), \$560 per month for a three-bedroom 40% AMI unit (4 units), \$750 per month for a three-bedroom 50% AMI unit (20 units), and \$940 per month for a three-bedroom 60% AMI unit (36 units).

Based on the expected rent rates, HUD income limits and certain housing stress assumptions, household income for Oakland Pointe residents is projected to average \$30,725 and range from \$16,475 to \$50,825. Expected average incomes for Oakland Pointe units are shown in Table 1, below. These compare to a projected 2018 Countywide median income of \$87,625 and a projected 2018 Countywide average income of \$114,975 for the James City County.

Table 1	
Estimated Average 2018 Incomes for Oakland Pointe Unit Types	
Oakland Pointe Unit Types	Average Incomes
2-Bedroom, 40% AMI	\$20,875
2-Bedroom, 50% AMI	\$24,375
2-Bedroom, 60% AMI	\$33,400
3-Bedroom, 40% AMI	\$23,650
3-Bedroom, 50% AMI	\$30,850
3-Bedroom, 60% AMI	\$38,050

Construction of Oakland Pointe is expected to begin by the end of 2019 (mid-FY 2020). The first units were assumed to be occupied in the first quarter of 2021 (third quarter FY 2021), with the last units occupied in the second quarter of FY 2022. Because the stabilization year for the proposed development will occur in FY 2023, a five-year analysis period was used (FY 2020-FY 2024).

Methodology

The fiscal impact of Oakland Pointe on the James City County was calculated using the methodology described below. Fiscal impact is defined as the difference between all revenues to the County generated by the development and all costs to the County attributable to the development. Revenues and costs are described in further detail below. The fiscal impact of a by-right development was not calculated as a comparative fiscal impact analysis for a by-right development because this is not required by the County.

The fiscal impact was calculated over a five-year period. This period was chosen because the stabilization year for the development falls within the first 5-year increment and projected revenues and costs do not change after that. The stabilization year is FY 2023 and the analysis period continues through FY 2024. The stabilization year is the year following the completion of all phases of a project (the year beyond which the fiscal cash flow from the development does not change).

All fiscal impacts are presented in constant 2018 dollars, (i.e., inflation is not applied to either revenues or costs throughout the analysis period). A constant in 2018 dollars was chosen because the analysis is substantially based on the revenue, cost and tax rate assumptions contained in the James City County *FY 2018 Adopted Operating Budget* and the Budget 2018 column of the *Williamsburg-James City County Public Schools FY 2019 Superintendent's Proposed Budget* (the “Budget(s)”). ***These were the budgets in effect at the time this fiscal impact analysis was originally calculated.***

The constant dollar approach means that no assumptions are made about rates of increase in real estate assessments in the County. Also, no assumptions are made about increasing tax revenues from sales, meals or business license taxes based upon retail price increases. Neither are assumptions made about future increases in the unit costs of government. The practical implication of this approach is that any future systemic imbalances between rising revenues and rising costs are assumed to be adjusted through changes in the County's tax rate, either upward or downward.

A marginal revenue/marginal cost approach was used to calculate expected revenues and costs to the County attributable to the development. This is opposed to an average revenue/average cost approach, in which estimates of a project's revenues and costs are based upon a jurisdiction's per-capita revenues and costs. The marginal revenue/marginal cost methodology counts only variable costs and revenues and, thus, does not count fixed costs and revenues that would be spent or received by the County whether additional development occurs or not. It counts only revenues and costs attributable to an increase in the number of households from the development being analyzed.

It is, thus, a more accurate estimate of future revenues and costs resulting from a development than is the average revenue/average cost approach. The average revenue/average cost approach actually calculates a project's “fair share” of public costs, rather than the incremental impact of a project on a locality's fiscal position. A more detailed description of the methodology used in this analysis is presented in the Appendix.

Revenues estimated for Oakland Pointe fall into three categories: one-time direct revenues, recurring direct revenues and additional tax revenues generated by households. The methodology does not use multipliers to calculate revenues that could be generated through a project's secondary impacts, as such multipliers are considered to be unreliable for small geographic areas. The methodology does not include revenues generated from spending by construction workers at Oakland Pointe, as such spending cannot reliably be said to occur within the County.

One-time direct revenues are revenues to the County derived from the construction of Oakland Pointe. They include all plan review fees, building permit and associated fees (electrical, mechanical and plumbing), other development fees, and water and sewer facility fees and other fees payable to the James City Service Authority (JSCA). No cash proffers are assumed for Oakland Pointe as part of the fiscal impact analysis.

Recurring direct revenues consist of real estate property taxes, personal property taxes (car tax), car rental tax, and other fees paid by households to the County, as well as water and sewer charges paid to the JSCA. These are taxes and fees paid directly to the County by households and/or the property owner. Real estate taxes currently paid on the assessed value of the site, as well as taxes estimated to be paid by a household potentially living on the site, were deducted from real estate property tax calculations. Recurring direct taxes were calculated based upon the assessed property values, the County's per-household user fees or other methodologies explained in the Appendix.

Additional tax revenues generated by households are estimates of taxes paid by James City County businesses due to purchases made by Oakland Pointe households. These include the local option sales tax, meals tax, and the business license fees paid by businesses on gross receipts from these sales. The methodology for estimating net new sales and gross receipts is presented in the Appendix.

Purchases by Oakland Pointe households are estimated based upon spending patterns according to household estimated income. Spending patterns are derived from the most recent U.S. Bureau of Labor Statistics Consumer Expenditure Survey. An adjustment was made for purchases made outside the County. The methodology for estimating these revenues is presented in the Appendix.

No generated taxes were estimated for construction workers or employees of businesses located in James City County, as these employees were assumed either to be already living and spending in James City County or living outside the County and, thus, spending most of their income outside the County.

Costs were divided into five categories: education variable operating costs per student, other variable operating costs of government per household, education capital costs (if any), general government capital costs (if any) and enterprise fund costs. Cost data and assumptions were derived from the *Budgets*.

Per household costs were calculated for various budget line items. State and federal revenues supporting various budget line items were deducted to leave only the County's operating cost. Per household costs for certain government functions, such as public assistance and public health services, that are expected to serve the Oakland Pointe population were calculated using a smaller household base. Chief executive, legislative and administrative functions, which would be performed regardless of population size, were not included in the calculations.

A percentage of certain administrative support services, to the extent that they support operations which would be provided independent of population size, were not included in the calculations. The methodology for estimating the cost of government, including, enterprise fund costs (the per-linear foot cost of road maintenance and the per-customer cost of refuse collection), is presented in more detail in the Appendix.

Education costs exclude administrative and other fixed costs. The County's student generation formula (0.31 students per household for a multi-family development) was used. Student generation estimates for Oakland Pointe are shown in Table 2, below. The methodologies for estimating the cost of education are presented in more detail in the Appendix.

Table 2	
Projected Williamsburg-James City County Public School Attendance from Oakland Pointe	
Elementary School	17
Middle School	9
High School	13
Total	39

Regarding the determination of potential education capital costs, school capacity and enrollment data were obtained from the Williamsburg-James City County Public Schools and the Virginia Department of Education. Table 3 below shows the facility capacities, current enrollments, and remaining capacities before and after the development of Oakland Pointe.

Table 3				
Available Classroom Capacities Before and After Oakland Pointe				
	Available Capacity Prior to Oakland Pointe Development			Available Capacity After Oakland Pointe Development
	Rated Capacity	Current Enrollment	Remaining Capacity	
<i>County Student Generation Formula</i>				
Norge Elementary	695	680	15	-2
Toano Middle School	790	706	84	75
Warhill H.S.	1,441	1,392	49	36

The only school which appears to present capacity issues is Norge Elementary and only by a nominal amount. Given historic fluctuations in enrollment at Norge Elementary it is believed that adequate capacity will exist to accommodate the project student generated by Oakland Pointe.

Three measures of fiscal impact were used—cash flow, total net revenue and the benefit-to-cost ratio. Cash flow shows the annual surplus or deficit of revenues less costs for a sample of ramp up years through the stabilization year. Because revenues and costs are reported in constant dollars, there is no change in the projected cash flow after the stabilization year.

Total net revenue is the sum of annual cash flows over the analysis period but also includes the value to the County of off-site improvements—new sidewalk and bikeline along Richmond Road. Another way of explaining total net revenue is that it is derived by subtracting total costs to the County attributable to a project from total revenues to the County derived from a project over the analysis period.

Finally, the benefit-to-cost ratio is the ratio of total project revenues to the County and total project costs to the County. A benefit-to-cost ratio greater than 1.0-to-1 signals a net fiscal benefit. The magnitude of the benefit-to-cost ratio signals the strength of the fiscal impact on the County. For instance, a benefit-to-cost ratio of 1.5-to-1 indicates that for every additional dollar of spending a project costs the County, the County is expected to receive \$1.50 in additional revenue.

Fiscal Impact of Oakland Pointe

Connelly Development is seeking a rezoning of the Site to Multi-family Residential zoning (R-5). This zoning would permit the development described above. The derivation of the revenues and costs attributed to Oakland Pointe are described in the Methodology section, above, and in the Appendix. The revenues projected for Oakland Pointe are listed in the Table 4 on the following page. Costs generated by Oakland Pointe are displayed in Table 5, located on page 12. Both revenues and costs are shown for the stabilization year and the total for the five-year analysis period (FY 2020-FY 2024).

Subtracting total projected costs from total revenues yields a positive net total revenue (or revenues net of costs) for the development. However, the positive fiscal impact occurs only when all funds are combined. The combined General and Virginia Public Assistance Funds show a negative fiscal impact.

In the stabilization year, the County is expected to receive more than \$215,000 annually in new revenue from all funds resulting from the development of Oakland Pointe while incurring about \$340,000 in new annual costs. Thus, the fiscal impact for Oakland Pointe is predictably negative, given the lower incomes of Oakland Pointe households. However, the cash flow calculated using carefully determined parameters and assumptions, shown in Table 6, is substantially less negative than predicted by the County's average-cost/one-size-fits-all fiscal impact formula.

Annual cash flow from Oakland Pointe is shown in Table 6 on page 12. Cash flow is shown for the General and Virginia Public Assistance funds and the JSCA separately. While cash flow is negative for the combined General and Virginia Public Assistance Funds, it is positive for the JSCA. In the stabilization year, the County is expected to see a net revenue deficit (revenues less costs) \$124,325.

The County's General and Virginia Public Assistance Funds are expected to experience a revenue deficit of about \$222,500, while the JSCA is expected to experience a revenue surplus of almost \$100,000 annually. These funds, though separate for accounting purposes, ultimately impact the County's general fund. JSCA surpluses are either transferred into the general fund or the funds would be used to enable a faster repayment of debt service, which would result in larger surpluses transferred to the general fund in the future.

Table 7, on page 13, shows the fiscal impact measures for Oakland Pointe. These are somewhat positive for the combined funds but negative for the General and Virginia Public Assistance Funds over the five-year analysis period. Benefit-to-cost ratios for the combined funds in the stabilization year falling below 1-to-1, meaning that the County is expected to receive only \$0.63 in revenue for every dollar of cost attributed to the proposed development. Over a five-year period, the County can expect to receive more than \$220,000 in surplus revenue. The somewhat positive benefit-to-cost ratios for the five-year period are due to the presence of one-time revenues.

In all of the tables below "General Fund" includes the County's Virginia Public Assistance Fund.

While not quantifiable, Oakland Pointe will have positive impacts for economic development in James City County. The County has identified the lack of affordable housing as a serious problem. The lack of housing stock that is affordable to the County's lower paid workforce is particularly felt by the County's business community. Employers in the County, including those in the tourist industry—a major component of the County's economic base—find that many of their workers cannot afford to live in the County. They must pay a wage premium to induce workers living outside the County to commute into the County or lose workers to competing businesses located outside the County. Thus, expanding the stock of affordable housing in the County will benefit businesses in the County and help the County to attract and retain businesses in the future.

Table 4 Oakland Pointe Projected Revenues		
Revenue Type	Annual Revenues, Stabilization Year (FY 2023)	Five-Year Total (FYs 2020-2024)
Current Taxes Generated from the Site	\$(4,875)	\$ (24,350)
Real Estate Property Tax	\$ 72,400	\$ 245,750
Personal Property (Car) Tax, and Car Rental Tax	\$ 10,900	\$ 33,975
Utility consumption and other fees	\$ 13,625	\$ 42,600
<i>Subtotal Direct Taxes</i>	<i>\$ 92,050</i>	<i>\$ 297,975</i>
Additional Revenues Derived from Households	\$ 14,500	\$ 45,325
<i>General Fund Annual Revenues</i>	<i>\$106,550</i>	<i>\$ 340,575</i>
Sewer Flow and Meter Charges	\$ 42,825	\$ 131,275
Water Flow and Meter Charges	\$ 66,000	\$ 202,350
<i>JCSA Annual Revenues</i>	<i>\$108,825</i>	<i>\$ 333,625</i>
Subtotal Annual Revenues	\$215,375	\$ 674,200
Building Permit and Review Fees		\$ 41,975
Development Review and Other Fees		\$ 21,775
Motor Vehicle Registration Fee		\$ 950
<i>General Fund One-time Revenues</i>		<i>\$ 64,700</i>
Sewer and Water Review and Permit Fees		\$ 5,500
Sewer and Water Inspection Fees		\$ 10,400
Sewer Facility and Connection Fees		\$ 227,500
Water Facility, System, Account and Other Fees		\$ 245,000
<i>JCSA One-time Revenues</i>		<i>\$ 488,400</i>
Value of Offsite Improvements		\$ 35,000
Subtotal One-time Revenues		\$ 588,100
Total Revenues	\$215,375	\$1,262,300
<i>General Fund Revenues*</i>	<i>\$106,550</i>	<i>\$ 405,275</i>
<i>JSCA Revenues</i>	<i>\$108,825</i>	<i>\$ 822,025</i>

*Does not include value of off-site improvements
Figures rounded to the nearest \$25.

Table 5 Oakland Pointe Projected Operating Costs		
Cost Type	Annual Costs, Stabilization Year (FY 2023)	Five-Year Total (FYs 2020-2024)
General Government Service* Operating Costs	\$131,900	\$403,275
General Government Service Capital Costs		\$ 0
Education Operating Costs	\$197,200	\$605,975
Education Capital Costs		\$ 0
Total General Fund Costs	\$329,100	\$1,009,250
JCSA Costs	\$ 10,600	\$ 32,400
Total Operating Costs	\$339,700	\$1,041,650

Figures rounded to the nearest \$25.

Table 6 Oakland Pointe Projected Cash Flow				
	FY 2020	FY 2021	FY 2022	Stabilization Year FY 2023
General Fund Revenues*	\$ 64,725	\$ 25,050	\$ 105,100	\$ 106,550
JCSA Revenues	\$503,650	\$ 19,400	\$ 96,550	\$ 108,825
Total Revenues	\$823,525	\$ 44,450	\$ 201,650	\$ 215,375
General Fund Costs	\$ 0	\$ 57,625	\$ 293,425	\$ 329,100
JCSA Costs	\$ 0	\$ 1,825	\$ 9,400	\$ 10,600
Total Costs	\$ 0	\$ 59,450	\$ 302,825	\$ 339,700
General Fund Cash Flow	\$ 64,725	\$(32,575)	\$(188,325)	\$(222,550)
JCSA Cash Flow	\$503,650	\$ 17,575	\$ 87,150	\$ 98,225
Total Cash Flow	\$568,375	\$(15,000)	\$(101,175)	\$(124,325)

Figures rounded to the nearest \$25.

*The “cost” of taxes currently collected on the site is subtracted from General Fund revenues. General Fund revenues do not include the value of off-site improvements.

Table 7 Oakland Pointe Fiscal Impact Measures, General, Virginia Public Assistance and JCSA Funds		
	Stabilization Year (FY 2023)	Five-Year Total (FYs 2020-2024)
Total Net Revenues*	N/A	\$ 220,650
General Fund	N/A	\$(603,975)
JCSA	N/A	\$ 789,625
Benefit-to-Cost Ratio	0.63-to-1	1.21-to-1
General Fund	0.31-to-1	0.4-to-1
JCSA	10.27-to-1	33.72-to-1

*Includes the value of off-site improvements

Oakland Pointe

Appendix

Methodology

Approach

Fiscal impact is defined as the difference between all revenues to James City County (the “County”) and the James City Service Authority (“JCSA”) generated by the project and all costs to the County/JCSA attributable to the project. Henceforth, unless the connotation is otherwise, “County” shall also include the combined County and JCSA account.

Only variable revenues and costs are counted in the fiscal impact study. This means that, rather than applying per capita or per household all non-tax revenue and total County per capita or per household expenditures to the proposed development, Oakland Pointe, only those incremental revenues and costs that the County will actually receive or incur due to the increase in households are counted as having a fiscal impact. Fixed costs that do not rise as population or households increase incrementally are not counted as having a fiscal impact.

Revenues include one-time direct revenues, annual direct revenues from the project and tax revenues generated by households. One-time revenues include building permit fees and other development fees, as well as sewer and water facilities fees.

Annual direct revenues include: real estate property taxes, personal property taxes, and other revenues such as fines and user charges. User charges include water and sewer charges paid by Oakland Pointe residents to the JCSA. Tax revenues generated by households are taxes paid or collected by James City County businesses due to purchases made by residents of Oakland Pointe. Costs include: operating costs of government per household, education operating costs, and capital costs for general government or schools, if any.

Revenues and costs currently generated by the Site for the County were subtracted from the fiscal impact of Oakland Pointe. The Site contains a single family residence which was treated as if currently occupied. Zillow established the value of the property at about \$275,000 and the income of the hypothetical household occupying the site was estimated by dividing this value by 3.5 (the sale price-to-income ratio typically used to qualify potential home buyers), resulting in an estimated household income of \$78,575. Revenue currently received from the Site includes real estate and personal property taxes, various fees and user charges, and additional revenue generated by households.

All fiscal impacts are presented in constant 2018 dollars. Inflation is not applied to either revenues or costs throughout the analysis period. The constant dollar approach also means that no assumptions are made about the rate of real estate assessment increases in the County. No assumptions are made about future increases in tax revenues from sales, meals or business license taxes that are based upon retail price increases. Neither are assumptions made about future increases in the unit costs or revenues of government. The practical implication of this approach is that any systemic future imbalances between rising (or falling) revenues and rising costs will be adjusted through changes in the County’s tax rate, either upward or downward.

Three measures of fiscal impact are used. One is the annual cash flow through the stabilization year. Cash flow is derived from the net revenue surplus/deficit (revenues minus costs). The second fiscal impact measure is the total net revenue, or the cumulative cash flow, over the five year period. This is equivalent to total revenues less total costs over the analysis period.

Cash flow was calculated for each year of project activity through the stabilization year, the year following the year in which all costs and revenues have been realized. Thus, the stabilization year captures the fully realized cost and revenue impact generated by the project. The stabilization year was determined to be FY 2023. Because revenues and costs are reported in constant dollars, there is no significant change in the projected cash flow after the stabilization year. Although the stabilization year occurs in FY 2023, for convenience purposes, the analysis period was extended to a fifth year.

Finally, the benefit-to-cost ratio is the ratio of total project net revenues to the County and total project net costs to the County. A benefit-to-cost ratio greater than 1.0-to-1 signals a net fiscal benefit. The magnitude of the benefit-to-cost ratio signals the strength of the fiscal impact on the County. For instance, a benefit-to-cost ratio of 1.5.0-to-1 indicates that for every additional dollar of spending the project costs the County, the County is expected to receive \$1.50 in additional revenue.

Throughout, revenue and cost data is estimated on a per-household basis. However, in some cases, per-household metrics are influenced by household size, when ultimate consumers of public services are individuals. Whenever the number of persons in a household would have a marginal impact on variable costs or revenues, the per-household metrics were adjusted for household size. Also, the County's contributions to some outside agencies are based upon population, making them variable costs. After per capita costs were determined, these were converted to per household costs for convenience of calculation. These calculations are more fully described below under "Cost Calculation."

The projected number of households in the County in FY 2018 (31,406) was taken from the County's *FY 2018 Adopted Operating Budget*. The number of business establishments in the County (1,884) available from the Virginia Employment Commission's Quarterly Census of Employment and Wages (third quarter 2017) was used to calculate the per-business cost data that was used to adjust the cost per household estimates in some cases (see under "Cost Calculation" below). The business firm, rather than a per-employee measure, was deemed to be a more appropriate unit to measure the delivery of most County services to the business community.

All cost and revenue data were derived from the *James City County FY 2018 Adopted Operating Budget* and the Budget 2018 column of the *Williamsburg-James City County Public Schools FY 2019 Superintendent's Proposed Budget* (which contained more detail than did the *FY 2018 School Board Approved Budget Summary* available online), individually, "the *Budget*" as the case may be or collectively, "the *Budgets*." These were the budgets in affect when this fiscal impact analysis was originally conducted.

General Parameters and Assumptions

Oakland Pointe will be located at 7581 Richmond Road, south of Oakland Drive on parcel 2310100002 (“the Site”). The proposed development consists of 126 affordable housing units in five three-story apartment buildings, of 12, 24 or 42 units. Oakland Pointe will also have a clubhouse, multi-use field, dog run area, toddler and elementary playgrounds, pavilion and park, and both mulch and hard trails.

Site work for Oakland Pointe is assumed to begin during the third quarter of 2019 (the first quarter of FY 2020). Construction of the first building is assumed to begin by the end of 2019. Each building is assumed to take twelve months to construct and two months after construction completion before the first move-ins. Due to premarketing, the first building is assumed to be 60% preleased, with absorption thereafter at a rate of 12 units per month. Building B, with 42 units, is assumed to be the first apartment building built, together with the clubhouse, followed by apartment Building A2 (12 units), and the three apartment Buildings A1 (24 units each). All building permits are assumed to be issued in FY 2020. Due to the anticipated high demand for affordably priced apartments, a vacancy rate of only 2.5% is assumed.

It is recognized that the above description is based on an existing concept plan and details of the proposed development may change due to site considerations or changing market conditions. This representation is not a pledge or guarantee from the developer that the proposed development will exactly match this description. However, the final development plan is expected to not diverge from the above description to an extent that would materially change the results of this fiscal impact.

Revenue Calculations

Revenues estimated for Oakland Pointe fall into three categories: one-time direct revenues, direct annual revenues, and additional annual tax revenues and fees generated by households. The methodology does not use multipliers to calculate revenues that could be generated through the project’s secondary impacts. Such multipliers are considered to be unreliable when applied to small economic units, such as localities.

One-time direct revenues are revenues to the County derived from the construction of Oakland Pointe. These were calculated for both the County and the JCSA.

One-time revenues are shown below and on the following page.

- all building permit fees
- building plan review fees
- Certificate of Occupancy (CO) and fire inspection fees
- erosion & sediment control review fees
- hydrant meter charges
- lawn irrigation system fee
- Planning Commission/Design Review Committee (DRC) fees

- service connection and account fees
- site plan review fees
- stormwater installation inspection fees
- VSMP fees
- water and sewer conceptual plan review fees
- water and sewer line inspection fees and
- water and sewer system facilities fees.

Building permits for the proposed apartments were calculated based on a total building size of 133,174 square feet for the apartment buildings and the community center. For calculating plumbing permit fees, as well as sewer and water system facilities fees, three fixtures per full bath and two fixtures per half bath, plus three kitchen/utility room fixtures were assumed. The clubhouse was assumed to have ten plumbing fixtures. Each apartment building was assumed to be equipped with four roof drains with the clubhouse having two roof drains. One water distribution system per building and one sewer drain per unit were also assumed. Fees for six manholes, three fire hydrants, 1,950 linear feet of water line, 890 linear feet of sanitary sewer gravity line and 780 linear feet of sanitary sewer force main were assumed for calculating plumbing, inspection and other fees, based on the applicant's utility plan.

For calculating electrical permit fees, a 150 amp service was assumed for each apartment unit and a 400 amp 3-phase service was assumed for the clubhouse. A temporary service permit was assumed to be required for each building. HVAC permits were based on an estimated average cost of \$3,000 per apartment unit and \$9,000 for the clubhouse. Natural gas piping permits were calculated assuming 1,950 linear feet of gas main at \$75 per linear foot and 400 linear feet of gas delivery line for the apartment buildings at \$25 per linear foot. The apartment buildings were assumed to be sprinklered, with sprinkler costs estimated at \$3.00 per square foot. No elevators were assumed for the apartment buildings. The Site acreage (14.54 acres) was used to calculate erosion control permit fees. Three BMP features are expected to be provided. One 40 square foot sign was assumed.

Water and sewer fees were calculated assuming that the proposed development is served by a single 3 inch master meter serving all six buildings. Water and sewer system facilities fees are assessed at the project rate (i.e., per bathroom fixture). A single parcel was assumed for the purposes of calculating the lawn irrigation connection fee.

In response to recent changes to Virginia's law governing proffers, the County amended its Zoning Ordinance to prohibit proffers for residential projects. Accordingly, no proffers are included as revenues to the County. It is not anticipated that Oakland Pointe will cause any public infrastructure facility to exceed its current capacity..

Direct annual revenues consist of those revenues paid directly to James City County by Oakland Pointe property owner and residents. These include real estate property taxes, personal property taxes on vehicles, and other fees and user charges paid to James City County or the JCSA, including sewer and water usage charges.

For the proposed development, the County's real estate assessment was estimated by applying a rental income-based approach derived from a correlation of January 1, 2018 assessments per-unit to rent for the most comparable multi-family developments in James City County. The formula used computes the average improvement assessment per unit per \$25 of asking rent. This formula has been used to estimate multi-family assessments in other Hampton Roads jurisdictions with dependable accuracy.

The comparables used were: Longhill Grove, Olde Jamestown Apartments, Regency at Longhill, Rolling Meadows Apartments, The Station at Norge, Stonegate Apartments and Woods of Williamsburg. Three of these comparables are tax credit developments, as will be Oakland Pointe. Rents ranged from \$725 to \$1,210 per month, somewhat higher than the proposed rents for Oakland Pointe. Rents for these comparables averaged about \$900, which is also higher than the average rent (\$740 per month) expected for the proposed development. Nevertheless, since no correlation was identified between the average rent of the comparable apartments and their assessment per unit per \$25 of rent, the fact that rents for the proposed development were below asking rents for all of the comparable apartments was not considered to be an error-producing factor when using this methodology.

Averaging the seven comparables, the formula calculated \$1,519.39 in real estate improvement assessment per \$25 of average asking rent. The per-unit assessment includes the distributed assessment for amenities. The calculated metric for each of the comparables ranged from \$1,368 to \$1,674 per \$25 of average asking rent, a deviation from the mean of no more than 10.18% and an average deviation from the mean using absolute numbers (neither positive nor negative) of only 5.94%. Thus, the model can be deemed to predict the expected improvement assessment for Oakland Pointe with a good deal of confidence. However, in recognition of the newness and quality of construction, a 25% premium was added to estimate improvement assessment.

Applying the calculated \$1519.39 real estate assessment per \$25 of average rent and adding the new construction premium should produce the best estimate of the assessed value that will be assigned to Oakland Pointe. Applying this formula resulted in an estimated improvement assessed value of \$7,088,000, rounded to the nearest \$100, for Oakland Pointe. This produces a total assessment per unit of about \$56,250, which is somewhat higher than the average assessed value of the product comparables, although Oakland Pointe average rents are almost 18% lower than the average for the comparables and 4% lower than the lowest comparable rent. This reflects the expected increased valuation due to new construction.

Additionally, the per-acre assessment for Oakland Pointe was computed. Per acre land assessments for the seven comparable properties ranged from \$53,750 per acre to about \$226,000 per acre. Four of the comparables had land assessments of \$100,000 per acre. The average of the seven comparables was about \$105,400 per acre, which was deemed reasonable and used to compute the land assessment for Oakland Pointe.

Adding the expected \$1,532,000 land assessment to the estimated improvement assessment yields a total real estate assessment for Oakland Pointe of \$8,619,900, rounding to the nearest \$100. Land assessment for the Site is currently only about \$23,700 per acre, plus an improvement assessment of \$143,200. This assessment was assumed to remain in place until construction begins, at which time the property is assumed to be reassessed at \$105,400 per acre, with the new assessment effective for FY 2021. The property is expected to be fully assessed at the beginning of FY 2022. Taxes currently generated from the Site are counted as negative revenue in the fiscal impact analysis.

The annual personal property tax to be received by the County from Oakland Pointe residents was estimated by first calculating the average personal property tax per vehicle and then adjusting this amount to account for variations in the number and value of vehicles owned by income level and tenure. The base car tax per vehicle (\$359.42) was calculated by dividing the County's total car tax revenue by the estimated number of vehicles in the County. The County's total car tax revenue was estimated by dividing the Personal Property Tax Relief Act (PPTRA) revenue received from the Commonwealth, as estimated by the County in its *Budget*, by the percentage of the total typical personal property tax bill for which tax relief is provided (44.4% in 2017, the latest year available, from the County's *FY 2017 Comprehensive Annual Financial Report*). The number of vehicles was estimated by adjusting the aggregate number of vehicles reported in the 2016 U.S. Census Bureau American Community Survey (ACS) for two year's estimated annual household growth. This was calculated by dividing the County's 2018 household estimate, derived from the *Budget*, by the 2016 ACS household estimate.

Data from the U.S. Bureau of Labor Statistics 2016 Consumer Expenditure Survey (CES) were used to estimate the relative value of vehicles owned by households at various income levels. This was done by first calculating the vehicle purchase net outlay, from the CES data, for the average income estimated for each type of unit at Oakland Pointe. This amount was then divided by the amount of vehicle purchase net outlay calculated for the estimated 2018 average household income for James City County derived from the ACS. This ratio was then applied to the average personal property tax per vehicle received by the County.

The estimated personal property tax per Oakland Pointe household was then calculated by multiplying the estimated property tax per vehicle for that household's income level by the number of vehicles estimated to be owned by that household. The estimated number of vehicles owned by households for each unit type was calculated by adjusting for differences in vehicle ownership by income using the same methodology used to adjust the average car tax per vehicle based on value. The number of vehicles owned per household was also adjusted for differences in ownership patterns of owners and renters. The number of vehicles per household was further adjusted for the difference between the actual number of vehicles per household in the County and the number predicted by the CES data using the average household income for the County. This was done to normalize the CES data to actual County experience.

The resulting estimate of car tax paid by households in each Oakland Pointe unit type was then multiplied by the number of occupied units for the appropriate unit type to derive the estimated total car tax received by the County.

The entire calculation can be demonstrated in the series of equations below:

$$PPT = \sum PPT/V_{OP} \times V/HH_{OP} \times HH_{OOP}$$

Where, PPT = Total personal property tax paid by Oakland Pointe residents

PPT/V_{OP} = Personal property tax per vehicle for each unit type at Oakland Pointe

V/HH_{OP} = Vehicles per Oakland Pointe household and

HH_{OOP} = the number of occupied households for each unit type at Oakland Pointe

$$PPT/V_{OP} = PPT/V_{JCC} \times (VPNO_{IOP}/VPNO_{IJCC})$$

Where, PPT/V_{JCC} = Average personal property tax per vehicle for all James City County Households

VPNO_{IOP} = Vehicle purchase net outlay for each type of Oakland Pointe unit income level and

VPNO_{IJCC} = Vehicle purchase net outlay for households at mean income for James City County

and

$$V/HH_{OP} = V/HH_{IOP} \times (V/HH_R / V/HH) \times (V/HH / VHH_{JCCCES})$$

Where, V/HH_{IOP} = Vehicles per household for each type of Oakland Pointe unit income level

V/HH_R = Vehicles per household for renter households in the James City County

V/HH = Vehicles per household for all James City County households

V/HH = Vehicles per household for all the James City County households

VHH_{ILOWCES} = the average number of vehicles per household calculated using the CES data for James City County's average income

Certain other revenues were derived from the *Budget*. These were calculated on a per household basis. The local share of the communication sales tax remitted by the Commonwealth was not included as a variable revenue because this is distributed according to a fixed formula applied to total statewide communications sales tax collection and, therefore, would not change with the addition of households to the County.

Revenue from the County's utility consumption fee was calculated on a per household and per business basis in order to adjust for the higher usage by businesses (per business revenue from this source is expected to be considerably higher than per household revenue). In the absence of empirical data, it was assumed that utility consumption tax bills of businesses would be five times the average residential household bill. (The methodology for distributing revenues between households and businesses is the same as for distributing costs and is explained below under "Cost Calculation.")

The car rental sales tax, which, like the communications sales tax and utility consumption fee, is collected by the state and remitted to the County, was also calculated on a per household basis, distributed equally between households and businesses. The per household collection estimated for Oakland Pointe residents, however, was adjusted for differences in auto lease expenditure based on income level, using data from the CES.

User fees per residential unit were calculated by dividing revenues estimated to be received in FY 2018 as reported in the *Budget* by the number of households in the County. Per household user fee revenue was calculated for, dog licenses, e-summons fees, fines and forfeitures, parking tickets, and recreation fees and park revenues. Per household revenues for e-summons fees, fines and forfeitures, parking tickets, and recreation fees and park revenues were adjusted for differences between the expected Oakland Pointe household size and average household size in James City County, as household size was deemed to affect revenues from these sources.

Household size for Oakland Pointe was estimated by making assumptions about per-bedroom occupancy. It was assumed that, at minimum, each bedroom would be occupied by at least one person. Bedrooms could also be occupied by a couple or by children of the same sex. For analysis purposes, it was assumed that a bedroom was twice as likely to be occupied by a single adult as by a couple (this could include unrelated adults sharing an apartment). Based on these assumptions, it was assumed that two bedroom apartments at Oakland Pointe could be occupied by two persons (60%), three persons (37%) or four persons (3%) and that three bedroom apartments could be occupied by three persons (58%), four persons (34%), five persons (6%) or six persons (2%). Thus, average household size for Oakland Pointe was calculated to be 2.97 persons per household versus about 2.4 persons per household calculated from the FY 2018 household and population estimates contained in the *Budget*.

Table A-1, on the following page, details the County's variable revenues, other than those derived from the direct levy of taxes and water/sewer flow charges on the project, also showing revenues per household.

Per household revenue was also calculated for residential water and sewer use charges. A daily flow of 310 gallons per day for each residential unit was estimated by the applicant's engineering consultant. It is anticipated by the applicant that Oakland Pointe will be served by a 3 inch master meter. Water and sewer flow charges will be based on the meter reading. These revenues flow to the JCSEA.

Tax rates and fees found on the current James City County website and/or contained in the most recent edition of the County's municipal Code were used and assumed to be accurate.

Table A-1 James City County Variable, Non-Direct Revenues, FY 2018		
Item	Revenue	Revenue per Household
Car Rental Sales Tax	\$ 110,000	*\$ 3.30
Dog License	\$ 30,000	\$ 0.96
E-summons Fee	\$ 30,000	\$ 1.12
Fines and Forfeitures	\$ 300,000	\$ 11.16
Parking Tickets	\$ 5,000	\$ 0.19
Recreation Fees & Park Revenue	\$3,369,300	\$132.87
Utility Consumption Fee	\$ 350,000	\$ 8.57
Total	\$4,783,300	**\$154.87

*Base rate; adjusted by income level

** Excludes car rental tax

Source: *James City County FY 2018 Adopted Operating Budget*

Additional revenues generated by households are estimates of taxes paid by James City County businesses due to purchases made by Oakland Pointe residents. Purchases by Oakland Pointe residents are estimated based upon their projected spending patterns. These spending patterns were estimated using the most recent (2016) CES. The CES income referenced tables were used to identify spending patterns specific to the household income level of Oakland Pointe residents.

Household incomes, which were also used to estimate personal property tax and car rental tax revenues, as stated above, were estimated using HUD income limits for tax credit housing and assumptions about the rate of housing stress acceptable to residents of Oakland Pointe. HUD income limits by household size for 2018 were taken as the upper income limit for Oakland Pointe households. The number of units was estimated for each household size in order to calculate average household size at Oakland Pointe (see above). Household size was cross-tabulated by the percentage of area median income (AMI) used to set upper income limits for renting each unit type. These percentages are 40%, 50% and 60% of AMI.

For each unit type, there are multiple possibilities of persons per household. HUD income limits for Oakland Pointe households vary by household size and the allowable AMI percentage assigned to that unit type. Thus, there are specific income limits applied to two person households at the 40%, 50% and 60% levels; and to three, four, five and six person households at each of the HUD AMI percentage levels. For any of the six unit types (three AMI levels each for the two and three bedroom units), the average maximum household income can be calculated by multiplying the number of units occupied by each specific household size by the HUD income limit for that household size and AMI level and then dividing the result by the total number of units for that unit type. This can be shown in the formula on the following page.

$$\text{AvgMaxInc}_{UT} = (\sum U_{PPH} \times \text{MaxInc}_{UTPPH}) / U_{UT}$$

Where AvgMaxInc_{UT} = the average maximum income for each unit type, where unit type is distinguished by the number of bedrooms and the allowable AMI percentage

U_{PPH} = the number of units at each person-per-household level

MaxInc_{UTPPH} = the HUD income limit for the number of persons per household at the AMI percentage for that unit and

U_{UT} = the total number of units in that unit type

However, it cannot be assumed the average maximum income for Oakland Pointe units is equal to the average household income. In fact, most households at Oakland Pointe can be expected to have incomes lower than the applicable HUD income limits. While the percentage of income devoted to rent calculated using proposed rents at Oakland Pointe and the HUD income limits is above what the average renter (at typical income levels) would pay, they are below the percentages considered to indicate housing stress. Housing stress is generally considered to occur when 30% or more of income is devoted to housing costs (in this case rent). Lower income households can frequently experience levels of housing stress rising to 35% or more of income being devoted to housing.

An assumption was made that two thirds of Oakland Pointe households would not experience housing stress but that one-third would experience some level of housing stress, devoting between 30% and 35% of their incomes to rent. For convenience and in the absence of controverting data, a straight line distribution of household incomes along a continuum of highest to lowest was assumed. Using this assumption, the midpoint between a) the HUD income limit for any unit type and household size (MaxInc_{UTPPH}) and b) the point of housing stress (30% of income devoted to rent) can be equated with the average income along that continuum. Similarly, the midpoint between the income at a particular rent level equal to the point of housing stress and the income equal to spending 35% of income on rent at that rent level can be equated with the average income along the continuum containing one-third of Oakland Pointe renters.

Thus, the average household income for any unit type can be computed through a weighted average of 67% of household income at the midpoint between the HUD income limit and the point of housing stress and 33% of household income at the midpoint between income at the point of housing stress and income at 35% of income spent on rent, for the relevant rent level. This computation can be shown by the formula below.

$$\text{AvgInc}_{UTPPH} = \{[(\text{MaxInc}_{UTPPH} + \text{Inc}_{HS})/2] \times 0.67\} + \{[(\text{Inc}_{HS} + \text{Inc}_{HS35})/2] \times 0.33\}$$

Where, AvgInc_{UTPPH} = the average income for each unit type

Inc_{HS} = income at the point of housing stress for each unit type and

Inc_{HS35} = income at the point of 35% of income spent on rent for each unit type

Calculated average household incomes for the six unit types ranged from \$20,875 to \$38,050, rounding to the nearest \$25. The average for all units at Oakland Pointe was \$30,725.

Household income expenditure tables from the CES were then used to calculate average annual household spending on retail items and restaurants (food away from home) and at grocery stores, as well as on personal services. Expenditures were estimated using those household incomes calculated for Oakland Pointe households.

It was assumed that spending for hardware and building supplies would be conducted by Oakland Pointe's maintenance department and residents would spend only incidentally at hardware and building supply stores. However, none of this expenditure was assumed to occur in James City County, as both the closest Lowes and Home Depot are located in York County. Therefore, those expenditures (for household repair and maintenance) were not included in the calculation of spending generating local tax revenue.

The spending estimates were then used to calculate local sales and meals taxes generated by Oakland Pointe at James City businesses, as well as the business license fees from revenue generated by this spending.

Adjustment was then made for purchases made outside the County. Because of the high volume of spending by tourists and regional outlet shoppers at James City County businesses, the standard model for calculating leakage of retail spending does not work for the County. Apparel, furniture and food and beverage establishments are particularly vulnerable to overestimation of spending in James City County by County residents. Grocery spending, as well, yielded an index indicating a net inflow of dollars from shoppers not residing in James City County.

In order to adjust for the "tourism" effect, a retail shopping gradient model was used to estimate the retention of Oakland Pointe residents' retail spending in James City County. The gradient model was calibrated to be sensitive to shopping decisions likely to be made by shoppers of the income level that will be found at Oakland Pointe.

The gradient model, briefly described, plots retail locations and their distances from the subject development. All other things held equal, it is assumed that shoppers are less likely to patronize competing retail outlets the farther the distance from their residence. Distance is measured in driving time and the propensity to shop at a given location is calculated as the reciprocal of the distance in minutes, with 1 minute given a weight of 1, 2 minutes a weight of 0.5, 3 minutes a weight of 0.33 and so on.

Only the closest same store location is mapped and stores at which residents are unlikely to shop are either excluded or given a lower weight, while certain stores at which residents of Oakland Pointe are more likely to shop (e.g. Wal-Mart) were given a higher weight. Distance weighted scores are disaggregated by locality and summed for the host locality and all other localities. The sum of the host locality score divided by the sum of all distance weighted scores is the best estimate of the percentage of spending retained in the host locality.

Gradient models were developed for grocery spending, food away from home, and shopping goods. The mapping of grocery stores was limited to a 15 minute drive time. Stores with a substantial grocery section (i.e., Wal-Mart) were included. For food away from home, fast food, QSR and buffets, casual dining (including ethnic foods) and family style restaurant establishments were plotted within a ten minute drive time, with the exception of Outback which has an eleven minute drive time from the Site. A 2% allowance was given for dining at other, more upscale restaurants and these were all considered to be located outside the County. Shopping goods locations were plotted over a radius that included the farthest retail node or mall with a unique store, but not greater than 30 minutes. Shopping goods locations were weighted by the number of unique anchor stores in each location.

Six grocery stores or food outlets were identified within Oakland Pointe shopping area. Five were located in James City County—Food Lion in Norge, which is within walking distance of the Site; Aldi's on Richmond Road; Farm Fresh in Norge; Kroger on Ironbound Road, and Trader Joe's near Monticello Avenue. One grocery outlet was located York County—Wal-Mart in Lightfoot. The Fresh Market and Harris Teeter in James City County were considered to be too expensive to be patronized by households at Oakland Pointe, especially given the more affordable choices available. Similarly, households at Oakland Pointe who prefer organic products were assumed to shop at the less expensive and closer Trader Joe's rather than Whole Foods in Newport News. Also, since, for now, the closest buying clubs to Oakland Pointe are located almost a half hour away in Newport News, no buying clubs were included in the grocery outlet mix.

Grocery outlets were also weighted for the attractiveness to the population living at Oakland Pointe, which will be modest income. Thus, Wal-Mart was given a weight of 3, and Aldi's and Food Lion were each given a weight of 2—Aldi's for its discount pricing and Food Lion for its moderate pricing and walkability to the site. Farm Fresh and Kroger, which are not known for discount pricing, were given a weight of 0.75 and Trader Joe's, which was assumed to appeal to a limited segment of Oakland Pointe households, was given a weight of 0.2. These weights were then multiplied by the distance weighted score. The distance weighting methodology yielded an estimate of 87.82% of spending on food at home, ABC and tobacco expenditures remaining in the County for Oakland Pointe households.

The restaurants plotted are located primarily along or near Richmond Road or in the Lightfoot area of York County. Thirty-one (31) fast food, QSR, buffet, casual dining and family style restaurants were identified within the Oakland Pointe travel area with 24 of these located in James City County. Three restaurants—Foodattude, Outback, and TGI Fridays—were deemed to be patronized less often by Oakland Pointe households and were given a weight of 0.5. As noted above, 2% of Oakland Pointe household dining was assumed to be at “celebration restaurants” located outside of James City County. Therefore, 2% was subtracted from the percentage of restaurant patronage expected to occur within the County calculated using the distance weighting methodology (88.92%) to obtain a restaurant spending retention metric of 86.92%.

Eight retail destinations were identified for shopping goods purchases by Oakland Pointe households— Cedar Lane Shopping Center and Williamsburg Marketplace in the Lightfoot area of York County, Dollar General in Norge, the Marquis Center, the New Town/Monticello area, Williamsburg and Monticello Shopping Centers in Williamsburg, Williamsburg Premium Outlets, and the Patrick Henry retail district. Three of these destinations are located in James City County. In addition to the distance weight, each location was weighted for selection, based on the number of unique anchors or cluster of junior anchors and the appeal of these anchors to the target population. Cedar Lane Shopping Center and Williamsburg Marketplace in Lightfoot were given weights (multiplied by the distance weight) of 4 and 6, respectively, with the Wal-Mart at Cedar Lane weighted as 4 and Ross Dress for Less, Big Lots and Dollar Tree considered as anchors for Williamsburg Marketplace and each given a weight of 2. Williamsburg Shopping Center and Monticello Shopping Center were given a weight of 3 for the thrift stores located there, under the assumption that these stores would either remain at Monticello Shopping Center or relocate nearby when Midtown Row is developed. The Williamsburg Premium Outlets was given a weight of 1.75, as most of the stores at that location appeal to a more upscale shopper; the New Town/Monticello Avenue area was given a weight of 3, the Marquis Center was given a weight of 3, and the Patrick Henry retail district was assigned a weight of 6. The Lowes and Home Depot at Cedar Lane and Williamsburg Marketplace were not included in the weights because apartment dwellers spend a much lower percentage of income at home improvement stores than do home owners.

The distance gradient model calculated that 26.66% of shopping goods purchases by Oakland Pointe residents would take place in James City County. Expected home goods and repair purchases calculated from the CES were treated separately from other retail purchases and 100% of this shopping was assumed to occur in York County. For the purpose of calculating total non-food retail spending, 70% of total retail spending was assumed to be for convenience goods with 30% for shopping goods. Grocery spending was used as a proxy for convenience spending, as stores at which convenience spending occurs typically are located near grocery stores. Thus, excluding hardware store expenditures, 69.47% (the blended rate) of non-food retail spending by Oakland Pointe households was assumed to occur in James City County.

Accordingly, for Oakland Pointe households, 87.82% of taxes derived from grocery spending, 86.92% of taxes derived from meals spending, 69.47% of taxes derived from other retail spending and 0% of taxes derived from home goods and repair spending were assumed to be received by James City County (with the remainder received by other surrounding localities).

Thus, spending per household according to the income level of Oakland Pointe households (calculated from the CES for each unit type) was multiplied by the appropriate retention percentage estimates in order to capture only spending that would occur in James City County. These per household spending estimates were then multiplied by the number of occupied units at Oakland Pointe for each unit type.

The resulting retail spending estimates were then multiplied by the 1% local sales tax and 0.2% retail business license fee (or in the case of personal service spending by 0.36%) to calculate those revenue streams. Restaurant spending was multiplied by the County's 4% meals tax to calculate that revenue stream. James City County does not have an admissions tax or a tobacco tax.

Cost Calculations

Costs were variable operating costs of government per household. No capital costs were assumed as adequate infrastructure is presumed to exist or will be installed by the developer and the additional buildings at Oakland Pointe will not increase the volume of police patrols or create the need for a new fire station or fire equipment. Cost data and assumptions were derived from the *Budgets*.

When calculating the variable per household cost of public services, some public services are consumed by households only and some public services are consumed by households and businesses (i.e., recreational services would be assigned completely to households, since businesses do not directly consume these services). For those public services that serve businesses and households, the costs generated by businesses and the costs generated by households must be distinguished and only costs generated by households are to be attributed to Oakland Pointe.

Per household and per business variable costs were determined in the following manner. Business establishments and households were considered to be equal units from the standpoint of generating public service costs, when both households and business establishments consumed those services. A percentage of each service whose consumption was shared by households and businesses was allocated to households and to businesses according to the formula below.

$$\%HH = HH/(HH + B)$$

$$\%B = B/(HH + B)$$

Where, %HH = Percent Allocated to Households

% B = Percent Allocated to Businesses

HH = the Number of Households

B = the Number of Businesses

Per household variable costs were then determined according to the following formula:

$$VC_{HH} = VC \times \%HH/HH$$

Where VC_{HH} = Variable Cost per Household

VC = Total Variable Cost (of a government function)

Per business costs are not relevant for this fiscal impact analysis, as no commercial development is proposed for Oakland Pointe. However, it is necessary to calculate these in order to determine true per-household costs.

To calculate revenues per household, revenue is simply substituted for expenditure in the formula above. In the case of those revenues for which businesses are assumed to generate an amount per unit other than do households, the above formula for the calculation of allocation to households and businesses was adjusted by multiplying the number of businesses by the determined factor (see above under the discussion on “Revenues”). The adjustment to the percent allocated to households then results in an adjustment to revenues by households.

Governmental functions that serve both households and businesses were:

- Adult criminal and civil justice (Courthouse, Clerk of Court, Commonwealth Attorney, Police, Sheriff), since crimes are committed against (and by) businesses as well as persons (however, the Regional Jail and Regional Juvenile Detention Center costs were attributed only to households, since it is people from households, not businesses, who populate these facilities)
- Commissioner of the Revenue and Treasurer (both businesses and households are taxed)
- E-911 Operations and Fire & Rescue (response events occur at businesses and households) and
- Accounting, Human Resources, Information Resources and Purchasing (which support all County governmental functions).

The cost of government functions which serve only households was distributed across the number of households, only, resulting in a higher per-household cost than if costs were distributed among both households and businesses.

The cost of providing certain government services, though calculated on a per-household basis, was deemed to be sensitive to household size. These are services that are provided directly to individuals, rather than being provided to the household unit. Household sizes at Oakland Pointe were calculated to be larger than the Countywide average (see above). For these functions, per household costs were adjusted to take into account the larger household sizes at Oakland Pointe.

This adjustment was computed according to the following formula:

$$VC_{OPHH} = VC_{HH} / PHH \times PHH_{OP}$$

Where VC_{OPHH} = Variable Cost per Oakland Pointe Household
 VC_{HH} = Variable Cost per James City County Household
 PHH = Average Persons per Household in James City County
 PHH_{OP} = Persons per Household at Oakland Pointe

Those government functions that are sensitive to household size were:

- Adult criminal justice functions, including incarceration
- E-911
- Library
- Recreation services.

However, it was recognized that the police patrol function is less sensitive to household size than other adult criminal justice functions. Therefore, only half of the Police department variable costs were adjusted for household size.

A calculation was made in order to determine the Voter Registration and Elections cost per household at Oakland Pointe. This was necessary because the variable cost for this department is determined by voter and the cost per voter needs to be converted into a cost per household. It was assumed that, for the most part, a household could contain 1 or 2 potential voters. At Oakland Pointe, single-parent households would contain 1 potential voter and all other households would contain 2 potential voters. This may underestimate the actual number of potential voters because some households counted as single-parent households (1 person per bedroom) may actually contain two or more unrelated adults. However, this underestimation results in a calculation of higher per household costs (costs are amortized over a smaller base) and, thus, this constitutes a conservative estimate with respect to fiscal impact.

The average variable cost of Voter Registration and Elections services per potential voter was first calculated using the formula shown below.

$$AVC_{pv} = TVC / (R_{1pHH} + 2R_{2pHH} + O_{1pHH} + 2O_{2pHH})$$

Where AVC_{pv} = average cost per potential voter

TVC = Voter Registration and Elections total variable cost

R_{1pHH} = the number of 1-person renter households

R_{2pHH} = the number of renter households with 2 or more persons

O_{1pHH} = the number of 1-person owner households

O_{2pHH} = the number of owner households with 2 or more persons

Data were derived from the ACS.

The average number of potential voters per Oakland Pointe household was then calculated using the formula shown below.

$$PV_{OP} = SPHH_{OP} + 2CHH_{OP}$$

Where PV_{OP} = the average number of potential voters per Oakland Pointe household

$SPHH_{OP}$ = the number of “single parent” households at Oakland Pointe and

CHH_{OP} = the couple households at Oakland Point

To calculate the cost per unit of service for water and sewer billing services, the number of sewer customers was used in place of the number of households in the County. It was assumed that sewer customers were also County water customers and that both bills would be sent out together. The County's sewer system serves a larger number of customers than does its water system. Oakland Pointe will be served by both the County's water and sewer systems.

Oakland Pointe will be served by a single master meter and individual apartments will not be submetered. Thus, Oakland Pointe will add only one customer to the County's billing process. The water and sewer main lines put in place by the developer will be privately owned and maintained and will, thus, create no new maintenance costs for the JCSA.

Variable costs associated with the provision of additional water flow and the collection and/or treatment of additional sewage flow were assumed to be for increased utility payments (by JCSA) and increased operating supplies. Fifty percent (50%) of utility costs in the water and sewer operation portion of the JCSA budget was assumed to be for facility heating, cooling and lighting and, therefore, a fixed cost. The number of personnel operating these facilities was assumed not to vary with marginal increases in water or sewage flow and, therefore, to be a fixed cost also.

However, this budget detail was not available in the County's *FY 2018 Budget*. Therefore, those costs derived previously from the FY 2014 County *Budget* were multiplied by the ratio of FY 2018 "direct expenses" line item cost to the FY 2014 "direct expenses" line item cost. This assumes that all direct expenses increased at the same rate during this period, which may not be accurate. However, without budget detail, this method provided the best estimate of these variable costs. This methodology was used to calculate both sewer and water operations variable costs. These costs were then used to calculate the cost per 1,000 gallons by dividing them by the number of gallons produced estimated to be maintained by the JCSA, respectively, as found in the *Budget*, then multiplying that quotient by 1,000.

The cost per unit of service for the County's Real Estate Assessor was calculated using the number of assessed parcels, rather than the number of households. This was derived from the *Budget*. Although technically, Oakland Pointe will add only one service unit to the Assessor's workload, that service unit was deemed equivalent to five service units (land, three apartment building types, and the clubhouse).

Oakland Pointe households would be served by the County's Satellite Office and the variable costs associated with that office were calculated. However, the Satellite Office only serves households in the upper portion of the County (the remainder of the County being closer to the County's and the DMV's main customer service offices). Therefore, this variable cost was divided by the number of households in the upper portion of the County (Census Tracts 803.01, 804.01 and 804.02) in order to obtain the variable cost per Oakland Pointe household.

The County's stormwater management division was deemed to have no variable costs associated with Oakland Pointe. Per state and federal regulations, all stormwater will be contained onsite, resulting in no increased stormwater maintenance burden for the County. The County's Solid Waste Management department would also incur no additional costs due to the development of Oakland Pointe, as the proposed development would be served by commercial private haulers.

Oakland Pointe would be served by certain government functions that typically apply an income test or whose clientele are predominantly lower income. These functions include certain health services supported by the County and the social services budgeted under the County's Virginia Public Assistance Fund. Not all of the funding provided by the County constitutes variable costs and not all residents of Oakland Pointe are expected to be served by these entities. Some health organizations supported by the County receive discretionary appropriations that are not tied to population growth or to the provision of services to County residents. These organizations include the Olde Towne Medical and Dental Center and the Parents as Teachers program. These costs were counted as fixed costs and excluded from the fiscal impact calculations.

Although the services provided by the Peninsula Health District are not restricted by income level, the agency primarily serves a Medicaid-eligible population. Thus, the number of households over which the County's support is spread is fewer than the number of households in the County. The County's entire contribution to the Peninsula Health District was considered to be a variable cost since increases in the County's contribution can be considered the result of increased services. The number of households over which this cost would be amortized was assumed to equal the number of households in the County that are Medicaid-eligible (estimated to be 5,936). This was estimated by calculating the number of households in the County with an income equal to or lower than the 2018 Medicaid eligibility income limit for a family of four. The County's contribution to the Peninsula Health District was divided by this number of households to estimate the County's cost per Medicaid-eligible household.

The number of Medicaid-eligible households at Oakland Pointe was then estimated. A proportional estimation method was used to calculate the percentage of households in each unit type with incomes below the Medicaid eligibility threshold. This was done for each household size within each unit type. These percentages were then applied to the number of units to estimate the total number of Medicaid-eligible households at Oakland Pointe. Using this methodology, it was determined that 30.16% of Oakland Pointe households would be Medicaid eligible. Therefore, the County's cost per Medicaid-eligible household was applied to 30.16% of Oakland Pointe households.

Funding for Colonial Behavioral Health is determined through a formula that takes into account both population growth and usage. Colonial Behavioral Health also primarily serves a Medicaid-eligible population. Thus, in order to compute the per household cost of the County's contribution, that contribution was divided by a denominator consisting of the number of Medicaid-eligible households in the County times 50% plus the number of households in the County adjusted for larger household size times 50%. However, this variable cost per household was only calculated using the number of Medicaid-eligible households estimated for Oakland Pointe.

The *Budget* did not provide a great deal of detail for the Social Services budget in the Virginia Public Assistance Fund and, therefore, assumptions were made to estimate variable costs. It was assumed that all public assistance expenditures were funded from state and federal revenues and that purchased services and local non-reimbursable expenses were fixed costs. Grant program expenditures also are not locally funded. Fixed cost positions were identified using the “Authorized Positions per Department” table in the *Budget Appendix* (see below for a discussion of fixed cost positions). Fixed cost positions identified were: Director, Assistant Director, Accounting Technician, Accounts Payable Specialist, Administrative Supervisor, Benefits Program Chief, Budget Management Specialist, Children’s Services Act Coordinator, Chief of Services, and Information Systems Technician. The County’s *Compensation Plan* was used to estimate salaries for these fixed cost positions (see below for a description of the methodology used). Based on the ratio of fringe benefits to salaries from a sample of departments, fringe benefits for these fixed cost positions were estimated to be 40% of estimated salaries. Fixed cost position salaries and fringe benefits were then subtracted from administration expenses. Other fixed costs were assumed to equal 15% of administration expenses and this amount was also subtracted from administration expenses. The remainder constituted variable costs for the department.

The percentage of variable costs that were locally funded was then computed. Since public assistance and grants expenditures were assumed to be fully funded from non-local sources and were not counted as variable costs, these amounts were subtracted from the department’s total revenues leaving an amount equivalent to only those costs that are potentially funded from local revenues. Total local revenue, including fund balance, was then divided into total revenues (less the subtracted costs) resulting in an estimated 44.5% of variable costs estimated to be locally funded.

Next, the variable cost per Oakland Pointe household was computed. The primary services that would be provided by Social Services to residents of Oakland Pointe were identified as Medicaid eligibility processing and administration and administration of the Supplemental Nutritional Assistance Program (SNAP), or food stamps. Other services would be provided, of course, but income eligibility criteria for these programs were deemed to serve as a proxy for all other services. Since SNAP income eligibility thresholds are lower than for Medicaid, the potential pool of Medicaid-eligible households was used as the denominator to compute gross per household costs for Social Services. The number and percentage of Oakland Pointe households that would be income-eligible for each program was then computed and the two percentages (30.16% for Medicaid and 26.98% for SNAP) were then averaged. This average (28.57%) was used to compute the number of Oakland Pointe households that would receive services from Social Services and, thus, incur variable costs for the County.

Government functions that would be performed regardless of population size were also excluded. These include those shown on the following page:

- Board of Supervisors
- Building and Safety Permits (the permitting and inspection of Oakland Pointe can easily be absorbed with existing staff)
- Capital projects
- Communications
- Cooperative Extension Service (contribution which is not based on a per-capita formula)
- County Attorney
- County Manager
- Courthouse
- Development Management
- Economic Development
- Emergency Management
- Engineering and Resource Protection
- Facilities Maintenance
- Financial and Management Services
- Fleet and Equipment (variable costs of travel and motor fuel are included in relevant department costs)
- General and Capital Services
- Grounds Maintenance
- Health Services contributions which are not based on a per-capita formula
- Non-departmental
- Other regional entities contributions which are not based on a per-capita formula)
- Outside agencies contributions which are not based on a per-capita formula)
- Parks and Recreation, parks component
- Planning
- Tourism
- Zoning Enforcement

Certain administrative support functions are substantially fixed costs (since they must be provided) but have a variable cost component (since they serve County functions that incur variable costs from population growth). In order to calculate the percentage of the variable costs of these functions that should be counted (as supporting other variable costs), the personnel expenses for those functions that were primarily variable in nature was divided by all County operating fund personnel expenses. This percentage (61.31%) was then applied to the variable costs incurred by the following functions:

- Accounting
- Human Resources
- Information and Resource Management
- Purchasing

Various adjustments were made to expenditure line items to arrive at the County's variable cost of providing public services.

Generally, positions that must be provided for a department to function and that are not expandable due to population growth (“fixed cost positions”) were excluded from the cost analysis. This would typically include director and assistant director positions, as well as specialized positions filled by only one person. In the Sheriff’s Office, four deputy sheriff positions were considered fixed cost positions assigned to court security. In order to estimate salaries for fixed cost positions, data from the County’s latest *Compensation Plan* (“Salary Structure in Alphabetical Order by Position Name FY 2018”) was used, with positions identified through the Appendix to the *Budget*. The mid-range salary was used as the best estimate for salaries for these positions. Fixed-cost salaries were subtracted from personnel category costs and fringe benefits and other costs associated with these positions (i.e., travel, staff development, uniforms, etc.) were estimated proportionally and subtracted from these costs, as well. For certain departments, the number of variable cost positions were few in relation to total positions and, in these cases, data from the *Compensation Plan* were also used to estimate variable personnel costs in the same manner.

Various other types of line item costs were also excluded as fixed costs to the County. Among other items, these include:

- advertising, except for Human Resources
- building maintenance
- contractual services
- dues/memberships/subscriptions
- duplicating (although there is a variable cost component, most of the cost is the fixed cost of copier leasing)
- equipment maintenance
- furniture and equipment
- leases and rentals
- recognition
- software
- telephone
- utilities.

Variable cost expenses that were typically included are:

- personnel salaries and fringe benefits
- office supplies
- operating supplies/materials
- travel and training.

Other costs were included as variable costs if they were a function of service provision to citizens or expenses incurred primarily by non-administrative personnel. These costs include those shown on the following page:

- clothing purchases/rental and uniform care
- local travel
- motor fuels (except one-half of motor fuels cost for parks and recreation was estimated to be for parks vehicles, which would not be affected by increases in park usership and, therefore was counted as a fixed cost)
- postage
- printing
- records management
- travel and training/staff development/other training.

For the Police department, operating equipment and/or operating equipment replacement was included and, for both the Police and Fire/EMS departments and the Regional Jail, vehicles and/or vehicle replacement were included as a variable cost simply due to the large numbers of equipment and vehicles associated with staffing size and demand for services.

Other line items included for specific functions were:

- food, medical supplies, merchandise for resale, and trips and events for Parks and Recreation
- juror payments for the Clerk of Court
- medical supplies for Fire/EMS (the EMS function) and

The County makes lump sum contributions to a number of regional organizations, including Colonial Community Corrections, Virginia Peninsula Regional Jail, the Regional Juvenile Detention Center (Merrimac Center) and Williamsburg Regional Library. As budget detail was unavailable for all of these regional organizations except the Merrimac Center, FY 2014 budget details obtained for a previous fiscal impact analysis in James City County were updated using available data. For the two criminal justice agencies, variable costs previously calculated were assumed to have remained in the same proportion to total costs so that the ratio of variable costs as a percent of total costs was applied to the County's FY 2018 contributions. With respect to the originally estimated costs, variable costs were first determined from their respective FY 2014 operating budgets with the following special items considered to be variable costs:

- food, laundry, medical and security supplies; inmate programs; and transportation for the Regional Jail
- offender services and non-administrative transition services for Colonial Community Corrections

The County's share of these variable costs was then calculated by applying the County's contribution as a share of the agency's total budget according to the formula on the following page.

$$VC_{JCC} = \text{Cont}_{JCC} \times VC_A / TC_A$$

Where, VC_{JCC} = James City County's share of variable costs

VC_A = the agency's variable costs in FY 2014

Cont_{JCC} = James City County's contribution to the agency and

TC_A = the agency's total costs in FY 2014

In the case of the Williamsburg Regional Library, the percentage fixed costs (12.46%) was obtained from information provided by James City County for a separate fiscal impact analysis. This percentage was then applied to the County's contribution to the Library and deducted from the County's contribution to leave only the variable cost component.

For the Merrimac Center, variable costs were first identified in the Center's FY 2018 budget. These variable costs included 85% of salaries, fringe benefits, background checks and employee miscellaneous costs (15% of these costs were estimated to be for administrative positions); clothing; food, housekeeping, linen, medical/lab, office, operating, personal hygiene and programs supplies; field trips/treatment and purchase of bedspace. Non-County funded costs were then proportionally deducted, distributing these among fixed and variable costs (see below for this methodology).

Contributions to other regional and community organizations were counted as fixed costs, as these contributions are at the discretion of the Board of Supervisors and are not directly impacted by changes in the number of households located in the County.

With respect to Parks and Recreation, the parks function is largely a fixed cost, since parks are maintained and patrolled regardless of incremental changes in population size. The recreation component is largely a variable cost function, since services are provided to individual citizens. The Appendix to the County's *Budget* was used to identify positions associated with the parks component, as well as other fixed cost positions and the County's *Compensation Plan* was used to estimate salaries and wages for these positions. Fringe benefits, travel and training, local travel, motor fuels, and clothing purchases associated with these fixed cost positions were proportionally calculated and excluded. Additionally, it was assumed that one-half the cost of trips and special events was for special events, which is a fixed cost.

As noted above, billing associated with water and sewer services was considered to be a variable cost. This function was not broken out in the County's *Adopted Budget* but, based on previous inquiries to County staff, was assumed to reside in the Water Fund. An estimate of the cost of this activity was calculated by counting the salaries and fringe benefits for meter readers and utility account representatives plus an estimated \$0.30 per billing customer mailing to pay for postage, printing and office supply costs. This estimate is consistent with the postage, printing and office supply costs obtained from the more detailed FY 2014 *Budget*.

Finally, revenues from the Commonwealth and other non-County sources were deducted from the calculated variable costs to leave only the County's variable operating costs. Revenues deducted included those shown on the following page:

- Commonwealth shared expense contributions to the following functions:
 - Clerk of Circuit Court
 - Commissioner of the Revenue
 - Commonwealth Attorney
 - General Registrar
 - Sheriff
 - Treasurer
- HB 599 distributed proportionally according to budget size among:
 - Commonwealth Attorney
 - Judiciary
 - Police
 - Sheriff
- City of Williamsburg contributions to:
 - Accounting
 - Animal Control
 - Clerk of Court
 - Commonwealth Attorney
 - Sheriff
 - Treasurer
- ALS/BLS fees, false alarm fees to Fire/EMS
- Excess clerk fees and remote access fees to Clerk of Courts
- Facility rentals, league fees, park advertising and vending machine revenues to Parks and Recreation
- Various user agency contributions, credits/other and miscellaneous revenue to
 - Accounting
 - E-911
 - Fire/EMS
 - Human Resources
 - Information Resources Management
 - Police
 - Treasurer

These revenues are, of course, applied to both variable and fixed costs. When subtracted from line item costs, these revenues were, therefore, distributed between variable and fixed costs. For those Constitutional Offices receiving funding from the Commonwealth, the budgeted amounts obtained from the Approved FY 2018 Budgets found on the Virginia Compensation Board website were used. This source also provided state supported salaries and fringe benefits for Constitutional officers and other funded positions. Salaries and fringe benefits funding from the Commonwealth were first subtracted from total salaries and fringe benefits from the *Budget*.

The unfunded portion of fixed cost position salaries and fringe benefits was then calculated and subtracted. This was calculated by multiplying the fixed cost position amounts by the ratio of total unfunded salaries (or fringe benefits) to total salaries (or fringe benefits) for the office. The total amount of Constitutional Office salary and fringe benefit funding from the Commonwealth was then subtracted from total non-local revenues received by the office, since this revenue had already been subtracted. The formula shown below was then applied in order to disaggregate remaining fixed and variable costs.

$$R_{VC} = R \times VC/TC$$

Where, R_{VC} = Revenues assigned to variable costs

R = All revenues

VC = Variable costs of the line item function

TC = Total cost of the line item function

The amount of payments made by the Commonwealth to fund Constitutional Offices was subtracted from TC , as those payments had been otherwise removed in the formula, and contributions credited to a department's budget were added back to the total cost line item in the *Budget* to reflect the true variable operating cost.

Table A-2 on the following page details the County's variable cost expenditures for households and expenditures per household. Table A-3 on page A-27 details the County's variable cost expenditures for per unit other than the household or where the household base has been modified. Variable costs associated with the presumed existing residential use were substantially the same as for Oakland Pointe except that per household costs were not adjusted for household size and the cost of services provided to lower income households were not included in the cost calculations. Per household variable costs for the existing residential household were calculated to be \$828.61.

Education costs were estimated separately from other public service costs of local government. Education costs were calculated on a per pupil basis. The Williamsburg-James City County Public School population for the 2017-18 school year (11,514 students) was obtained from the Virginia Department of Education *Fall Membership Data* website. Cost data and assumptions for school operating costs were derived from the adopted the Budget 2018 column of the *Williamsburg-James City County Public Schools FY 2019 Superintendent's Proposed Budget*.

Table A-2 James City County Non-School Expenditures per Household, FY 2018			
Item	Expenditure	Expenditure per Household	Notes
Accounting	\$ 42,050	\$ 1.26	61.31% are variable costs; Excludes contributions from various agencies
Animal Control	\$ 97,175	\$ 3.09	Excludes costs paid by Williamsburg
Clerk of Circuit Court	\$ 16,600	\$ 0.62	Excludes fees and costs paid by Commonwealth and Williamsburg; adjusted for household size
Colonial Community Corrections	\$ 44,000	\$ 1.73	Adjusted for household size
Commissioner of the Revenue	\$ 322,175	\$ 9.68	Excludes costs paid by Commonwealth
Commonwealth Attorney	\$ 266,000	\$ 9.90	Excludes costs paid by Commonwealth and Williamsburg; adjusted for household size
Courts/Judicial	\$ 7,875	\$ 0.29	Excludes costs paid by Williamsburg and funded by HR599; no personnel costs; adjusted for household size
Emergency Communications	\$ 1,527,525	\$ 56.83	Excludes credits/other; adjusted for household size
Fire/EMS	\$ 3,993,350	\$119.96	Excludes fees
Fleet and Equipment	\$ 449,200	\$ 13.49	89.95% are variable costs
Hampton Roads Military and Federal Facility Alliance	\$ 23,000	\$ 0.91	Converted from population-based formula
Hampton Roads Planning District Commission	\$ 113,700	\$ 4.48	Converted from population-based formula
Human Resources	\$ 148,775	\$ 4.47	61.31% are variable costs; Excludes credit/other
Information Resources Mgmt	\$ 627,425	\$ 18.85	61.31% are variable costs; Excludes credit/other
Library	\$ 3,939,275	\$146.55	Adjusted for household size
Parks & Recreation	\$ 3,890,175	\$144.72	Excludes estimated costs of Parks; Excludes fees; adjusted for household size
Peninsula Council for Workforce Development	\$ 28,300	\$ 1.12	Converted from population-based formula
Police	\$ 8,072,300	\$271.40	Excludes costs paid by Commonwealth and credit/other; 50% adjustment for household size
Purchasing	\$ 90,325	\$ 2.71	61.31% of variable costs; JCC share of variable costs; adjusted for household size
Regional Jail	\$ 1,779,600	\$ 70.18	Excludes non-County funded costs; adjusted for household size
Regional Juvenile Detention Center	\$ 1,155,075	\$ 45.55	Excludes costs paid by Commonwealth and Williamsburg; adjusted for household size
Sheriff	\$ 310,350	\$ 11.55	Excludes costs paid by Commonwealth and Williamsburg
Treasurer	\$ 620,875	\$ 18.65	
Total	\$27,565,125	\$957.99	

Rounded to the nearest \$25

Source: *James City County FY 2018 Adopted Operating Budget*

Table A-3 James City County Non-School Expenditures per Service Unit other than Households, or for Modified Household Base, FY 2018			
Item	Expenditure	Expenditure per Service Unit	Notes
Assessor	\$ 376,325	\$ 10.92	Per parcel
Colonial Behavioral Health	\$1,392,400	\$ 62.12	Per average of Medicaid-eligible households and all households adjusted for household size
Peninsula Health District	\$ 360,950	\$ 60.81	Per Medicaid-eligible household
Satellite Office	\$ 126,300	\$ 15.63	Per household in northern James City County
Sewer Operations	\$ 285,550	\$ 0.17	Per 1,000 gallons water consumed
Social Services	\$1,114,800	\$187.81	Per average of Medicaid-eligible and SNAP-eligible households
Voter Registration and Elections	\$ 282,300	\$ 5.77	Per potential voter; Excludes General Registrar costs paid by Commonwealth
Water and Sewer billing	\$ 498,675	\$ 20.61	Per sewer customer
Water Operations	\$ 994,775	\$ 0.59	Per 1,000 gallons water consumed

Rounded to the nearest \$25

Source: *James City County FY 2018 Adopted Operating Budget*

Costs for functions that must be provided and are not affected by relatively small changes in student population were excluded. These included the administrative functions and functions for which limited staff was provided at individual schools (such as the school nurse or librarian). However, student service functions for which staff resources were distributed systemwide or over a number of schools (such as psychological services) were included as variable cost components, since fluctuations in student population would affect staffing levels. In cases, where additional positions or partial positions appeared to be added to single-position functions, either in particular schools or generally as “floaters,” those additional positions were counted as variable costs. With respect to guidance services, conservatively, positions at middle and high schools in excess of a single position were counted as variable costs, even though the number of positions allocated to each school (two for middle schools and four for high schools) appeared to be fixed. Certain excluded functions comprise entire cost centers and others are included as line items within cost centers. Those functions excluded from the variable cost calculations are listed on the following page.

- Assistant Superintendents
- Chief of Staff
- Communication services
- Executive services
- Guidance services (except as explained above)
- Operations (except janitorial services as explained below)
- Principal and assistant principal offices
- Security services (within Student Services)
- Speech and audiological services and
- Technology services

There were also certain functions for which staffing met the fixed cost criteria but which contained some variable cost component, such as instructional materials. Those functions falling into this category are listed below:

- Gifted and talented program and
- Health services

Functions that are funded entirely from non-County revenues were also excluded from the calculation of variable costs. These included grant funded programs, state funded programs and food & nutrition services, which are funded through a combination of state, federal and program income revenue.

Certain fixed costs were then deducted from the budget costs of those remaining functions that were deemed to create variable costs. Typical fixed costs within these budgets included:

- Administrative and supervisory personnel
- Capital outlays
- Communications
- Dues and subscriptions
- Electricity and heating
- Leases and rentals
- Retiree health care credit and
- Software

Additionally, 25% of the cost of water was subtracted from school budgets, as this was assumed to be used for janitorial and other building-related purposes.

Certain assumptions were made with regard to the distribution of staff across fixed cost and variable cost activities for Operations and Transportation. For Operations it was assumed that 25% of janitorial work could be related to demand placed by a school's student population. All other work would need to be performed regardless of fluctuations in a school's population. Therefore, 25% of service personnel salaries and fringes and 25% of materials and supplies were counted as variable costs.

In Transportation costs related to management functions were subtracted. Trade salaries were assumed all to be associated with vehicle maintenance, which has a seven-person staff. It was estimated that, for a minimum size bus fleet, two mechanics would be required. Therefore two-sevenths of the personnel cost for this function was deemed a fixed cost.

Certain functions, though administrative, support both fixed and variable cost activities, with the cost of providing these functions being sensitive to increases in variable costs. These support functions are fiscal services and human resources. As with other functions, typical fixed costs were deducted from the function's total cost to leave only variable costs. These variable costs were then distributed between the fixed cost and the variable cost functions they support. In order to calculate this distribution, the total amount of variable salaries in the *Budget* (excluding these support functions) was divided into the amount of salaries in the total *Budget*. The variable cost for each support function was multiplied by the resulting percentage (74.77%) of variable costs within the budget.

Next, categorical revenues received from state, federal and other sources were deducted from functional line item variable costs. When the functional line item contained both fixed and variable costs, a portion of categorical revenue proportional to the percentage of fixed costs was deducted from these categorical revenues. The general formula for computing this deduction is shown below:

$$CR_{var} = CR \times VC/TC$$

Where CR_{var} = Variable categorical revenues

CR = Total categorical revenues

VC = Variable costs and

TC = Total costs

Certain categorical revenues, however, only applied to variable costs. These included revenue from the Commonwealth to support FICA, VRS and group life fringe benefits for instructional personnel and the Commonwealth's textbook contribution. When this was the case, the above formula was not applied. These two groups of categorical revenues apply, however, to multiple functions/cost centers and, so, were distributed proportionally among them.

Functional line item costs from which categorical revenues were subtracted and those categorical revenues are shown in Table 3 on the following page.

Table A-4 Line Item Functions Receiving Categorical Revenue Williamsburg-James City County Public Schools	
Function	Categorical Revenues
All Instructional programs	From Commonwealth: compensation supplement; retirement, social security and group life insurance payments
General instruction	From Commonwealth: algebra readiness; compensation supplement; early reading intervention; ESL; foster care reduced K-3 class size; remedial education; retirement, social security and group life insurance payments; textbook payments
Special education	From Commonwealth: special education contribution; regional programs special education
Homebound instruction	Commonwealth contribution
Career & technical education	From Commonwealth: CTE/vocational occupational/technology education; vocational education contribution; textbook payments
Gifted and talented	Commonwealth contribution
Summer school	Commonwealth remedial summer school contribution Summer school tuition payments
Pre-school	From Commonwealth: At risk 4 year olds

Source: 2018 Budget column, *Williamsburg-James City County Public Schools Fiscal Year 2019 Superintendent's Proposed Budget*

Revenues were distributed to both James City County and the City of Williamsburg and were combined when subtracted from variable costs. The amount of textbook payments exceeded identified line item textbook costs in the *Budget*. The balance of the Commonwealth's textbook payments was applied to defray the textbook and instructional materials line item in the School Performance cost center, resulting in a negative cost per student in that function.

After deducting categorical revenue, these variable costs were then distributed among local funding and other funding sources. In order to calculate this percentage, non-categorical funding from all sources was summed. Only non-categorical funding was used because the local share percentage was applied to variable costs after categorical revenues had been deducted. Funding sources were: James City County, the City of Williamsburg, the Commonwealth (including HCD indirect costs, the local sales tax remittance and supplementary lottery funds), the federal government and other revenue sources. The percentage of funding originating from James City County was then calculated. This percentage (57.18%) was then applied to the calculated variable costs less categorical revenue in each line item function. The capital budget and the budget for state funded institutions are not included in these calculations, as these are separately funded.

Table A-4 below shows the data for these calculations as well as total amounts of categorical revenues, non-categorical revenues and excluded revenues provided by state, federal and other sources. The table does not include excluded revenues which fund a program or cost center with no cost to the County or fund an exclusively fixed cost function. Excluded revenues are not a part of the variable cost calculations.

Table A-5 Sources of Non-categorical and Categorical Funding		
Source of Funding	Non-categorical Funding	Total Categorical Funding
James City County	\$ 76,391,075	
City of Williamsburg	\$ 8,064,800	
Commonwealth of VA	\$ 48,668,250	\$10,188,525
Federal government	\$ 90,000	\$ 20,000
Other	\$ 385,000	\$ 10,000
Total	\$133,599,125	\$16,232,675
Percent JCC Funding	57.18%	

Rounded to the nearest \$25

Source: 2018 Budget column, *Williamsburg-James City County Public Schools Fiscal Year 2019 Superintendent's Proposed Budget*

This calculated local share of variable costs was then multiplied by the estimated variable costs per function, less categorical revenue, and then divided by the number of students within the school system to yield the variable cost to the County per each additional student. The general formula for calculating James City County's variable student cost is shown below.

$$SVC_{JCC} = \sum \{ [TC_n - FC_n - (CR_n \times (TC_n - FC_n) / TC_n)] \times (JCC_{ncr} / TC_{ncr}) \} / S$$

Where, SVC_{JCC} = James City County Variable Cost per Student

TC_n = Total Cost of functional line item

FC_n = Fixed Cost of functional line item

CR_n = Categorical Revenue funding functional line item

JCC_{ncr} = James City County Non-categorical Revenue funding

TC_{ncr} = Total Non-categorical Revenue funding and

S = Number of students enrolled

Per-student variable operating costs to James City County are detailed in Table A-5 on the following page.

Table A-6
James City County Variable Cost of Operations per Student

Item	Budgeted Variable Costs	Categorical Revenue*	Variable Costs (less Categorical Revenue)	Variable Cost Per Student	County Cost per Student (62.7%)
General Instructional Services	\$61,426,025	\$4,718,350	\$56,707,675	\$4,925.11	\$2,816.14
Career & Technical Ed	\$ 359,550	\$ 156,175	\$ 203,375	\$ 17.66	\$ 10.10
Fiscal Services (74.77%)	\$ 434,150	\$ 0	\$ 434,150	\$ 37.71	\$ 21.56
Gifted & Talented	\$ 194,800	\$ 138,500	\$ 56,300	\$ 4.89	\$ 2.80
Health Services	\$ 182,775	\$ 225	\$ 182,550	\$ 15.85	\$ 9.06
Homebound Instruction	\$ 160,725	\$ 22,775	\$ 137,950	\$ 11.98	\$ 6.85
Human Resources (74.77%)	\$ 443,725	\$ 0	\$ 443,725	\$ 38.54	\$ 22.04
Instructional Student Services	\$ 1,142,550	\$ 58,050	\$ 1,142,550	\$ 94.19	\$ 53.86
Media Services	\$ 1,215,250	\$ 135,625	\$ 1,079,625	\$ 93.76	\$ 53.61
Operations--Janitorial	\$ 1,108,350	\$ 0	\$ 1,108,350	\$ 96.26	\$ 55.04
Psychological Services	\$ 626,600	\$ 0	\$ 626,600	\$ 54.42	\$ 31.12
Special Education	\$14,781,525	\$3,627,500	\$11,154,025	\$ 968.73	\$ 553.92
Summer School	\$ 2,270,325	\$ 179,700	\$ 2,090,625	\$ 181.57	\$ 103.82
Textbooks and materials, nec	\$ 241,600	\$ 348,800	\$ -107,200	\$ -9.31	\$ -5.32
Transportation, Vehicle Maintenance	\$ 840,700	\$ 0	\$ 840,700	\$ 73.02	\$ 41.75
Transportation, Vehicle Operation	\$ 6,048,375	\$ 0	\$ 6,048,375	\$ 525.31	\$ 300.37
Total	\$91,477,025	\$ 9,385,700	\$82,091,325	\$7,129.69	\$4,076.72
Grand Total	\$123,470,112				

Rounded to the nearest \$25

*Categorical revenue supporting fixed costs has been subtracted

2018 Budget column, *Williamsburg-James City County Public Schools Fiscal Year 2019
Superintendent's Proposed Budget*

Thus, although gross spending per student, including all funds except capital projects, is given in the *Budget* as \$12,483, variable costs funded by the County account for only \$4,076.72 of this per-pupil cost.

Additionally, variable costs associated with the pre-school program were calculated. The pre-school program serves the County's at-risk population and all Oakland Pointe households were assumed to be eligible for enrollment in the Bright Beginnings preschool program. Enrollment in this program is currently only 153 students and, therefore, the per-student cost of this program is amortized over a much smaller base than the K-12 program. The annual per pre-school student variable local-share cost for the school system's pre-school program was calculated to be \$13,000.

In order to calculate a pre-school student generation rate for the program, the program's current enrollment was divided by the number of households with incomes falling below 60% AMI for a four-person household. This resulted in a pre-school student generation rate of 0.0188 pre-school students per household applied to households at Oakland Pointe. A more conservative approach would use the estimated number of Medicaid-eligible households as the denominator to compute the pre-school student generation rate. This approach yields a pre-school student generation rate of 0.0258 pre-school students per Medicaid-eligible household. Using the 60% of AMI approach results in a predicted 2.4 pre-school students at Oakland Pointe. Using the Medicaid-eligible approach results in a predicted 3.24 pre-school students at Oakland Pointe. Roughly averaging these approaches, Oakland Pointe can be expected to generate 3 new pre-school students attending the Williamsburg-James City County Public Schools.

Education expenditures were assigned to Oakland Pointe by estimating the number of students to be generated by the project and multiplying this by the per-student cost of education. The number of students generated by Oakland Pointe was calculated using the student generation metric supplied by the County (0.31 students per multi-family household). Applying this metric to the 126 units proposed yields an estimated increase of 39 students attending the Williamsburg-James City County public schools as a result of the development of Oakland Pointe.

Education capital costs were estimated based upon the estimated actual impact of the increase in students on Williamsburg-James City County public school capacity. Recent changes to the County's Zoning Ordinance prohibit the submission of proffers for residential projects.

The current distribution of student enrollment among the school system's elementary, middle and high schools was used to allocate students expected to be generated by Oakland Pointe among those schools to which these students would be assigned. The relevant percentage distribution was calculated to be: elementary schools: 44.39%; middle schools: 22.7%; high schools: 32.91%. Students from Oakland Pointe will be zoned to Norge Elementary School, Toano Middle School and Warhill High School. Applying the above distribution percentages to the estimated total number of students to be generated at each school yields 17 students attending Norge Elementary School, 9 students attending Toano Middle School and 13 students attending Warhill High School.

Enrollment at each of these schools was derived from the Virginia Department of Education Fall Membership Data for September 30, 2018 (the latest data available for school year (SY) 2019). Capacity was obtained from the enrollment Appendix of the *School Budget*. Table A-7, on the following page, shows current capacity and enrollment, remaining capacity, and remaining capacity after development of Oakland Pointe.

Table A-7
Available Classroom Capacities Before and After
Oakland Pointe

	Available Capacity Prior to Oakland Pointe Development			Available Capacity After Oakland Pointe Development
	Rated Capacity	Current Enrollment	Remaining Capacity	
<i>County Student Generation Formula</i>				
Norge Elementary	695	680	15	-2
Toano Middle School	790	706	84	75
Warhill H.S.	1,441	1,392	49	36

Source: Williamsburg-James City County Public Schools and County Planning staff

As can be seen from the table above, students expected to be generated from Oakland Pointe will not cause any of the schools to which students from Oakland Pointe will be assigned to reach their facility capacities except Norge Elementary by a nominal amount which, given the margin of error with this projection and the historic fluctuations in enrollment from year to year, is not expected to present an actual capacity exceedance. .

JCC TAX ID NOS: # 2310100002
CONSIDERATION: \$1.00

THIS DEED IS EXEMPT FROM TAXATION UNDER VIRGINIA CODE
§§ 58.1-811 (A)(3)

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT ("Agreement") is made this _____ day of _____, 2019, by and between LISA JOY P. MARSTON, Trustee of the LISA JOY P. MARSTON REVOCABLE TRUST DATED September 13, 2010 (the "Grantor") and the COUNTY OF JAMES CITY, VIRGINIA, a political subdivision of the Commonwealth of Virginia, (the "County" or the "Grantee" and, together with the Grantor, the "Parties").

WITNESSETH:

WHEREAS, Grantor is the owner in fee simple of a parcel of property located at 7581 Richmond Road in James City County, Virginia and further identified as James City County Real Estate Tax Parcel Number 2310100002 as more particularly described in Exhibit A attached hereto (the "Property");

WHEREAS, the Grantor desires to ensure that development of the Property, under certain conditions, be limited to affordable housing and accessory uses as more particularly described herein and have the Property be subject to the terms, limitations, and obligations of this Agreement;

WHEREAS, Grantor desires density bonuses for development of the Property, which must be secured by a document approved by the county attorney.

NOW, THEREFORE, in consideration of the recitals and the mutual benefits, the covenants and terms herein contained, and for other good and valuable consideration, the receipt of which is hereby acknowledged, the Grantor hereby grants, conveys, covenants, and agrees as follows:

1. GRANT AND CONVEYANCE OF EASEMENT. The Grantor hereby grants and conveys to the Grantee a perpetual easement, in gross, (the "Easement") prohibiting development of the property for any use more intense than would be permitted under the County's General Agricultural, A-1, zoning district, unless:

(a) For a period of not fewer than thirty (30) years from the date of this Easement, one hundred percent (100%) of the residential dwelling units constructed on the Property are subject to the applicable income limitations under and in accordance with the federal Low Income Housing Tax Credit Program as administered by the Virginia Housing and Development Authority, or a comparable or successor governmental program, or such other affordable housing regime as the County's Director of Planning may approve (the "Approved Program") (collectively, the "Use");

(b) The Owner shall consult with and accept referrals of, and rent to “qualified tenants” (as hereinafter defined), in accordance with its best management practices, from the Department of Social Services, Housing Division of James City County. The term “qualified tenants” shall mean prospective tenants which satisfy management policies and the requirements established for the Use under the Approved Program;

(c) The buildings constructed on the Property are designed and constructed substantially consistent, subject to only minor changes, with the architectural elevations entitled “Proposed Oakland Pointe Apartments”, dated October 18, 2017, prepared by Parks-Player Architecture & Planning, LLC (a copy of which elevations are on file with the County’s Director of Planning). Prior to site plan approval for the Use, final building elevations for the Use shall be submitted to the County’s Director of Planning for review and approval for consistency with this Section 1(b);

(d) The owner of the Property achieves EarthCraft/Viridian gold certification, or equivalent certification as determined by the County’s Director of Planning for all buildings to be constructed on the Property, as shown on the master plan titled “Master Plan for Oakland Pointe,” prepared by AES Consulting Engineers and dated October 25, 2017, last revised September 26, 2018 (the “Master Plan”, a copy of which is on file with the County’s Director of Planning). Proof of EarthCraft/Viridian gold certification, or equivalent certification, shall be provided to the County’s Director of Planning within three months of issuance of a Certificate of Occupancy for the Use or such other time as is agreed to in writing in advance by the County’s Director of Planning;

(e) The owner of the Property develops water conservation standards to be submitted to and approved by the James City Service Authority prior to final site plan approval, and subsequently enforces these standards. The standards shall address such water conservation measures as limitations on the installation and use of approved landscaping design and materials to promote water conservation and minimize the use of public water resources;

(f) Any offsite traffic improvements specified in a final Traffic Impact Study for the Use, approved by the County’s Director of Planning and the Virginia Department of Transportation (a copy of which is on file with the County’s Director of Planning), are installed or, in the discretion of the County’s Director of Planning, guaranteed in accordance with Section 19-74 of the James City County Code, prior to issuance of a Certificate of Occupancy for the Use. Such offsite traffic improvements are (i) commenced prior to commencement of onsite land disturbance activities, and (ii) completed prior to completion of onsite land disturbance activities, provided such sequencing of the construction is approved by all applicable governmental agencies;

(g) Subject to review and approval by the Virginia Department of Transportation, the median improvements within the Route 60 median, west of the Oakland Drive crossover, as shown on that certain drawing entitled “RT. 60 MEDIAN SCHEMATIC PLANTING PLAN SHEET NUMBER 3 OF 3” prepared by AES Consulting Engineers and dated October 25, 2017 (a copy

of which is on file with the County's Director of Planning), as the same may be modified by Virginia Department of Transportation in connection with its review and approval, are installed or, in the discretion of the County's Director of Planning, guaranteed in accordance with Section 19-74 of the James City County Code, prior to issuance of a Certificate of Occupancy for the Use;

(h) Prior to issuance of a Certificate of Occupancy for the Use, the owner (i) constructs and agrees to maintain in good order and repair a five foot wide concrete sidewalk upon that certain property located adjacent to the Property and commonly known as 7575 Richmond Road in James City County, Virginia and further identified as James City County Real Estate Tax Parcel Number 2321100001B (the "Adjacent Parcel") as shown generally on the Master Plan, and (ii) obtains an easement from the owner of the Adjacent Parcel for pedestrian travel over and upon such sidewalk; and

(i) The owner of the Property works with an agent of the Virginia Cooperative Extension Office ("VCEO") or, if a VCEO agent is unavailable, a soil scientist licensed in the Commonwealth of Virginia or other qualified professional approved by the County's Director of Planning, to conduct soil tests and to develop, based upon the results of the soil tests, a customized nutrient management plan ("Nutrient Management Plan") for all turf areas of the Property. The Nutrient Management Plan shall be submitted to the County Stormwater & Resource Protection Director for review and approval prior to the issuance of a Certificate of Occupancy for the Use. Upon approval, the owner of the Property shall be responsible for ensuring that any nutrients applied to the turf areas on the Property be applied in accordance with the applicable Nutrient Management Plan or any updates or amendments thereto as may be approved by the County Stormwater & Resource Protection Director.

2. MISCELLANEOUS PROVISIONS.

(a) *No public right-of-access to Property.* This Agreement does not create, and shall not be construed to create, any right of the public to enter upon or to use the Property or any portion thereof.

(b) *Continuation.* The covenants, terms, conditions, servitudes, and restrictions of this Agreement shall apply to the Property as a whole, and shall run with the land perpetually and be binding upon the parties, their successors, assigns, personal representatives, and heirs, and be considered a servitude running with the land in perpetuity; provided, however, notwithstanding any provision of this Agreement and any current or subsequent zoning classification of the Property, if, upon the last day of the sixth (6) month following the date of this Agreement, the Property may only be developed in accordance with density limitations and restrictions at least as restricted as the criteria and restrictions applicable to the James City County Zoning Ordinance A-1 zoning classification then in effect, upon written request of the Grantor, the Grantee shall initiate the process necessary to terminate the Easement. A document evidencing said termination shall be recorded in the Clerk's Office of the Circuit Court for the City of Williamsburg and the County of James City, Virginia.

(c) *Action at law inadequate remedy.* The Parties agree that monetary damages would not be an adequate remedy for the breach of any terms, conditions and restrictions herein contained, and therefore, in the event that the Grantor, their successors or assigns, violate or breach any of the terms, conditions and restrictions herein contained, the Grantee, in addition to all other remedies available at law and in equity, may institute a suit, and shall be entitled to enjoin, by *ex parte* temporary injunction and/or permanent injunction, such violation.

(d) *Failure to enforce does not waive right to enforce.* The failure of the Grantee to enforce any right, provision, covenant, restriction, term or condition of this Agreement shall not constitute a waiver of the right of the Grantee to enforce such right, provision, covenant, restriction, term or condition in the future. All rights, remedies and privileges granted to the Grantee pursuant to any term, provision, covenant, restriction, or condition of this Agreement shall be deemed to be cumulative and the exercise of any one or more thereof shall not be deemed to constitute an election of remedies, nor shall it preclude the Grantee from exercising such other privileges as may be granted by this Agreement, or at law or in equity. Furthermore, the Grantor hereby waives any defense of laches, estoppel, or prescription.

(e) *No right of enforcement by the public.* This Agreement does not create, and shall not be construed to create, any right of any member of the public exclusive of the County itself to maintain a suit for any damages against the Grantor for any violation of this Agreement.

(f) *Severability.* If any provision of this Agreement is determined to be invalid by a court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby.

(g) *Recordation.* Upon execution by the Parties, this Agreement shall be recorded with the record of land titles in the Clerk's Office of the Circuit Court for the City of Williamsburg and the County of James City, Virginia.

(h) *Authority to convey easement.* The Grantor covenants that it is vested with good title to the Property and enter into this Agreement.

(i) *No Assignment.* Neither Grantee nor its successors may assign or transfer the Easement established and conveyed hereby.

(j) *Controlling law.* The interpretation and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia.

(k) *Entire agreement.* This instrument sets forth the entire agreement of the Parties with respect to this Agreement and supersedes all prior discussions, negotiations, understandings, or agreements relating to this Agreement, all of which are merged herein.

(l) *Amendments.* This Agreement may be amended only with the written consent of the Grantee and the then owner of the Property, and such amendment shall be duly recorded. Any amendment shall be at the sole discretion of the Grantee.

(m) *Opportunity to cure.* Notwithstanding any other provision of this Agreement, the Grantor shall not be deemed to be in violation of this Agreement unless such violation continues for a period of thirty (30) days after receipt of notice thereof from Grantee.

(Remainder of page left blank. Signature pages to follow)

[Signature Page to Easement Agreement]

WITNESS the following signature and seal:

LISA JOY P. MARSTON, Trustee of the
LISA JOY P. MARSTON REVOCABLE TRUST DATED September 13, 2010

COMMONWEALTH OF VIRGINIA

City/County of _____, to-wit:

The foregoing Agreement was signed, sworn to and acknowledged before me this _____
day of _____, 2018, by LISA JOY P. MARSTON, Trustee of the LISA JOY P. MARSTON
REVOCABLE TRUST DATED September 13, 2010, Grantor.

WITNESS my signature and notarial seal.

Notary Public

Registration # _____

Expiration Date _____

[Signature Page to Easement Agreement]

GRANTEE: THE COUNTY OF JAMES CITY, VIRGINIA

Acceptance of this Deed of Easement is approved and, pursuant to a Resolution of the Board of Supervisors of James City County, Virginia, duly adopted on the 14th day of July 2015, this conveyance is hereby accepted on behalf of Grantee.

By:

Title: County Administrator

STATE/Commonwealth of _____
CITY/COUNTY OF _____, to-wit:

The foregoing instrument was acknowledged before me this ____ day of _____, 2018, by _____ as County Administrator of James City County, Virginia.

Notary Public

My commission expires: _____
Notary Registration No. _____

Approved as to form:

COUNTY ATTORNEY

EXHIBIT A

LEGAL DESCRIPTION

All that certain lot, piece or parcel of land containing 14.54 acres, set out and shown as Parcel B of Oakland Farm on a plat entitled "A SURVEY FOR CONVEYANCE TO SOUTHPOINT PROPERTIES 326.89 AC +/-, PARCEL A, LYING IN POWHATAN DISTRICT, JAMES CITY COUNTY, VIRGINIA", dated December 21, 1973, made by L.V. Woodson & Associates, Inc. Engineers, Surveyors and Planners, recorded in James City County Plat Book 32, page 2 on March 28, 1974 and to which plat reference is here made for a more complete description.

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Rebecca Vinroot, Director of Social Services

SUBJECT: Williamsburg/James City County Community Action Agency Board Replacement

ATTACHMENTS:

Description	Type
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REVIEWERS:

Department	Reviewer	Action	Date
Social Services	Vinroot, Rebecca	Approved	1/18/2019 - 3:54 PM
Publication Management	Colonna, Tina	Approved	1/18/2019 - 4:15 PM
Legal Review	Kinsman, Adam	Approved	1/30/2019 - 3:41 PM
Board Secretary	Fellows, Teresa	Approved	1/30/2019 - 4:16 PM
Board Secretary	Purse, Jason	Approved	2/5/2019 - 12:56 PM
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 12:59 PM

ITEM SUMMARY

DATE: 2/12/2019

TO: The Board of Supervisors

FROM: Teresa J. Fellows, Deputy Clerk

SUBJECT: Adjourn until 4 p.m. on February 26, 2019 for the Work Session

REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	2/5/2019 - 3:38 PM