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
November 9, 2021
5:00 PM

A. CALL TO ORDER

B. ROLL CALL

C. MOMENT OF SILENCE

D. PLEDGE OF ALLEGIANCE

1. Pledge Leader(s) - Aiko Lejarazo-Sanchez, Jennifer Estrada Guzman, and Yoncel Zacarias, students from Jamestown High School

E. PUBLIC COMMENT

F. CONSENT CALENDAR

G. PUBLIC HEARING(S)

1. Ordinance to Amend County Code sec. 2-16.2
2. Ordinance to Permit Use of Golf Carts on Public Highways in Elmwood
3. Ordinance to amend James City County Code section 20-45 to allow the Commissioner of the Revenue to assess a penalty for late returns
4. Ordinance to Repeal County Code Sections 17-8, 17-9, and 17-10
5. Creation of the Historic Triangle Recreational Facilities Authority
6. SUP-19-0006. Hazelwood Farms - The Village Center

H. BOARD CONSIDERATION(S)

1. 2022 Legislative Agenda

I. CLOSED SESSION

J. ADJOURNMENT

1. Adjourn until 1 p.m. on November 23, 2021 for the Business Meeting

AGENDA ITEM NO. D.1.

ITEM SUMMARY

DATE:	11/9/2021
TO:	The Board of Supervisors
FROM:	Teresa J. Fellows, Deputy Clerk
SUBJECT:	Pledge Leader(s) - Aiko Lejarazo-Sanchez, Jennifer Estrada Guzman, and Yoncel Zacarias, students from Jamestown High School

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REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:57 PM

AGENDA ITEM NO. G.1.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Liz Parman, Assistant County Attorney

SUBJECT: Ordinance to Amend County Code sec. 2-16.2

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Ordinance	Ordinance
🗋	Final Ordinance	Ordinance

REVIEWERS:

Department	Reviewer	Action	Date
Attorney	Kinsman, Adam	Approved	10/5/2021 - 11:39 AM
Publication Management	Daniel, Martha	Approved	10/5/2021 - 11:44 AM
Legal Review	Kinsman, Adam	Approved	10/5/2021 - 1:21 PM
Board Secretary	Fellows, Teresa	Approved	10/7/2021 - 1:53 PM
Board Secretary	Rinehimer, Bradley	Approved	10/8/2021 - 11:51 AM
Board Secretary	Fellows, Teresa	Approved	10/8/2021 - 2:10 PM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Elizabeth Parman, Assistant County Attorney

SUBJECT: Ordinance to Amend County Code Section 2-16.2

Virginia Code § 15.2-1719 permits a locality to dispose of unclaimed personal property in the possession of its local law enforcement agency. The County may provide by Ordinance for either the sale or retention for use by the local enforcement agency.

County Code Section 2-16.2 allows for the disposition of such unclaimed personal property through sale but has not been updated to allow local law enforcement agencies to retain such items for use.

The attached Ordinance updates County Code Section 2-16.2 to allow local law enforcement to retain unclaimed personal property for use when the unclaimed personal property is not needed in a criminal prosecution and has been in possession of the agency for more than 60 days. Prior to either sale or retention, notice must be published in a newspaper for two successive weeks.

Staff recommends adoption of the attached Ordinance to update County Code Section 2-16.2.

EP/md
AmdCCSec2-16.2

Attachment

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 2, ADMINISTRATION, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY AMENDING ARTICLE IV, OFFICERS AND EMPLOYEES, DIVISION 2, SPECIFIC OFFICERS, SECTION 2-16.2, DUTY OF CHIEF OF POLICE CONCERNING ABANDONED OR UNCLAIMED TANGIBLE PERSONAL PROPERTY.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 2, Administration, is hereby amended and reordained by amending Article IV, Officers and Employees, Division 2, Specific Officers, Section 2-16.2, Duty of chief of police concerning abandoned or unclaimed tangible personal property.

Chapter 2. Administration

Article IV. Officers and Employees

Division 2. Specific Officers

Sec. 2-16.2 Duty of chief of police concerning abandoned or unclaimed tangible personal property.

(a) Disposition generally. The chief of police is authorized to provide for the *(i)* public sale *or (ii) the retention for use by the county law enforcement agencies* of a*ny*~~ll~~ unclaimed personal property which has been in possession of the county law enforcement agencies and unclaimed for a period of more than 60 days. As used herein, "unclaimed property" shall be ~~defined to include~~ any personal property belonging to another which has been acquired by a law enforcement officer pursuant to his duties, which is not needed in any criminal prosecution, which has not been claimed by its rightful owner and which the state treasurer has indicated will be declined if remitted under the Uniform Disposition of Unclaimed Property Act.

(b) Public sale. Prior to the sale *or retention for use by the law-enforcement agency* of any unclaimed item, the chief of police, or his designee, shall make reasonable attempts to notify the rightful owner of the property, obtain from the commonwealth's attorney a written statement advising that the item is not needed in any criminal prosecution, and cause to be published in a newspaper of general circulation in the county, once a week for two successive weeks, notice that there will be a public *display and* sale of unclaimed personal property. Such property*, including property selected for retention by the law-enforcement agency,* shall be described generally in the notice, together with the date, time and *place* ~~close~~ of the sale and *shall be made available for public viewing at the sale*. The costs of advertisement, removal, storage, investigation as to ownership and liens, and notice of sale shall be paid from the proceeds of the sale. The balance of the proceeds shall be held by the chief of police, or his designee, for the owner and paid to such individual upon satisfactory proof of ownership. *Any unclaimed item retained for use by the law-enforcement agency shall become the property of James City County and shall be retained only if, in the opinion of the chief of police, there is a legitimate use for the property by the agency and that retention of the item is a more economical alternative than purchase of a similar or equivalent item.*

~~In the event~~*If* no claim *has been*~~is~~ made by the owner *for the property or*~~for the~~ proceeds of the sale within 60 days of the sale, the ~~after costs~~*remaining funds* ~~proceeds~~ shall be deposited in the general fund of the county *and the retained property may be placed in to use by the law-enforcement agency*. Any owner shall be entitled to apply to the county within three years from the date of sale *and, if timely application is made therefor and the satisfactory proof of ownership of the funds or property is made,* ~~for the after cost proceeds of the sale. If such a timely application is made,~~ the county shall pay the *remaining proceeds of the sale or return the property* ~~monies properly due~~ to the owner without interest or *other* ~~additional~~ charges *or compensation*. No claim shall be made nor any suit, action or proceeding be instituted for the recovery of such ~~monies~~*funds or property* after three years from the date of sale.

State law reference(s) - Code of Va., § 15.2-1719 - Authority to dispose of unclaimed property in possession of sheriff or police.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

AmdCCSec2-16.2-ord

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 2, ADMINISTRATION, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY AMENDING ARTICLE IV, OFFICERS AND EMPLOYEES, DIVISION 2, SPECIFIC OFFICERS, SECTION 2-16.2, DUTY OF CHIEF OF POLICE CONCERNING ABANDONED OR UNCLAIMED TANGIBLE PERSONAL PROPERTY.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 2, Administration, is hereby amended and reordained by amending Article IV, Officers and Employees, Division 2, Specific Officers, Section 2-16.2, Duty of chief of police concerning abandoned or unclaimed tangible personal property.

Chapter 2. Administration

Article IV. Officers and Employees

Division 2. Specific Officers

Sec. 2-16.2 Duty of chief of police concerning abandoned or unclaimed tangible personal property.

(a) Disposition generally. The chief of police is authorized to provide for the (i) public sale or (ii) the retention for use by the county law enforcement agencies of any unclaimed personal property which has been in possession of the county law enforcement agencies and unclaimed for a period of more than 60 days. As used herein, “unclaimed property” shall be any personal property belonging to another which has been acquired by a law enforcement officer pursuant to his duties, which is not needed in any criminal prosecution, which has not been claimed by its rightful owner and which the state treasurer has indicated will be declined if remitted under the Uniform Disposition of Unclaimed Property Act.

(b) Public sale. Prior to the sale or retention for use by the law-enforcement agency of any unclaimed item, the chief of police, or his designee, shall make reasonable attempts to notify the rightful owner of the property, obtain from the commonwealth's attorney a written statement advising that the item is not needed in any criminal prosecution, and cause to be published in a newspaper of general circulation in the county, once a week for two successive weeks, notice that there will be a public display and sale of unclaimed personal property. Such property, including property selected for retention by the law-enforcement agency, shall be described generally in the notice, together with the date, time and place of the sale and shall be made available for public viewing at the sale. The costs of advertisement, removal, storage, investigation as to ownership and liens, and notice of sale shall be paid from the proceeds of the sale. The balance of the proceeds shall be held by the chief of police, or his designee, for the owner and paid to such individual upon satisfactory proof of ownership. Any unclaimed item retained for use by the law-enforcement agency shall become the property of James City County and shall be retained only if, in the opinion of the chief of police, there is a legitimate use for the property by the agency and that retention of the item is a more economical alternative than purchase of a similar or equivalent item.

If no claim has been made by the owner for the property or proceeds of the sale within 60 days of the sale, the remaining funds shall be deposited in the general fund of the county and the retained property may be placed in to use by the law-enforcement agency. Any owner shall be entitled to apply to the county within three years from the date of sale and, if timely application is made therefor and the satisfactory proof of ownership of the funds or property is made, the county shall pay the remaining proceeds of the sale or return the property to the owner without interest or other charges or compensation. No claim shall be made nor any suit, action or proceeding be instituted for the recovery of such funds or property after three years from the date of sale.

State law reference(s) - Code of Va., § 15.2-1719 - Authority to dispose of unclaimed property in possession of sheriff or police.

AmdCCSec2-16.2-ord-final

AGENDA ITEM NO. G.2.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Eric Peterson, Chief of Police

SUBJECT: Ordinance to Permit Use of Golf Carts on Public Highways in Elmwood

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In 2007, the Board adopted an Ordinance permitting neighborhoods to apply to have public highways in neighborhoods designated for golf cart use. Recently, homeowners from Elmwood have submitted an application pursuant to Section 13-60 et seq. of the County Code, requesting that the Board designate the streets for golf cart use.

Following careful consideration of Elmwood's request and the results of a subsequent traffic study conducted by the Police Department, staff feels that golf carts may be safely accommodated along the public highways in Elmwood. These roads would include Elmwood Lane, Birch Circle, Chinkapin Lane, Locust Place, and Tanbark Lane.

Staff recommends adoption of the attached Ordinance designating certain roads in Elmwood for golf cart use.

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Resolution	Resolution

REVIEWERS:

Department	Reviewer	Action	Date
Police	Peterson, Eric	Approved	10/8/2021 - 1:52 PM
Police	Peterson, Eric	Approved	10/8/2021 - 1:53 PM
Publication Management	Pobiak, Amanda	Approved	10/8/2021 - 2:07 PM
Legal Review	Kinsman, Adam	Approved	10/8/2021 - 4:14 PM
Board Secretary	Fellows, Teresa	Approved	10/11/2021 - 8:38 AM
Board Secretary	Rinehimer, Bradley	Approved	10/11/2021 - 8:49 AM
Board Secretary	Fellows, Teresa	Approved	10/11/2021 - 10:23 AM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Eric Peterson, Chief of Police

SUBJECT: Ordinance to Permit Use of Golf Carts on Public Highways in Elmwood

---

In 2007, the Board adopted an Ordinance permitting neighborhoods to apply to have public highways in neighborhoods designated for golf cart use. Recently, homeowners from Elmwood have submitted an application pursuant to Section 13-60 et seq. of the County Code, requesting that the Board designate the streets for golf cart use.

Following careful consideration of Elmwood's request and the results of a subsequent traffic study conducted by the Police Department, staff feels that golf carts may be safely accommodated along the public highways in Elmwood. These roads would include Elmwood Lane, Birch Circle, Chinkapin Lane, Locust Place, and Tanbark Lane.

Staff recommends adoption of the attached Ordinance designating certain roads in Elmwood for golf cart use.

EP/ap
ORDGlfCartsElmwd-mem

Attachment

R E S O L U T I O N

ORDINANCE TO PERMIT USE OF GOLF CARTS ON

PUBLIC HIGHWAYS IN ELMWOOD

WHEREAS, the residents of Elmwood have petitioned the Board of Supervisors of James City County, Virginia, to designate the streets in Elmwood for golf cart use; and

WHEREAS, the Board has carefully considered the concerns voiced by the residents of Elmwood, the recommendation of staff and the speed, volume and character of motor vehicle traffic using the public highways in Elmwood; and

WHEREAS, pursuant to Section 46.2-916.2 et seq. of the Code of Virginia and Section 13-60 et seq. of the County Code, the Board has determined that golf cart operation on the public highways in Elmwood is compatible with state and local transportation plans and is consistent with the Commonwealth of Virginia's Statewide Pedestrian Policy.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, does hereby designate the following roads located in the Elmwood neighborhood for golf cart use:

a) Elmwood Lane
b) Birch Circle
c) Chinkapin Lane - Route 1608
d) Locust Place
e) Tanbark Lane - Route 1606

BE IT FURTHER ORDAINED that no golf carts shall be permitted on any of the designated streets until the County receives full payment for all signage required by Section 13-62 of the County Code and such signage is installed.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

ORDGlfCartsElmwd-res

AGENDA ITEM NO. G.3.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Adam R. Kinsman, County Attorney

SUBJECT: Ordinance to amend James City County Code section 20-45 to allow the Commissioner of the Revenue to assess a penalty for late returns

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ATTACHMENTS:

	Description	Type
🗋	memo	Cover Memo
🗋	ordinance	Ordinance
🗋	ordinance-final	Ordinance

REVIEWERS:

Department	Reviewer	Action	Date
Attorney	Kinsman, Adam	Approved	10/26/2021 - 1:10 PM
Publication Management	Pobiak, Amanda	Approved	10/26/2021 - 1:56 PM
Legal Review	Kinsman, Adam	Approved	10/28/2021 - 9:28 AM
Board Secretary	Fellows, Teresa	Approved	10/28/2021 - 10:33 AM
Board Secretary	Purse, Jason	Approved	11/2/2021 - 3:49 PM
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:54 PM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Richard W. Bradshaw, Commissioner of the Revenue
Adam R. Kinsman, County Attorney

SUBJECT: Revision of Section 20-45 of the County Code

The Commissioner of the Revenue desires that Section 20-45 of the James City County Code (the "County Code") be amended to permit his office to impose a 10% penalty for failure to provide a report on the amount of prepared food and beverage tax owed to the County. Currently, the County Code only permits the Treasurer to impose a penalty for such failure.

RWB/ARK/md
RevCCSec20-45-mem

Attachment

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 20, TAXATION, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY AMENDING ARTICLE VII, TAX ON PREPARED FOOD AND BEVERAGES, SECTION 20-45, PENALTY OF LATE REMITTANCE OR FALSE RETURN.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 20, Taxation, is hereby amended and reordained by amending Article VII, Tax on Prepared Food and Beverages, Section 20-45, Penalty of late remittance or false return.

Chapter 20. Taxation

Article VII. Tax on Prepared Food and Beverages

Sec. 20-45 Penalty of late remittance, ~~or~~ false return, *or failure to file report*.

(a) If any seller whose duty it is to do so shall fail or refuse to file any report required by this article or to remit to the treasurer the tax required to be collected and paid under this article within the time and in the amount specified in this article, there shall be added to such tax by the treasurer a penalty in the amount of ten percent of the tax past due, or $10.00, whichever is greater; provided, however, that the penalty shall in no case exceed the amount of the tax assessable and interest thereon at the rate of ten percent per annum, which shall be computed upon the taxes and penalty from the date such taxes are due and payable.

(b) If any person shall fail or refuse to file a report required to be filed by this article within the time specified, the commissioner of the revenue shall assess a penalty of ten percent to the tax owed for each such failure or refusal to file a report, which penalty shall become part of the tax owed at the time the penalty is assessed. No such penalty shall exceed the amount of the tax owned.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

RevCCSec20-45-ord

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 20, TAXATION, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY AMENDING ARTICLE VII, TAX ON PREPARED FOOD AND BEVERAGES, SECTION 20-45, PENALTY OF LATE REMITTANCE OR FALSE RETURN.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 20, Taxation, is hereby amended and reordained by amending Article VII, Tax on Prepared Food and Beverages, Section 20-45, Penalty of late remittance or false return.

Chapter 20. Taxation

Article VII. Tax on Prepared Food and Beverages

Sec. 20-45 Penalty of late remittance, false return, or failure to file report.

(a) If any seller whose duty it is to do so shall fail or refuse to file any report required by this article or to remit to the treasurer the tax required to be collected and paid under this article within the time and in the amount specified in this article, there shall be added to such tax by the treasurer a penalty in the amount of ten percent of the tax past due, or $10.00, whichever is greater; provided, however, that the penalty shall in no case exceed the amount of the tax assessable and interest thereon at the rate of ten percent per annum, which shall be computed upon the taxes and penalty from the date such taxes are due and payable.

(b) If any person shall fail or refuse to file a report required to be filed by this article within the time specified, the commissioner of the revenue shall assess a penalty of ten percent to the tax owed for each such failure or refusal to file a report, which penalty shall become part of the tax owed at the time the penalty is assessed. No such penalty shall exceed the amount of the tax owned.

AGENDA ITEM NO. G.4.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Liz Parman, Assistant County Attorney

SUBJECT: Ordinance to Repeal County Code Sections 17-8, 17-9, and 17-10

ATTACHMENTS:

	Description	Type
🗋	Memo	Cover Memo
🗋	Ordinance	Ordinance
🗋	Final Ordinance	Ordinance

REVIEWERS:

Department	Reviewer	Action	Date
Attorney	Kinsman, Adam	Approved	10/15/2021 - 9:47 AM
Publication Management	Daniel, Martha	Approved	10/15/2021 - 9:51 AM
Legal Review	Kinsman, Adam	Approved	10/18/2021 - 9:21 AM
Board Secretary	Fellows, Teresa	Approved	10/26/2021 - 2:53 PM
Board Secretary	Rinehimer, Bradley	Approved	10/27/2021 - 9:00 AM
Board Secretary	Fellows, Teresa	Approved	10/28/2021 - 10:33 AM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Elizabeth Parman, Assistant County Attorney

SUBJECT: Ordinance to Delete County Code Sections 17-8, 17-9, and 17-10

James City County Code Chapter 17, Article 2 requires septic tank cleaners to obtain a license from the Commissioner of the Revenue. This Article was included in the County Code in 1954 and has since become obsolete.

The Commissioner of the Revenue reports that he has not required this specific license in many years because persons engaged in the business of septic tank cleaning apply for a business license pursuant to Chapter 12 of the County Code.

Staff recommends removal of County Code Sections 17-8, 17-9, and 17-10 in their entirety.

EP/md
DelCCSec17-8,9,10-mem

Attachment

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 17, SEWERS AND SEWAGE, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY DELETING AND RESERVING ARTICLE II, SEPTIC TANK CLEANERS.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 17, Sewers and Sewage, is hereby amended and reordained by deleting and reserving Article II, Septic Tank Cleaners, deleting and reserving Section 17-8, License required; Section 17-9, Conditions precedent to issuance of license; and Section 17-10, Annual license tax imposed.

Chapter 17. Sewers and Sewage

Article II. ~~Septic Tank Cleaners~~ *Reserved*

~~Sec. 17-8. License required.~~

~~No person shall engage in the business of removing the contents of privies or septic tanks in the county without first having obtained from the commissioner of the revenue, or his duly appointed representative, a license to engage in such business.~~

~~(11-1-54, § 1)~~

~~Sec. 17-9. Conditions precedent to issuance of license.~~

~~No license will be issued under this article until the equipment to be used and the manner and places of disposal of the contents of privies and septic tanks have been approved by the county health officer or his representative. The equipment, to be approved, must be capable of holding and transporting the contents of privies and septic tanks in a sanitary manner and without spillage. The places of disposal must be free from any chance of such contents contaminating any food or water supply or stream and must not be on any property without the owner's written consent. The manner of disposal must be such that flies, animals and fowl will not have access to such contents.~~

~~(11-1-54, § 1)~~

~~Sec. 17-10. Annual license tax imposed.~~

~~There is hereby levied and assessed an annual license tax of $50.00, not proratable, upon each licensee under this article.~~

~~(1-11-54, § 1)~~

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

DelCCSec17-8,9,10-ord

ORDINANCE NO._____

AN ORDINANCE TO AMEND AND REORDAIN CHAPTER 17, SEWERS AND SEWAGE, OF THE CODE OF THE COUNTY OF JAMES CITY, VIRGINIA, BY DELETING AND RESERVING ARTICLE II, SEPTIC TANK CLEANERS.

BE IT ORDAINED by the Board of Supervisors of the County of James City, Virginia, that Chapter 17, Sewers and Sewage, is hereby amended and reordained by deleting and reserving Article II, Septic Tank Cleaners, deleting and reserving Section 17-8, License required; Section 17-9, Conditions precedent to issuance of license; and Section 17-10, Annual license tax imposed.

Chapter 17. Sewers and Sewage

Article II. Reserved

Secs. 17-8-17-10. Reserved.

(Repealed November 9, 2021)

DelCCSec17-8,9,10-ord-final

AGENDA ITEM NO. G.5.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Scott A. Stevens, County Administrator

SUBJECT: Creation of the Historic Triangle Recreational Facilities Authority

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ATTACHMENTS:

	Description	Type
🗋	Memorandum	Cover Memo
🗋	Resolution	Resolution
🗋	Attachment 1 - Letter from City of Williamsburg	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Attorney	Kinsman, Adam	Approved	10/25/2021 - 3:56 PM
Publication Management	Pobiak, Amanda	Approved	10/25/2021 - 4:11 PM
Legal Review	Kinsman, Adam	Approved	10/26/2021 - 9:00 AM
Board Secretary	Fellows, Teresa	Approved	10/26/2021 - 2:53 PM
Board Secretary	Purse, Jason	Approved	11/2/2021 - 3:49 PM
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:53 PM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Scott A. Stevens, James City County Administrator

SUBJECT: Establishment of the Historic Triangle Recreational Facilities Authority

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At your September 28, 2021, Business Meeting, Williamsburg's Mayor, City Manager, and Victus Advisors discussed the impact an Indoor Sports Center would have on tourism within the Historic Triangle. More information is available in the attached letter from Williamsburg's City Manager, dated September 21, 2021. Victus Advisors recommended construction of a 150,000-square-foot facility that includes 12 basketball courts, convertible to accommodate other sports, with portable bleachers that could be reconfigured as needed. The recommendation is to build a facility that will generate visitors during the weekend and meet community needs during the week.

This facility would provide much needed gym space for the population of James City County. Construction of a facility similar to what is recommended would defer the County's need to build gymnasiums for our residents for many years.

Formation of the Historic Triangle Recreational Facilities Authority will allow the three localities to work together to address the questions of cost, operations, and scheduling for this project, while limiting the County's financial risk to what is approved for the Indoor Sports Facility by the Board of Supervisors. Staff would seek the Board of Supervisors' funding approval as more detailed project information becomes available.

Staff recommends adoption of the attached resolution.

SAS/md
EstHTRFALetter-mem

Attachment

R E S O L U T I O N

CONCURRENT RESOLUTION FOR THE ESTABLISHMENT OF THE HISTORIC TRIANGLE

RECREATIONAL FACILITIES AUTHORITY

WHEREAS, the City of Williamsburg, Virginia, James City County, Virginia, and York County, Virginia **(together, the "Participating Localities" and individually each a "Participating Locality")** desire to acquire, construct, and operate regional public recreational facilities in an area located in the City of Williamsburg, Virginia; and

WHEREAS, each Participating Locality finds it to be in the best interest of their respective localities to establish a public recreational facilities authority pursuant to the Public Recreational Facilities Authorities Act, Chapter 56 of Title 14.2 of the Code of Virginia § 15.2-5600, *et seq*, **(the "Act")** to be known as Historic Triangle Recreational Facilities Authority **(the "Authority")**; and

WHEREAS, the initial purpose of the Authority is to lease real property consisting of approximately 70 acres and known as the Colonial Williamsburg Visitors Center currently owned by Colonial Williamsburg Foundation and to design, construct, finance, and operate public recreational facilities on such real property **(the "Projects")**; and

WHEREAS, each Participating Locality has held a public hearing before its governing body **("Governing Body")** on the adoption of this Resolution, the creation of the Authority and the Articles of Incorporation set forth in this Resolution pursuant to the Act.

NOW, THEREFORE, BE IT RESOLVED by the Governing Body of the Participating Locality as follows:

1. The Authority is hereby established as a political subdivision and a body politic and corporate of the Commonwealth of Virginia.

2. The members of the Authority shall be the Participating Localities.

3. The Authority shall be governed by a Board consisting of six (6) Board members to represent the Participating Localities **(the "Board")**. The Governing Body of each Participating Locality shall appoint two (2) Board members of the Authority Board who shall serve terms of four (4) years. The City Manager and the Economic Development Director of the City of Williamsburg shall be the Williamsburg Board members. The James City County Administrator shall appoint the James City County Board members. The County Administrator and the Economic Development Director of York County shall be the York County Board members. If a Board member is no longer holding the position for the Participating Locality, the Board member shall be deemed to have vacated Board membership and the Governing Body of such Participating Locality shall replace such Board member with the individual then serving is such position for the Participating Locality to fill the remainder of such Board member's term. A quorum shall consist of four Board members, as long as at least one member from each participating locality is present.

4. The following individuals are hereby appointed to serve as the first Board members to represent the Governing Bodies of each of the Participating Localities on the governing board of the Authority:

   Williamsburg:

   York County:

   James City County:

5. The Articles of Incorporation of the Authority shall be and are hereby adopted as follows:

ARTICLES OF INCORPORATION OF THE HISTORIC TRIANGLE RECREATIONAL FACILITIES AUTHORITY

Article I The name of the Authority is the Historic Triangle Recreational Facilities Authority. The address of the Authority's principal office is _____.

Article II The Authority is created as a political subdivision and a body politic and corporate of the Commonwealth of Virginia pursuant to the authority of Chapter 56 of Title 15.2 of the Code of Virginia of 1950, as amended § 15.2-5600, ***et seq. (the "Act")***.

Article III The participating localities of the Authority are the City of Williamsburg, Virginia, James City County, Virginia, and York County, Virginia.

Article IV The names and addresses and terms of office of the first members of the Authority are as follows:

Name	**Address**	**Term**

The Authority shall be governed by a Board consisting of six (6) members to represent the Participating Localities **(the "Board")**. The Governing Body of each Participating Locality shall appoint two (2) members of the Authority Board who shall serve terms of four (4) years. The City Manager and the Economic Development Director of the City of Williamsburg shall be the Williamsburg members. The James City County Administrator shall appoint the James City County members. The County Administrator and the Economic Development Director of York County shall be the York County members. If a Board member is no longer holding the position for the Participating Locality, the member shall be deemed to have vacated membership and the Governing Body of such Participating Locality shall replace such member with the individual then serving is such position for the Participating Locality to fill the remainder of such term. A quorum shall consist of four Board members, as long as at least one member from each participating locality is present.

Article V The Authority is created for the initial purpose of acquiring, constructing, and operating one or more public recreational facilities to not only serve the citizens of the Participating Localities, but also to promote and enhance recreation, sports, and tourism activities in the geographic area of the Participating Localities and shall have all powers of such an authority under the Act.

6. This Resolution will be effective immediately upon adoption by the Governing Body of each Participating Locality and the Authority's creation shall be effective

immediately upon the date on which all Participating Localities have adopted this Concurrent Resolution.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

HistTriRecFacAuth-res

CITY OF WILLIAMSBURG

Office of the City Manager

September 21, 2021

Neil Morgan
York County Administrator
224 Ballard Street
Yorktown, Virginia 23690

Scott Stevens
James City County Administrator
101 Mounts Bay Road, Building D
Williamsburg, Virginia 23185

Mr. Morgan and Mr. Stevens:

This letter serves to formally invite James City County and York County to participate with the City of Williamsburg in the Historic Triangle Recreational Authority. The Authority will be charged with leasing the Colonial Williamsburg Visitor Center property, developing recreational assets, and managing those assets for the benefit of our residents and visitors.

Background:
Since 2014, the concept of a regional field house has been under review by our localities. The Williamsburg Hotel & Motel Association (WHMA) has long advocated for this effort as a collection of lodging owners who feel such a complex would improve overnight stays. Numerous studies have been completed at the direction of WHMA, demonstrating the potential positive impacts of a sports facility. Despite the potential positive impact for the region, the project has never advanced due to the financial requirements of acquiring land, facility construction, and long-term operations. The 2018 passage of SB942 provided the Historic Triangle with an additional half percent of sales tax for regional tourism promotion and a half percent of sales tax for locality use. The City of Williamsburg committed its share of the realized new revenues to an annual grant program to increase tourism products and improve tourism trade inside the City and region. 2019 was the first year of the grant program, and the City received 22 applications, invited 11 of those to proceed with the application, and awarded $2,239,153 to seven projects. One such project is the WHMA application for the design and construction of a regional sports facility. Through consideration of the WHMA application, the City has committed design/study funding for each of the last two years and the debt service for one-half of the construction costs of the sports facility.

Action Steps:
The City identified a series of steps that would allow the project to be methodically planned and concurrently evaluated for success before committing to construction. The following steps have been completed:

(1) The Historic Triangle Sports Advisory Committee (HTSAC), comprised of Chief Administrative Officers, appropriate Parks and Recreation staff, tourism staff members, economic development staff, and a representative from WHMA, met to discuss and define the required local programming elements. Such elements included the number and specifications for hard courts, recreation fields, aquatic features, play areas, training elements, therapy spaces, medical service areas, meeting space requirements, and performance venue needs. This step included consultation with the public-school divisions and William & Mary to review and provide input on other strategic needs that should be considered part of a regional facility.

(2) The City selected a sports tourism consultant and an economist to evaluate the defined local programming schedule for applicability and success in drawing sports tourism events to the facility annually. This initial analysis included direct and indirect revenues, attendance estimates, market competition reviews, and suggested recruitment strategies.

(3) HTSAC convened to review contending sites inside the City of Williamsburg for the location of the regional sports facility and rank them in order of preference. This step included consulting with local public-school divisions and W&M. Additional action items consisted of revising earlier projections for revenue and competitiveness to include analysis of the sites selected in order of preference and developing

401 Lafayette Street, Williamsburg, Virginia 23185-3617 / (757) 220-6180 / fax (757) 259-3796 / atrivette@williamsburgva.gov

construction and operational costs for the chosen locations. A final component of this step was creating a partnership agreement outlining the roles of each participating entity and the financial commitments required.

The remaining steps include:

(4) The locality governing bodies will be invited to participate in the regional Authority. This action step will include approval of the formative documents for the Historic Triangle Recreational Authority
(5) The Authority will negotiate control of the selected site (as needed) and issue a design/build RFP or respond to PPEA submissions for the facility.
(6) General Assembly revision of §58.1-603.2 Code of Virginia to redirect maintenance of effort funding to the Historic Triangle Recreational Authority
(7) Based on the outcome of the RFP or PPEA process, the Authority will seek financial commitment from the local governing bodies in the form of a Memorandum of Agreement (MoA) establishing the financial partnership of all three jurisdictions.

HTSAC:

Programming

The Historic Triangle Sports Advisory Committee met in March of 2020 to review programming needs and discuss the potential sites for a shared regional sports facility. The committee's inclusive membership allowed all interests to be represented. The outcome of this work included the recommendation from the parks and recreation departments that the facility should house no fewer than 12 regulation basketball courts that could be converted for volleyball and other court sports. This program plan would meet the community's needs and provide a space for a successful sports tourism venue. The consultant studies of the project support this recommendation.

Location

The HTSAC reviewed numerous potential locations for the regional sports center. This review led to a complete evaluation of four sites. Ultimately one site was the clear best choice. The group selected the Colonial Williamsburg Visitor Center as the desired location because of its central proximity to all three jurisdictions' commercial areas, ease of access from I-64, and available space for supporting uses to make the center more competitive for sports tourism opportunities.

Recommendation

The HTSAC met on August 19, 2021, to review the work of two consultants hired to evaluate the planning and economics of the proposed facility. The group also discussed the formative documents for the proposed Authority, the financial commitments necessary from the three localities, and the potential structure of a land lease for the property. The committee unanimously recommended the project proceed forward with presentations to the elected bodies of all three localities.

Financial Analysis:

The City contracted with Victus Advisors to update and verify the results of the previous field house study completed by Sports Facility Advisors. Additionally, the City contracted with HVS Convention, Sports & Entertainment Facilities Consulting (HVS) to provide an independent evaluation of the Victus Advisors' assumptions and complete a more robust economic impact assessment. The outcomes of these assessments are positive. The estimated operating deficit expected with such a publicly owned facility has decreased from the 2017 and 2019 analyses of costs completed by SFA. The direct and indirect spending by visitors further offsets losses at the facility to make the project viable.

The annual operating costs remain estimates. The completed studies by Victus Advisors and HVS indicate that the operational model favoring sports tourism with community use will create an annual operating deficit of $481,700. HVS estimates that the annual tax revenues generated using only local sales and use tax, lodging tax, and the per room night tax will be $1,362,800. This estimate does not include meals tax revenues.

Regional Financial Commitment:
The success of this project is dependent on regional support. The City's commitment to funding for the project is designed to satisfy half of the estimated debt service following the decision to proceed with construction. It is hoped that the Greater Williamsburg Tourism Council will provide the balance of the regional tourism product development fund for capital costs. We will also seek a legislative amendment for the future maintenance of effort funds to be redirected to the Authority to satisfy any remaining capital debt service.

The most significant obstacle to completing the project is the anticipated operating costs. The City acknowledges that the facility is unlikely to profit or satisfy its expenses through directly generated revenues. However, the indirect gains generated in each of our localities will offset our financial commitments toward operating the facility and help to reduce the burdens of accepting the capital costs.

The annual financial contribution shall include: (1) the City paying half of the annual debt service for construction ($1,200,000 annually) This commitment stands as a yearly pledge to the project operating or debt service costs, and any excess funds will be available for use by the Authority.

The annual financial contribution may include: (2) the Greater Williamsburg Tourism Council paying the balance of the regional tourism product development fund toward yearly debt service for construction, (3) the redirection of maintenance of effort funds to the Authority to satisfy half of the annual debt service payment for capital construction, (4) York County paying half of the annual operating deficit, and (5) James City County paying half of the annual operating deficit.

The locality financial commitment will not be attained until the Authority has initiated the RFP/PPEA process for construction. Financing the project will depend on a binding financial commitment from all involved parties before issuing bonds. The elected bodies will be asked to execute a MoA outlining annual financial responsibilities. The MoA will prescribe, subject to approval by the Greater Williamsburg Tourism Council, County Boards of Supervisors, and the City Council, that the City of Williamsburg and the Greater Williamsburg Tourism Council will annually contribute to the Authority the funds necessary to service the debt for the facility's construction. The MoA further details that the Counties will provide half of the annual operating deficit. The yearly operational deficit consists of four elements. The first is the actual operating costs deficit (if any) for the facility. The second and third are any necessary contributions for operating and capital reserves, and the final component is the lease payment for the property. Given the initial performance analysis prepared by Victus and verified by HVS, we expect this to be $500,000 in a stabilized year, but that amount shall not exceed $750,000 per County per year.

Below is an example of the financing formula applied to the initial project: (subject to approvals)

i. Capital Construction Costs - $45 million (debt service)
    1. The City of Williamsburg - $1.2 million annually – committed (excess available to the Authority)
    2. Greater Williamsburg Tourism Council - $5 million one-time transfer (balance of the regional tourism product development fund)
    3. Historic Triangle Recreational Authority - $1.2 million annually (Maintenance of Effort funds required by §58.1-603.2 Code of Virginia) *legislative amendment required*
ii. Operating Costs - $1,978,900 Annually (based on a stabilization year)
    1. Annual contribution to Operating Reserve - $200,000
    2. Annual contribution to Capital Reserve - $118,300
    3. Annual Lease Payment - $200,000
    4. **Total annual operating costs = $2,497,200**
iii. Operating Revenues - $1,497,200 Annually (based on stabilization year)
    1. Annual JCC Supplement – $500,000 (capped at $750,000)
    2. Annual York Supplement - $500,000 (capped at $750,000)
    3. **Total annual revenues = $2,497,200**

Maintenance of Effort:
We will need to seek an amendment to §58.1-603.2 of the Code of Virginia to create paragraph D (3), which reads:

This legislation does not intend to reduce the funding dedicated by the subject localities to regional tourism promotion and product development. The subject localities shall annually allocate a total sum of $1,978,600 (City of Williamsburg Contribution $800,000, James City County Contribution $740,000, and York County Contribution $438,600) which shall be dispersed as follows: (1) $126,600 to the Greater Williamsburg Tourism Council (2) $402,000 to the Greater Williamsburg Chamber of Commerce, and (3) $1,450,000 to the Historic Triangle Recreational Authority.

This action will provide the Authority with the future maintenance of effort funding, less amounts committed to the Tourism Council and the Greater Williamsburg Chamber of Commerce, to be used as a match for the City of Williamsburg's annual debt service payment. Excess funds shall be held by Authority and expended at its sole discretion.

The Authority:
Board of Directors
The Historic Triangle Recreational Authority shall have voting members from the City of Williamsburg, James City County, and York County. The enabling statutes require that the Authority Board of Directors consist of at least five (5) members. Each locality shall appoint two members. It is anticipated that the initial appointees shall be the Chief Administrative Officer and either the Parks and Recreation Director or the Economic Development Director of each locality. Additionally, the Authority may request that Colonial Williamsburg be made a member of the Board of Directors as a substantial stakeholder. Later, members might be added to include William & Mary and the Williamsburg Hotel Motel Association
First Meeting
At the first meeting, anticipated in November of 2021, the Board of Directors shall appoint officers, adopt PPEA guidelines, and engage a financial advisor. Should any PPEA proposals be submitted to the Authority, they may be considered at this first meeting.

Schedule:
The City of Williamsburg publicly announced its intention to pursue this regional effort with the commitment of funds for the WHMA application in 2020. Since that time, there has been substantial private sector interest in the development opportunity. That interest was further defined during the 2020 State of the City Address. It is not unreasonable to expect an unsolicited PPEA proposal within days of the action required to form the Historic Triangle Recreational Authority. The Authority would then proceed with the PPEA process as defined by the State of Virginia, and construction could begin on the site within one year. This schedule allows four months for PPEA acceptance, six months for preliminary design and estimation, and two months for financing.

Request:
I have attached the formative documents for the Historic Triangle Recreational Authority and the Memorandum of Agreement. When approved by the City Council, the James City County Board of Supervisors, and the York County Board of Supervisors, these documents allow the project to proceed to the construction phase. Please let me know when the Board of Supervisors can consider these actions and how you would like the City to participate in the process?

The City remains confident that this project will serve as yet another primary attraction for the region. We look forward to this exciting partnership with our strategic partners.

I look forward to your response.

Sincerely,

Andrew O. Trivette
City Manager
City of Williamsburg

AOT/ms

CC: W&M President, Katherine Rowe; Colonial Williamsburg President, Cliff Fleet; WHMA Executive Director, Ron Kirkland

AGENDA ITEM NO. G.6.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Thomas Wysong, Senior Planner II

SUBJECT: SUP-19-0006. Hazelwood Farms - The Village Center

ATTACHMENTS:

	Description	Type
🗋	Staff Report	Staff Report
🗋	1. Resolution	Resolution
🗋	2. Location Map	Exhibit
🗋	3. Master Plan	Exhibit
🗋	4. Design Guidelines	Backup Material
🗋	5. Community Impact Statement	Backup Material
🗋	6. Traffic Impact Analysis	Backup Material
🗋	7. DRW Transportation Memos	Backup Material
🗋	8. Water and Sewer Graphic	Backup Material
🗋	9. Proposed Transportation Improvement Map	Exhibit
🗋	10. Public Input	Backup Material
🗋	11. Unapproved minutes from the October 6, 2021 Planning Commission meeting	Backup Material

REVIEWERS:

Department	Reviewer	Action	Date
Planning	Holt, Paul	Approved	10/25/2021 - 9:10 AM
Development Management	Holt, Paul	Approved	10/25/2021 - 9:10 AM
Publication Management	Daniel, Martha	Approved	10/25/2021 - 9:23 AM
Legal Review	Kinsman, Adam	Approved	10/25/2021 - 3:58 PM
Board Secretary	Fellows, Teresa	Approved	10/26/2021 - 2:54 PM
Board Secretary	Purse, Jason	Approved	11/2/2021 - 3:49 PM
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:54 PM

SUMMARY FACTS

Applicant:	Mr. Tim Trant, Kaufman and Canoles
Land Owners:	Hazelwood Farms LLC and Hazelwood R M III Trustee et ALS
Proposal:	A request for a Special Use Permit (SUP) on property located at 9505, 9517, 9689, and 9701 Old Stage Road, further identified as James City County Tax Map Nos. 0440100009, 0440100008, 0440100003, and 0440100002, respectively, and that portion of 9400 Barnes Road lying north of Interstate 64 (I-64), further identified as the portion of James City County Tax Map No. 0430100017 lying north of I-64 (collectively, the "Properties"). The application requests the following specially permitted uses on the Properties: • a convenience store which sells and dispenses fuel; • extension of public water and sewer facilities; • commercial buildings or groups of buildings that exceed 10,000 square feet of floor area pursuant to County Code Section 24-11(a)(2) and within the square footage limits shown on the master plan; • commercial buildings or groups of buildings, not including office uses, which generate, or would be expected to generate, a total of 100 or more additional trips to and from the site during the peak hour of the operation pursuant to County Code Section 24-11(a)(3); and • any buildings, additions, and expansions requiring an SUP pursuant to County Code Section 24-11(b).
Locations:	9505 Old Stage Road 9517 Old Stage Road 9689 Old Stage Road 9701 Old Stage Road 9400 Barnes Road (portion north of I-64)
Tax Map/Parcel Nos.:	0440100009 0440100008 0440100003 0440100002 0430100017
Current Zoning:	B-1, General Business
Project Acreage:	The five parcels together total approximately 79 acres
Comprehensive Plan:	Mixed Use Stonehouse
Primary Service Area: (PSA)	Inside
Staff Contact:	Thomas Wysong, Senior Planner II

PUBLIC HEARING DATES

Planning Commission:	October 6, 2021, 6:00 p.m.
Board of Supervisors:	November 9, 2021 5:00 p.m.

FACTORS FAVORABLE

1. Staff finds the proposal to be consistent with both the adopted 2035 Comprehensive Plan and draft 2045 Comprehensive Plan.

2. The applicant has submitted a Traffic Impact Analysis (TIA) accounting for the proposed commercial development. The proposed SUP conditions for multiple transportation commitments are intended to mitigate the proposed impacts of the development, improve the adjacent transportation network, and establish bicycle and pedestrian connections within the development and adjacent to nearby parcels.

3. The applicant has submitted design guidelines that adhere to the guidance in the 2035 Comprehensive Plan for Mixed Use development and exceed the requirements of the B-1, General Business Zoning District.

4. SUP conditions are proposed which are anticipated to mitigate impacts for each use.

5. With the proposed SUP conditions, staff finds that the proposal will not negatively impact surrounding development.

6. This proposal passes the Adequate Transportation Facilities Test.

7. Impacts: See Impact Analysis on Pages 9-12.

FACTORS UNFAVORABLE

1. Impacts: See Impact Analysis on Pages 9-12.

2. The proposal does not fully align with the *Regional Bikeways Plan*.

SUMMARY STAFF RECOMMENDATION

Staff recommends that the Board of Supervisors approve the application, subject to the proposed conditions.

PLANNING COMMISSION RECOMMENDATION

At its October 6, 2021 regular meeting, the Planning Commission recommended approval of the application with the proposed conditions by a vote of 6-0.

CHANGES SINCE PLANNING COMMISSION MEETING

None.

PROJECT DESCRIPTION

Mr. Tim Trant has applied on behalf of Hazelwood Farms LLC and Hazelwood R M III Trustee et ALS for an SUP for the following uses:

- a convenience store which sells and dispenses fuel;
- extensions of public water and sewer facilities;
- commercial buildings or groups of buildings that exceed 10,000 square feet of floor area pursuant to County Code Section 24-11(a)(2) and within the square footage limits shown on the master plan;
- commercial buildings or groups of buildings, not including office uses, which generate, or would be expected to generate, a total of 100 or more additional trips to and from the site during the peak hour of the operation pursuant to County Code Section 24-11(a)(3); and
- any buildings, additions, and expansions requiring an SUP pursuant to County Code Section 24-11(b).

The proposed SUP conditions would only allow for two fast food restaurants, one convenience store with fuel sales, and one bank with drive-through on the property.

Site Layout

The Hazelwood Farms Village Center is envisioned as an entertainment, retail, office, and business support complex. This SUP is being sought to permit up to 510,000 square feet of various retail, grocery, bank, office, self-storage, restaurant, hotel, convenience store, fuel station, and other commercial uses consistent with the B-1 zoning within a common development on these properties. The Village Center is a long-term project, meaning the applicant does not currently know the end users of the site or the exact locations of each use being proposed. As such, the proposed master plan and submitted design guidelines show the general layout of the Village Center and the uses designated for each of the five Land Bays of the property. Regarding public water and sewer, the site design proposes to extend a water transmission main and sewer force main from Fieldstone Parkway and under Route 30 to serve the development within the Village Center (See Attachment No. 7 for Improvement Graphic).

The site design proposes access to the property solely through the two entrances from Route 30 shown on the master plan. Commercial uses are proposed within each of the five Land Bays. A multiuse path is proposed along the frontage of the Property on Route 30 and connecting to interior commercial development. Land Bays 1, 2, and 3, which abut Route 30, are designated as the location of the "Frontage Retail Area," in which the applicant is proposing commercial use. The proposed SUP conditions limit the number of those particular uses that might have a negative impact on neighboring properties and community character. Specifically, the following limits are proposed in the conditions:

- Fast food restaurants with drive-throughs: two maximum
- Convenience stores with fuel sales: one maximum
- Banks with drive-throughs: one maximum

The applicant has submitted design guidelines for all development within the Village Center, which commit to bicycle and pedestrian connectivity, designing for public access improvements, parking standards, building pattern and form, and special design requirements. Per the illustrative layout detailed in the submitted design guidelines, the applicant envisions a series of inline shops, a food store, and a theatre as potential uses for Land Bay 5. A hotel is also shown as a potential use for Land Bay 4.

Public Transportation: Vehicular

The scale of this proposal requires the submittal of a TIA. The TIA examines the existing conditions of vehicular traffic for roads and intersections serving and impacted by the proposal of the Enterprise Center and the Village Center and the projected traffic impacts of the Hazelwood proposal on these roads and intersections with proposed improvements on these roads and intersections. For the Village Center, the Route 30/Fieldstone Parkway intersection, Route 30/Eastbound Ramp A intersection, and Route 30/Barnes Road intersection are the three existing intersections analyzed within the TIA. These intersections are not signalized or programmed for improvement by the Virginia Department of Transportation (VDOT). Each are expected to have increased demand as a result of the development of the Village Center. SUP conditions are proposed requiring a multi-stepped approach to improve the road network and mitigate the traffic impacts that are anticipated for the Village Center.

The first step is completing the TIA and gaining approval from VDOT for this analysis. The TIA has been reviewed by the County, Kimley-Horn and Associates (KHA), and VDOT, with KHA recommending approval and VDOT issuing approval. The approved TIA serves as the guide for the proposed improvements accompanying this SUP application.

The second step is ensuring the appropriate improvements are reviewed and scheduled for implementation. Per the proposed SUP conditions, the applicant is guaranteeing a Signal Justification Report (SJR) for the Route 30/Fieldstone Parkway and Route 30/I-64 Eastbound off-ramp intersections and Phasing Plan for both intersections will be approved prior to the submittal of the first site plan for the Village Center. The developer will be required to meet with the County and VDOT prior to submittal of both items to discuss traffic study requirements and review any updated road improvements that have occurred, been proffered by others, or funded by VDOT.

The third step is utilizing the approved Phasing Plan to ensure the necessary road improvements are installed as the Village Center is developed. The Phasing Plan is conditioned to include the improvements within the TIA, which are shown on the master plan and are intended to mitigate traffic impacts. Please see the table on the next page for a summary of the Level of Service (LOS) analysis of road facilities conducted within the TIA.

Hazelwood TIA LOS Analysis						
Road/Intersection (Project site impacted in bold)	*Current Status*	*Current Overall LOS*	*2030 Projected Overall LOS Without Hazelwood*	*Proposed Hazelwood Improvement (Proffered or Conditioned)*	*2030 Projected Overall LOS With Hazelwood*	*2030 Projected Overall LOS With Hazelwood, Moss Creek, and Stonehouse Developed**
Route 30/Fieldstone Parkway **Village Center**	Unsignalized	Level C or >	Level C or >	- Signalization. - Addition of double left-turn lanes on north-bound Route 30 at Property entrance. - Addition of right-turn lane on southbound Route 30 at Property entrance. - Property entrance with four exit lanes and two entering lanes. - Shared use path.	Level C or >	Level C
Route 30/I-64 Westbound Ramps **Enterprise Center**	Unsignalized	Level C or >	Level C or >	- Signalization. - Adjustment of pave-ment for improvement.	Level B	Level B
Route 30/I-64 Eastbound Ramp A	Unsignalized	Level B or >	Level B or >	- Signalization.	Level B	Level A
Route 30/Old Stage Road **Enterprise Center**	Unsignalized	Level C or >	Level C or >	- Signalization. - Addition of second left-turn lane on northbound Route 30. - Extension of right-turn lane on southbound Route 30 at Route 746 Old Stage Road to make a continuous lane with merging lane from	Level B	Level C

				I-64 off ramp onto Route 30. - Third northbound through lane on Route 30 at approach to Route 746 Old Stage Road and continuing to drop off lane at ramp to I-64 east. - Improvements to Route 746 Old Stage Road as shown on the master plan. - Adding second west-bound approach lane and taper on VDOT frontage road. - Restriction to two entrances on Old Stage Road as shown on master plan.		
Route 30/Barnes Road **Village Center**	Unsignalized	Level C or >	Level C or >	- None, Remain Unsignalized.	Level D or >	Level F**
I-64 Merges/Diverges **Enterprise Center/Village Center**	Unsignalized	Level B or >	Level B or >	- See continuous turn lane proposed for Route 30/Old Stage Road.	Level B or >	Level C or >

**90/100 Cycles analysis from TIA referenced in this column. TIA also includes 70-second cycle analysis, but 90/100 cycle deemed more appropriate.*

***See DRW Consultants LLC Memo dated 1/14/2020 for context on this intersection. The possibility of a U-turn at the signalized Fieldstone Parkway is presented as a potential solution to this LOS issue and can be expected to be examined during the SJR review of the Fieldstone Parkway and Route 30 intersection.*

In addition to the improvements detailed in the preceding table, the proposed SUP conditions restrict access to Barnes Road (except in the case of emergencies) and to include a public bus stop with the first site plan for development of the property. In order to ensure development does not exceed the bounds of the TIA, the proposed SUP conditions require that Property cannot exceed 1,596 PM peak hour trips as determined by the most recent edition of the Institute of Transportation Engineers Trip Generation Manual (the ITE Manual) at the time of each site plan approval for the development of the Property. Peak hour trips will be calculated and submitted with each development plan for the property.

Roadway congestion information from the 2045 Comprehensive Plan is presented below. As shown in the table, the most recent LOS data for each of the three facilities related to this proposal have a LOS in the A-C range. For each of these facilities, this LOS is anticipated to remain in this range in 2045.

Future Roadway Congestion Level

Facility	From	To	2017 Weekday Volume	2045 Weekday Volume	2017 PM Peak Period LOS	2045 PM Peak Period LOS
Barhamsville Road (Route 30)	I-64	Route 60	19,004	32,280	A-C	A-C
Old Stage Road (Route 30)	New Kent CL	Barnes Road (Route 601 S)	14,943	19,225	A-C	A-C
Old Stage Road (Route 30)	Barnes Road (Route 601 S)	I-64	8,315	13,680	A-C	A-C

The County adopted the Adequate Transportation Facilities Test by resolution on August 14, 2018. This policy requires for a proposed SUP or rezoning to be tested during the application process to ensure that transportation facilities are adequate to mitigate traffic impacts. Per the adopted policy, a proposed rezoning or special use permit application will pass the test if:

i. No off-site improvements are required by the TIA that is approved by both the Planning Director and the Virginia Department of Transportation; or
ii. All off-site improvements recommended by a TIA that is approved by both the Planning Director and the Virginia Department of Transportation are guaranteed in a form approved by the Planning Director and County Attorney.

The transportation improvements required by the SUP Conditions (which are recommended within the approved TIA) accompanying this application ensure that this proposal passes the Adequate Transportation Facilities Test.

PLANNING AND ZONING HISTORY

All of the parcels subject to this applicant are zoned B-1, which has been the zoning for the property since at least the 1980s.

SURROUNDING ZONING AND DEVELOPMENT

North: A-1, General Agricultural
MU, Mixed Use

West: A-1, General Agricultural

South: A-1, General Agricultural
B-1, General Business

East: PUD-R, Planned Unit Development Residential

The subject Property is located east of Barnes Road (Route 601), north of I-64, west of Old Stage Road, and west of Old Stage Road (Route 30). The Moss Creek Commerce Center and Land Bay 5 of the Stonehouse development are located to the east of the property on the other side of Route 30. Both of these projects are currently undeveloped. The Moss Creek parcel is zoned for Mixed Use and can permit development in accordance with the adopted Moss Creek Master Plan, which includes office/warehouse, a convenience store with fuel sales, a restaurant and retail uses. Per the adopted Stonehouse Master Plan, Land Bay 5 is designated for up to 180 residential units.

IMPACT ANALYSIS

Impacts/Potentially Unfavorable Conditions	Status *(No Mitigation Required/Mitigated/Not Fully Mitigated)*	Considerations/Proposed Mitigation of Potentially Unfavorable Conditions
Public Transportation: Vehicular	Mitigated	- See discussion on Page 3.
Public Transportation: Pedestrian/Bicycle	Not Fully Mitigated	- The County's *Pedestrian Accommodation Master Plan* requires a multi-use path along the southern frontage of Route 30. The Regional Bikeways Map proposes a bike lane along the southern frontage of Route 30. - Pursuant to Sec. 24-35 of the Zoning Ordinance, the proposed improvements shown on these maps are required to be shown on the site plan and installed at development. The bike lane will be further evaluated during the site plan review process. - The master plan proposed a multi-use path along the southern frontage of Route 30. Condition No. 4 requires the guarantee of this path prior to initial site plan approval. - Condition No. 15 ensures an internal traffic signage plan shall be submitted with site plans, which helps ensure pedestrian and cyclist safety. - Condition No. 17 requires internal pedestrian connections to be provided on the property.
Public Safety	No Mitigation Required	- Located within a six-minute radius of Fire Station 1. - The proposal does not generate impacts that require mitigation to the County's emergency services or facilities.
Public Schools	No Mitigation Required	- No residential units are proposed within the Village Center.
Public Parks and Recreation	No Mitigation Required	- No residential units are proposed within the Village Center.
Public Libraries and Cultural Centers	No Mitigation Required	- The proposal does not generate impacts that require mitigation to public libraries or cultural centers.
Groundwater and Drinking Water Resources	Mitigated	- The Village Center Master Plan proposes to use the existing James City Service Authority (JCSA) water main and sewer force main on Fieldstone Parkway. JCSA has reviewed and approved this conceptual proposal on the master plan, as well as the projected water and sewer flows within the CIS. The Master Plan shows a proposed public utility easement in the event that future looping of the water system under I-64 is pursued.

Impacts/Potentially Unfavorable Conditions	**Status** *(No Mitigation Required/Mitigated/Not Fully Mitigated)*	**Considerations/Proposed Mitigation of Potentially Unfavorable Conditions**
		Conditions - Condition No. 5 requires water conservation standards to be instituted and for the developer to consider designing the stormwater systems such that stormwater can be collected for irrigation. Furthermore, this condition prohibits the JCSA public water supply from being used for irrigation. - The conditions specific to convenience stores with fuel sales (Condition No. 20) require a Spill Prevention, Control and Countermeasures Plan be provided prior to issuance of a land disturbance permit. - The master plan includes the reservation of a corridor to accommodate a JCSA easement for a potential future water main loop.
Watersheds, Streams, and Reservoirs	Mitigated	- The master plan shows a conceptual layout for stormwater management facilities. This project is located within the Diascund Creek watershed. **Conditions** - Condition No. 19 requires the submittal of a Master Stormwater Management Plan meeting a higher standard than what is required by the County Ordinance.
Cultural/Historic	No Mitigation Required	- Per Section 24-145 of the Zoning Ordinance, an archaeological study and natural resource inventory will be required at the development plan stage.

Impacts/Potentially Unfavorable Conditions	**Status** *(No Mitigation Required/Mitigated/Not Fully Mitigated)*	**Considerations/Proposed Mitigation of Potentially Unfavorable Conditions**
Nearby and Surrounding Properties	Mitigated	**Conditions** - Condition No. 6 requires a 50-foot vegetated buffer along the Route 30 right-of-way. - Condition No. 7 requires a 50-foot vegetated buffer with additional ever-green plantings along I-64 to screen development in adjacent Land Areas. - Condition No. 8 requires a 100-foot vegetated buffer along the Barnes Road right-of-way to screen the project from nearby residential properties. - Condition No. 14 requires screening of all dumpsters, ground mounted HVAC, mechanical units, and cart corrals. - Condition No. 18 limits the height of lighting fixtures and states that lighting shall not be routinely illuminated at night. - Condition No. 20 (Convenience Stores with Fuel Sales) curtails outside displays, sale, or storage and intercom and speaker noise. - Condition No. 21 (Fast-Food Restaurants) curtails outside displays, sale, or storage and intercom and speaker noise.

Impacts/Potentially Unfavorable Conditions	**Status** *(No Mitigation Required/Mitigated/Not Fully Mitigated)*	**Considerations/Proposed Mitigation of Potentially Unfavorable Conditions**
Community Character	Mitigated	- Route 30 is designated as a Wooded Community Character Corridor. **Conditions** - The applicant has submitted design guidelines conditioned as part of this SUP. - Condition No. 3 prohibits a single building on the property from exceeding 70,000 square feet. - Condition No. 6 requires a 50-foot vegetated buffer along Route 30. - Condition No. 11 requires each site plan submitted to include the final architectural design for all buildings and include general elevations of the buildings, as well as the view of the building for all sides visible from Old Stage Road (Route 30) for the Director of Planning's review. - Condition No. 12 requires enhanced site design requiring a higher standard of façade design for certain buildings, parking lot design, location standards for drive-through uses, building footprint requirements, and design criteria for mini-storage warehouse use. - Condition No. 13 requires free-standing signage to be externally illuminated monument style signs not to exceed 8 feet in height, with brick base or similar material.

2035 Comprehensive Plan

The property is designated Mixed Use-Stonehouse on both the adopted 2035 Comprehensive Plan Land Use Map and the proposed 2045 Comprehensive Plan Land Use Map. The text for the specific Stonehouse Mixed-Use area from the 2035 and 2045 Comprehensive Plan is provided below:

"The principal suggested uses for the Stonehouse Mixed Use area are light industrial and office/business park. Except for the area between I-64 and Old Stage Road, commercial uses should be clearly secondary in nature, should be limited in scale, comprise a small percentage of the land area of the overall mixed use area, and be oriented towards support services that employees and residents in the Stonehouse area can utilize. The commercial uses should not be developed in a "strip" commercial fashion, but rather should be internally oriented with limited and shared access to Route 30. For the area between I-64 and Old Stage Road, community-scale commercial uses (such as shopping center, hotel, restaurant and office uses) consistent with prominent interstate interchange access and in support of surrounding residential development are envisioned. For the area between I-64 and Old Stage Road, residential is not a recommended use.

Staff finds the proposed Village Center is consistent with this language. The proposed development is for community-scale commercial uses, includes design guidelines that prohibit "strip development" and includes internal orientation of the site, and does not contain residential development.

Draft 2045 Comprehensive Plan

The 2045 Comprehensive Plan update for the Mixed Use Stonehouse designation includes one additional sentence for the Stonehouse Mixed Use Area: "Future development in the Stonehouse area will be conditioned on the provision of adequate transportation access."

Staff finds the proposed Village Center is consistent with this language, given the approved TIA and proposed SUP transportation conditions for the development.

The overall Mixed Use designation was revised and updated as part of the 2045 Comprehensive Plan Update to include general guidelines for overall development, the mix of uses, recommended densities and intensities, etc. The Village Center does not advance the complete communities concept (with recommended density and intensity) put forth within the 2045 Comprehensive Plan; however, staff finds that the development of the Village Center, when taken in context for all lands designated Stonehouse Mixed Use, is generally consistent with the intent of this designation in the 2045 Comprehensive Plan, which is to "create vibrant urban/small town environments that bring compatible land uses, public amenities, and utilities together at various scales. These developments should create pedestrian-friendly, complete communities, with a variety of uses that enable people to live, work, play, and shop in one place." Staff also finds that the Village Center aligns with the recommended uses and allocation for the Stonehouse Mixed Use designation, which call for 20-50% residential, 50-80% for non-residential, 5% public/civic area, and 10% open space and recreation area for the entire area on the Future Land Use Map designated for Stonehouse Mixed Use. As such, staff finds this proposal to be generally consistent with the draft 2045 Comprehensive Plan.

Goals Strategies and Actions

Staff also finds that this proposal generally aligns with multiple Goals, Strategies, and Actions (GSAs) within the Comprehensive Plan.

<u>Land Use</u>

This application aligns with multiple GSAs within the Land Use section. The GSAs in the Land Use section supports master-planning that emphasizes the economic potential of interchange areas by

promoting office and industry uses, encourages multiple uses commercial and industrial uses within nodes inside the PSA, and promotes the inclusion of bicycle and pedestrian facilities within the new developments.

Economic Development

This application aligns with multiple GSAs within the Economic Development section. The GSAs in the Economic Development section supports the development of a diverse economy, including retail and non-retail uses.

STAFF RECOMMENDATION

Staff recommends that the Board of Supervisors approve the application, subject to the proposed conditions.

TW/md
SUP19-6HazelwdFmsVllgCtr

Attachments:
1. Resolution
2. Location Map
3. Proposed Master Plan
4. Proposed Design Guidelines
5. Community Impact Statement
6. Traffic Impact Analysis
7. DRW Memo
8. Water and Sewer Graphic
9. Transportation Improvements Map
10. Public Input Received
11. Unapproved minutes from the October 6, 2021 Planning Commission meeting

R E S O L U T I O N

CASE NO. SUP-19-0006.

HAZELWOOD FARMS-THE VILLAGE CENTER

WHEREAS, the Board of Supervisors of James City County, Virginia, has adopted by Ordinance specific land uses that shall be subjected to a Special Use Permit (SUP) process; and

WHEREAS, Mr. Tim Trant of Kaufman and Canoles has applied for an SUP on behalf of Hazelwood Farms LLC and Hazelwood R M III Trustee et ALS on property located at 9505 Old Stage Road, 9517 Old Stage Road, 9689 Old Stage Road, and 9701 Old Stage Road, further identified as James City County Real Estate Tax Map Parcel Nos. 0440100009, 0440100008, 0440100003, 0440100002, and 0430100017 (the "Property") to allow for: a convenience store which sells and dispenses fuel; any commercial building or group of buildings that exceeds 10,000 square feet of floor area pursuant to Section 24-11(a)(2) of the County Code; any commercial building or group of buildings, not including office uses, which generates, or would be expected to generate, a total of 100 or more additional trips to and from the Property during the peak hour of the operation pursuant to Section 24-11(a)(3) of the County Code; and buildings, additions, and expansions requiring a special use permit pursuant to Section 24-11(b) of the County Code; and the extension of public water and sewer; and

WHEREAS, the Planning Commission, following its public hearing on October 6, 2021, recommended approval of Case No. SUP-19-0006 by a vote of 6-0; and

WHEREAS, a public hearing was advertised, adjoining property owners notified, and a hearing conducted on Case No. SUP-19-0006; and

WHEREAS, the Board of Supervisors of James City County, Virginia, finds this use to be consistent with good zoning practices and the 2035 Comprehensive Plan Land Use Map designation for the Property.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, after consideration of the factors in Section 24-9 of the James City County Code, does hereby approve the issuance of Case No. SUP-19-0006 as described herein with the following conditions:

1. *Master Plan*. This SUP shall be valid for approximately 79.06 acres of property located at 9505 Old Stage Road, 9517 Old Stage Road, 9400 Barnes Road, 9689 Old Stage Road, and 9701 Old Stage Road, further identified as 0440100009, 0440100008, a portion of 0430100017 (situated north of Interstate 64), 0440100003, and 0440100002, respectively (collectively referred to as the "Property"). Development of the Property shall be generally in accordance with the master plan entitled "Special Use Permit For Village Center at Hazelwood Farms (2020)" prepared by AES Consulting Engineers, dated 3/12/21 (the "Master Plan") and design guidelines entitled "Design Guidelines for Hazelwood Farms Village Center," prepared by Hopke & Associates, dated 09/22/21 (the "Design Guidelines"), with any deviations considered per Section 24-23(a)(2) of the Zoning Ordinance, as amended.

2. *Specially Permitted Uses*. This SUP shall be valid for (1) a convenience store which sells and dispenses fuel, (2) any commercial building or group of buildings that exceeds 10,000 square feet of floor area pursuant to Section 24-11(a)(2) of the County Code, (3) any commercial building or group of buildings, not including office uses, which generates, or would be expected to generate, a total of 100 or more additional trips to and from the site during the peak hour of the operation pursuant to Section 24-11(a)(3) of the County Code, and (4) buildings, additions, and expansions requiring a special use permit pursuant to Section 24-11(b) of the County Code; however, such commercial building, group of buildings, and additions or expansions thereto shall be limited to those permitted uses under Section 24-390 of the County Code, as amended, and those special uses permitted by this SUP. Uses within the specially-approved square footage are further subject to the following restrictions:

   A. There shall be no more than two fast-food restaurants, one convenience store with fuel sales, and one bank with a drive-through on the Property.
   B. The uses in subsection (A) shall only be located in Land Bay 1, Land Bay 2, or Land Bay 3, as shown on the Master Plan, and shall not be located within 150 feet of Barnes Road.
   C. Drive-through windows on the Property shall be screened so as to not be visible from Route 30 with landscaping and/or fencing as determined by the Director of Planning.
   D. Any fast-food restaurant shall also be subject to Condition No. 22 of this SUP.

3. *Square Footage Limitations*. Development of the Property shall not exceed 510,000 square feet of maximum gross floor area. No single building on the Property shall exceed 70,000 square feet. Building coverage for each land bay shall not exceed 30%. In order to accurately track the progression of the development of the Property and requirements of this condition, each site plan or subdivision plan for any development within the Property shall include a then-current accounting of the square footage of development that has previously been approved by the County and that is proposed by the plan being submitted for review. Such accounting shall be in a form reasonably acceptable to the Director of Planning.

4. *Traffic Improvements.*
   A. *SJR Required:* Prior to the submittal of a site plan for development within the Property, a Signal Justification Report (or such successor analysis or other requirement as may then be in effect) in accordance with the Virginia Department of Transportation (VDOT) regulations (the "SJR") for the Rt. 30/1-64 eastbound ramp junction intersection and a phasing plan ("Phasing Plan") for the following intersections shall be submitted to VDOT and the Planning Division for review and approval:

      i. Rt. 30/Fieldstone Parkway; and
      ii. Rt. 30/I-64 eastbound off-ramp junction.

   B. *SJR & Phasing Plan Scoping Meeting*: Prior to submittal of the SJR, a scoping meeting shall be conducted with VDOT and the Planning Division to determine the scope of the SJR.

   C. *SJR Completion & Road Improvement Plans*: Prior to final approval of the first site plan for development within the Property:

i. The SJR must be approved by VDOT and the Director of Planning or designee;
ii. The Phasing Plan for the improvements recommended in the approved SJR and, except to the extent superseded by the recommendation of the approved SJR, the improvements listed in Condition No. 4(F) below (collectively, the "Traffic Improvements") must be approved by VDOT and the Director of Planning or designee;
iii. Road improvement plans containing the portion of the Traffic Improvements recommended by the Phasing Plan based on the then-proposed development of the Property shall be submitted to and approved by VDOT and the Director of Planning or designee; and
iv. The improvements reflected in the road improvement plans described in Condition C (iii) shall be completed or guaranteed in accordance with Section 15.2-2299 of the Virginia Code (or such successor provision) and the applicable provisions of the County Code of Ordinances (such performance assurances to be herein referred to as a "Guarantee" or "Guarantees") in a manner acceptable to the County Attorney.

D. *Subsequent Approvals:* Prior to approval of any site plan for development within the Property subsequent to the first site plan:

i. Road improvement plans containing the portion of the Traffic Improvements recommended by the Phasing Plan based on the then-proposed development of the Property shall be submitted to and approved by VDOT and the Director of Planning or designee; and
ii. The improvements reflected in the road improvement plans described in Condition D(i) shall be completed or Guaranteed in a manner acceptable to the County Attorney.

E. *Subsequent SJR Approval:* Any subsequent SJR approved by VDOT and the Director of Planning or designee for the locations in Condition A above shall be deemed substituted for the SJR approval specified in Condition C(i).

F. *Intersection Improvements:* The following traffic improvements shall be constructed in accordance with the Phasing Plan described above:

i. Rt. 30/Fieldstone Parkway:
   a. Signalization of the intersection, either as a new signal installation or as an addition to a signal installed by others, or other intersection control improvements as determined by VDOT;
   b. Addition of double left turn lanes on northbound Rt. 30 at Property entrance;
   c. Addition of right turn lane on southbound Rt. 30 at Property entrance; and
   d. Property entrance with four exit lanes and two entering lanes.
   e. Shared use path, in accordance with Condition (4)I.

ii. Rt. 30/Eastbound 1-64 off ramp:
   a. Signalization of the intersection, either as a new signal installation or as an addition to a signal installed by others, or other intersection control improvements as determined by VDOT; and
   b. Any adjustment of pavement required for signal installation, or other intersection control improvements as determined by VDOT.

iii. Second entrance (right turn in/out only) to property at approximately Sta. 321+25 will be permitted with a right turn lane on southbound Rt. 30 at this second entrance.

G. *Alternative Intersection Conditions:* If VDOT and the Director of Planning or designee, through SJR review, requires alternative intersection design at any location in Condition 4(F) above, then the improvements recommended by the approved SJR shall be substituted for the corresponding improvements listed in Condition 4(F).

H. *Existing Rt. 30 Crossover*: The second existing crossover on Rt. 30 along the Property frontage located between Fieldstone Parkway and 1-64 shall be closed pursuant to the SJR and Phasing Plan review or other VDOT access approval for the Property.

I. *Multi-Use Path*: A multi-use path (in accordance with Sec. 24-35(b) of the Zoning Ordinance) shall be included with all road improvement plans on southbound Rt. 30 from Barnes Road to 1-64 at approximately Sta. 337+25 and shall be Guaranteed prior to site plan approval for initial development on the Property. On the north side of the Rt. 30/Fieldstone Parkway intersection, a multi-use path (in accordance with Sec. 24-35(b) of the Zoning Ordinance) crossing Rt. 30 from the Village Center entrance and connecting to a future multi-use path in Moss Creek development will be constructed with Rt. 30/Fieldstone intersection improvements. Multi-use paths (in accordance with Sec. 24-35(b) of the Zoning Ordinance) will be located in public rights-of-way or within easements dedicated to public access and VDOT maintenance.

J. *Barnes Road:* There will be no direct vehicular access, other than emergency access, between the Property and Barnes Road. Emergency access shall be determined by the Director of Planning. Such emergency access shall be designed to cross the Barnes Road Buffer at or near a perpendicular angle to the property line, with clearing kept to the minimum necessary to accommodate the access.

K. *Bus Stops:* A public bus stop shall be included in the initial site plan submitted for development of the Property. If placed on a public road, the bus stop may include a bump out and will have connections to the multi-use path system. If placed within the private property parking lot, the bus stop will include landings for bus patrons and pedestrian connections to multi-use paths on public right of way. Bus stop design shall be coordinated with the Williamsburg Area Transit Authority (WATA) prior to site plan approval to meet their design standards for shelters and pull-offs. Prior to final site plan approval the bus stop location, design, and bus circulation shall be approved by WATA and the Director of Planning. The bus stop shall be completed or Guaranteed prior to issuance of a Certificate of Occupancy for the development shown on the initial site plan for the Property. The bus stop requirement set forth in this condition may be waived by the Director of Planning and the Executive Director of WATA.

L. *Trip Generation:* Development of the Property shall not exceed 1,596 PM peak hour trips as determined by the most recent edition of the Institute of Transportation Engineers Trip Generation Manual (the "ITE Manual") at the time of each site plan approval for the development of the Property. Accordingly, each site plan for the development of the Property shall, when submitted to the County for review, contain an accounting of the PM peak hour trip generation, as determined by the ITE Manual, associated with the development proposed by such site plan, all development shown on previously approved site plans for development of the Property (except to the extent the proposed site plan is in lieu of a previously approved site plan for development of the Property), and all development shown on site plans then under review by the County for development of the Property. No site plan for development of the Property shall be approved by the County which includes an amount of development that, together with all other development shown on previously approved site plans for development of the Property (except to the extent the proposed site plan is in lieu of a previously approved site plan for development of the Property), would generate more than 1,596 PM peak hour trips as determined by the ITE Manual. In determining and accounting for the foregoing PM peak hour trips:

i. Internal and pass-by capture shall be determined in accordance with VDOT standards, and;
ii. Traffic counts for completed and occupied development on the Property may, with the approval of the County's Director of Planning, be substituted for ITE Manual estimated trips.

5. *Conservation & Irrigation*. Water conservation standards shall be enforced on the Property. Water conservation standards shall be submitted to and approved by the James City Service Authority (JCSA) prior to each site plan approval. The standards may include, but shall not be limited to, such water conservation measures as limitations on the installation and use of irrigation systems and irrigation wells, the use of approved landscaping materials including the use of drought-tolerant plants where appropriate, and the use of water-conserving fixtures and appliances to promote water conservation and minimize the use of public water resources.. In the design phase, the developer and designing engineer shall take into consideration the design of stormwater systems that can be used to collect stormwater for outdoor water use for the entire development. Only surface water collected from surface water impoundments, or water taken from an underground cistern, may be used for irrigating common areas on the Property. In no circumstances shall the JCSA public water supply be used for irrigation. If the Owner demonstrates to the satisfaction and approval of the General Manager of the JCSA through drainage area studies and irrigation water budgets that the impoundments cannot provide sufficient water for all irrigation, the General Manager of the JCSA may, in writing, approve a shallow (less than 100 feet) irrigation well to supplement the water provided by the impoundments or cisterns.

6. *Route 30 Buffer*. Prior to final approval of any site plan in Land Bay 1, Land Bay 2, or Land Bay 3, the Director of Planning or designee shall review and approve a landscape plan for the entirety of the Land Bay. The landscape plan for the Land Bay shall provide a 50-foot vegetated community character corridor buffer along the Route 30 right-of-way in accordance with Section 24-98 of the Zoning Ordinance. Any disturbance or grading into this area shall be the minimum necessary and shall require additional plantings consisting of no less than 125% of the required plantings per the Ordinance or as may be otherwise approved by the Director of Planning, such that at maturity the plantings match or exceed the mature height and density of trees and shrubs within the buffer. In areas of the buffer that are currently comprised of

mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, the buffer shall be left undisturbed in its natural state. In areas of the buffer that are not completely comprised of mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, supplemental evergreen shrubs and trees shall be required. The landscaping detailed in this condition shall be shown as part of the initial building site plan, or shall be submitted as a separate plan concurrent with the initial building site plan in Land Bay 1, Land Bay 2, and Land Bay 3. All landscaping on the landscape plan shall be Guaranteed prior to site plan approval. The landscaping shown on the approved landscape plans(s) for Land Area 1, Land Bay 2, or Land Bay 3 shall be installed within 12 months of the final site plan approval, unless another timeline for planting has been approved by the Director of Planning.

7. *Interstate 64 Buffer*. Prior to final approval of any site plan in Land Bay 4 or Land Bay 5, the Director of Planning or designee shall review and approve a landscape plan for the Land Bay(s). The landscape plan for the Land Area shall provide a 50-foot vegetated buffer along the Interstate 64 right-of-way and be landscaped to the provisions of Section 24-98 of the Zoning Ordinance, except that the required tree and shrubs mixture be modified to require 45 percent of all proposed trees and shrubs within the 50-foot wide vegetated buffer to be evergreen, with at least 45% of evergreen trees achieving a minimum height at maturity of 40 feet. Any disturbance or grading into this area shall be the minimum necessary and shall require additional plantings consisting of no less than 125% of the required plantings per the Ordinance or as may be otherwise approved by the Director of Planning, such that at maturity the plantings match or exceed the mature height and density of trees and shrubs within the buffer. In areas of the buffer that are currently comprised of mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, the buffer shall be left undisturbed in its natural state. In areas of the buffer that are not completely comprised of mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, supplemental evergreen shrubs and trees shall be required. The landscaping detailed in this condition shall be shown as part of the initial building site plan, or shall be submitted as a separate plan concurrent with the initial building site plan in Land Bay 4 or Land Bay 5. All landscaping on the landscape plan shall be Guaranteed prior to site plan approval. The landscaping shown on the approved landscape plans(s) for Land Bay 4 or Land Bay 5 shall be installed within 12 months of the final site plan approval, unless another timeline for planting has been approved by the Director of Planning.

8. *Barnes Road Buffer*. Prior to final approval of any site plan in Land Bay 1 or Land Bay 5, the Director of Planning or designee shall review and approve a landscape plan for the Land Bay(s). The landscape plan for the Land Area shall provide a 100-foot vegetated buffer along the Barnes Road right-of-way and be landscaped to the provisions of Section 24-98 of the Zoning Ordinance, except that the required tree and shrubs mixture be modified to require 45% of all proposed trees and shrubs within the 100-foot wide vegetated buffer to be evergreen, with at least 45% of evergreen trees achieving a minimum height at maturity of 40 feet. Any disturbance or grading into this area shall be the minimum necessary and shall require additional plantings consisting of no less than 125% of the required plantings per the Ordinance, such that at maturity the plantings match or exceed the mature height and density of trees and shrubs within the buffer. In areas of the buffer that are currently comprised of mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, the buffer shall be left undisturbed in its natural state. In areas of the buffer that are not completely comprised of mature forest, as defined in Sec. 24-98 of the Zoning Ordinance, supplemental evergreen shrubs and trees shall be required. The landscaping detailed in this condition shall be shown as part of the initial building site plan, or shall be submitted as a separate plan concurrent with the initial building site plan in Land Bay 1 or Land Bay 5. All landscaping on the landscape plan shall be Guaranteed prior to site plan approval. The landscaping shown on the approved landscape

plans(s) for Land Bay 1 or Land Bay 5 shall be installed within 12 months of the final site plan approval, unless another timeline for planting has been approved by the Director of Planning.

9. *Vehicular Access Restriction*. Access to the Property shall be restricted to the two primary commercial access roadways shown on the Master Plan. No other curb cuts are permitted on Route 30.

10. *Sustainable Design Initiatives*.
    A. Sustainable design initiatives shall be implemented during development of the Property and construction of all buildings to achieve the equivalent of those credits that would be required to achieve the "Certified" level in the Leadership in Energy and Environmental Design (LEED) 2009 Certification program or whatever is equivalent from the LEED for New Construction and Major Renovations (based on the most current guidelines) (the "Credits") for each building. This shall include completion of all prerequisite items, except that for the Energy and Atmosphere category prerequisite number 1, the Owner may choose to pursue Energy Star designation or such other energy systems verification process as is approved in advance by the Director of Planning. In addition, for up to a maximum of 10% of the points needed to reach the LEED "Certified" level, the Owner may request that initiatives equivalent to, but not included on the LEED checklist as credits, be pursued instead. Any request for equivalent initiatives shall be submitted in writing as part of the process specified in (b) below, together with supporting documentation for review and approval by the Director of Planning. Documentation of the building energy performance shall be provided by a mechanical engineer to the Director of Planning before the Certificate of Occupancy for each building to demonstrate an improvement in efficiency of the building's thermal envelope, mechanical systems, and electrical systems over code-required baseline performance.

    B. Application for formal LEED certification by the USGBC is at the discretion of the Owner, and is not required. If formal LEED certification is not pursued, compliance with this condition shall be monitored and verified to the County by a LEED Accredited Professional engaged by the Owner. The strategies to achieve the Credits will be incorporated into the construction documents either as part of the design, or as requirements for the contractor to substantiate during the course of construction. Compliance with the Credit requirements will be validated in a straightforward way through things like, but not limited to, review of contractor submittals, submission of design calculations, and letters certifying that requirements have been met. This validation will be overseen by a LEED-accredited professional and approved by the Director of Planning or designee, with Credits related to the design of the project approved prior to issuance of the final site plan approval, and Credits related to the construction of the project approved prior to issuance any Certificate of Occupancy.

11. *Architectural Review*. Prior to site plan approval, the Director of Planning shall review and approve the final architectural design of each proposed building to be consistent with the Design Guidelines. Each site plan shall include the final architectural design for all buildings shown and include general elevations of the buildings, as well as the view of the building for all sides visible from Old Stage Road (Route 30). Determination of substantial architectural consistency shall be made by the Director of Planning or designee. In the event the Director of Planning disapproves, the applicant may appeal the decision of the Director of Planning to the Development Review Committee which shall forward a recommendation to the Planning Commission.

12. *Site Design*.
    A. For Land Bay 1, Land Bay 2, and Land Bay 3, any building façade facing a road shall be designed in appearance as a front façade. The intent of this condition is to ensure that the side and rear of buildings, when visible from a roadway, achieve the standards put forward within the Design Guidelines for the front façade. No more than 25% of the required parking in these areas shall be located in between the building and Old Stage Road (Route 30).

    B. The design of parking lots shall be consistent with the Design Guidelines. Surface parking lots shall include landscaping that divides the parking lots into different "bays" or "pods" to reduce their visual dominance. Parking lot design showing compliance with this condition shall be shown on each site plan where new parking is required and shall be approved by the Director of Planning prior to site plan approval.

    C. Any use containing a drive-through element shall be located to the side or at the rear of the building and shall not face Route 30.

    D. No building may have a footprint greater than 70,000 square feet and no two buildings may have a combined footprint greater than 90,000 square feet. Floor plates may not be larger than 12,000 square feet without being divided into what appears to be two or more buildings.

    E. Building depths may not be greater than 90 feet without being divided into what appears to be two buildings.

    F. All warehouse storage units operated as mini-storage shall be designed as a single footprint building. Warehouse storage units whereby individual storage units have an exterior access door are prohibited.

13. *Free-Standing Signage*. All freestanding signage, including entrance signage located at the Property's two entrances as shown on the Master Plan shall be externally illuminated monument-style signs, not to exceed 8 feet in height. The base of the signs shall be brick or shall use materials similar in type and color with the site architecture. The design of the signs shall be approved by the Director of Planning prior to final site plan approval for consistency with this condition.

14. *Screening of Site Features*. All dumpsters, ground-mounted HVAC, mechanical units, and cart corrals which are adjacent to buildings shall be screened by an enclosure composed of masonry, closed cell PVC, prefinished metal, or cementitious panels, in detail and colors to blend with adjacent building materials. Where present, such features shall be shown on the site plan for the adjacent building, and shall be reviewed and approved by the Director of Planning for consistency with this condition.

15. *Internal Traffic Signage Plan*. The Owner shall include an internal signage plan with the materials submitted for the initial site plan review for the Property, which shall indicate the location of internal traffic signs and the orientation of vehicular flow within the Property. The internal signage plan shall be reviewed and approved by the Director of Planning, or designee, prior to final approval of the initial site plan for the Property. Thereafter, the internal signage plan may be amended with review and approval by the Director of Planning, or designee.

16. *Shared Maintenance of Site Improvements*. Prior to the first site plan approval for the Property, documentation shall be submitted demonstrating that all shared site improvements (including, but not limited to, utilities, stormwater facilities,

landscaping, roads and parking lots, and lighting) are subject to appropriate shared maintenance agreements ensuring that the site improvements will be maintained continuously. Compliance with this condition as to the existence of such shared maintenance documentation shall be subject to review and approval of the County Attorney or designee.

17. *Internal Pedestrian Accommodations*. The owner of each property shall provide internal pedestrian connections to include, but not limited to, wherever sidewalk enters the parking area or crosses any entrance to the Property or drive-through lane and shall provide safe connections to any existing or proposed WATA bus stop. The connections shall be clearly delineated by use of a different color of pavement, brick pavers or some other method determined to be acceptable by the Director of Planning.

18. *Lighting*. All new exterior light fixtures, including building lighting, on the Property shall have recessed fixtures with no lens, bulb, or globe extending below the casing and a lighting plan shall be submitted to and approved by the Director of Planning or designee prior to final site plan approval. All light poles must not exceed twenty (20) feet in height and the lighting plan must indicate no glare outside the boundary lines of the Property unless otherwise approved in writing by the Director of Planning or designee. "Glare" is defined as more than 0.1 foot-candle at the boundary of the Property or any direct view of the lighting source from adjoining properties

19. *Master Stormwater Management Plan*. A Master Stormwater Management Plan (MSWMP) for the Property or any Land Bay Area within shall be approved prior to the first site plan submittal for the area. The MSWMP shall comply with the standards within the adopted watershed management plan in place at time of submittal and all outside agency permits shall be issued prior to the third submittal of the MSWMP. Furthermore, each Village Center Area MSWMP shall adhere to the conditions detailed below:

    A. Land Areas 1, 3, and 4, as delineated on the Conceptual Stormwater Master Plan (revision date 8/20/19) will include a stormwater management facility, designed to the standards and specifications current at the time of land Area development.

    B. Each Land Area (1, 2, 3, and 4) will include no less than two treatment trains as part of the Land Area master stormwater approach. Each of these trains will be required to contain at least three low impact development features, such as those noted on the submitted plan set (i.e. vegetated filter strip, permeable pavement, bioretention basin, dry swale, manufactured treatment device).

C. If required by the watershed management plan adopted at the time of submittal, Special Stormwater Criteria (SSC) measures may not also be used to achieve required water quality requirements. At the time of an MSWMP submittal, specific SSC measures may be deemed unsuitable for the type of development as determined by the Director of Stormwater and Resource Protection or designee.

20. *Convenience Stores With Fuel Sales*. The convenience store with fuel sale permitted by this SUP shall be subject to the following additional conditions:

A. *Outside Display, Sale, or Storage*: Unless otherwise stated in this condition, no outside display, sale, or storage of merchandise shall be permitted at the Property. As used for this condition, the term "merchandise" shall include but not be limited to ice, soda, candy and/or snack machines. For the convenience store with fuel sale, only two outside vending machine and one outside ice chest shall be permitted and, if used, shall be situated against the exterior wall not facing Route 30 and both shall be screened with building materials similar in type and color with the site architecture to minimize visual impacts from adjacent road rights-of-way. Final screening design shall be approved by the Director of Planning.

B. *Use Design:* The convenience store shall not be designed or used as a truck stop, as defined within the Zoning Ordinance.

C. *Fueling Islands:* There shall be no more than six (6) fueling islands associated with the convenience store.

D. *Intercom and Speaker Noise*: All intercom and other speaker systems on the Property shall operate in such a manner that they shall not be audible from adjacent developments within the same Land Bay.

E. *Landscaping:* Prior to final site plan approval, a landscape plan shall be submitted showing adequate screening of the fuel islands from internal uses and/or external properties through the use of landscaped islands and/or medians. The islands and/or medians shall be a minimum of 5 feet wide in order to accommodate landscaping adjacent to the boundaries of the gas facility. Evergreen plantings with a minimum height of 3 feet shall be planted in these medians to adequately screen the fuel islands. The Director of Planning shall determine whether the screening is adequate prior to final site plan approval. Landscaping of the islands/medians shall be installed and/or Guaranteed prior to the issuance of a temporary Certificate of Occupancy.

F. *Architectural Review:* The architecture of any canopy, including any columns, shall match the primary colors, design and exterior building materials of the convenience store. The canopies shall have a mansard roof design, as determined by the Director of Planning. Any canopy shall have a maximum height of 15 feet measured from the finished grade to the underside of the canopy. The canopy shall not include signage that involves backlighting or electronic lettering. There shall be no more than two signs on the canopy.

G. *Spill Prevention, Control and Countermeasures (SPCC) Plan*: Prior to the issuance of a Land Disturbing Permit, an SPCC Plan shall be reviewed and approved by the Director of Stormwater and Resource Protection. The SPCC Plan shall address chemical handling, including, but not limited to, oil, diesel, and gasoline.

21. *Fast-Food Restaurants*. The fast-food restaurants permitted by this SUP shall be subject to the following additional conditions:
    A. *Signage:* All building face signage shall be externally-illuminated or use back-lit or channeled lettered lighting as defined in Section 24-67 of the Zoning Ordinance. For any back-lit or channeled lettered signs, the sign shall meet the criteria listed in Section 24-72 of the Zoning Ordinance, or successor section. In addition to any building face signage as permitted by the Zoning Ordinance, any fast-food restaurant may have one exterior freestanding sign. Freestanding signs shall be externally-illuminated monument-style signs not to exceed 8 feet in height and the base of the signs shall be brick or shall use materials similar in type and color with the site architecture.

    B. *Screening:* The food order board and drive-through pick up window(s) shall be screened from Route 30 with landscaping and/or fencing, as determined by the Director of Planning or designee.

    C. Outside Display, Sale or Storage: No outside display, sale, or storage of merchandise shall be permitted on the Property.

    D. Intercom and Speaker Noise: All intercom and other speaker systems on the Property shall operate in such a manner that they shall not be audible from adjacent developments.

    E. Architectural Review - Fast-Food Canopy: The architecture of any canopy accessory to a fast-food restaurant shall match the primary colors, design and exterior building materials of the fast-food restaurant, in accordance with the "Design Guidelines for Hazelwood Farms Village Center" and dated January 29, 2020. Final design of such canopy shall be reviewed and approved by the Director of Planning prior to site plan approval.

22. *Water and Sewer Facilities*.
    A. *Use:* This SUP shall be valid for the installation of a force main and water main, each a diameter of 4 inches or greater, to connect to existing facilities located within VDOT right-of-way for Fieldstone Parkway and extend across the intersection of Fieldstone Parkway and Old Stage Road (Route 30) to serve the Property. A water main loop may be installed on the Property under Interstate 64 to connect to parcels south of the interstate.

    B. *Construction Hours:* The hours of construction of the water and sewer facilities referenced in letter A above shall be limited to daylight hours, Monday through Friday. Limited night and weekend work may be approved by the Director of Planning if requested in advance and it is determined that such work will not negatively affect surrounding properties.

    C. *Replanting:* Prior to issuance of a Land Disturbing Permit, a plan addressing the replanting of disturbed vegetation within the right-of-way shall be submitted and approved by the Director of Planning or designee. The intent of the plan is to restore the area to pre-land disturbing conditions.

    D. *Lighting*: There shall be no new permanent lighting associated with the water and sewer facilities within the rights-of-way.

23. *Commencement for Construction*. Construction of one of these uses, excluding the public water and sewer facilities, shall commence within 60 months from the date of approval of this SUP or the SUP shall be void. Construction shall be defined as the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation. Construction does not include land preparation such as clearing, grading, or filling.

24. *Severance Clause*. This SUP is not severable. Invalidation of any word, phrase, clause, sentence, or paragraph shall invalidate the remainder.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

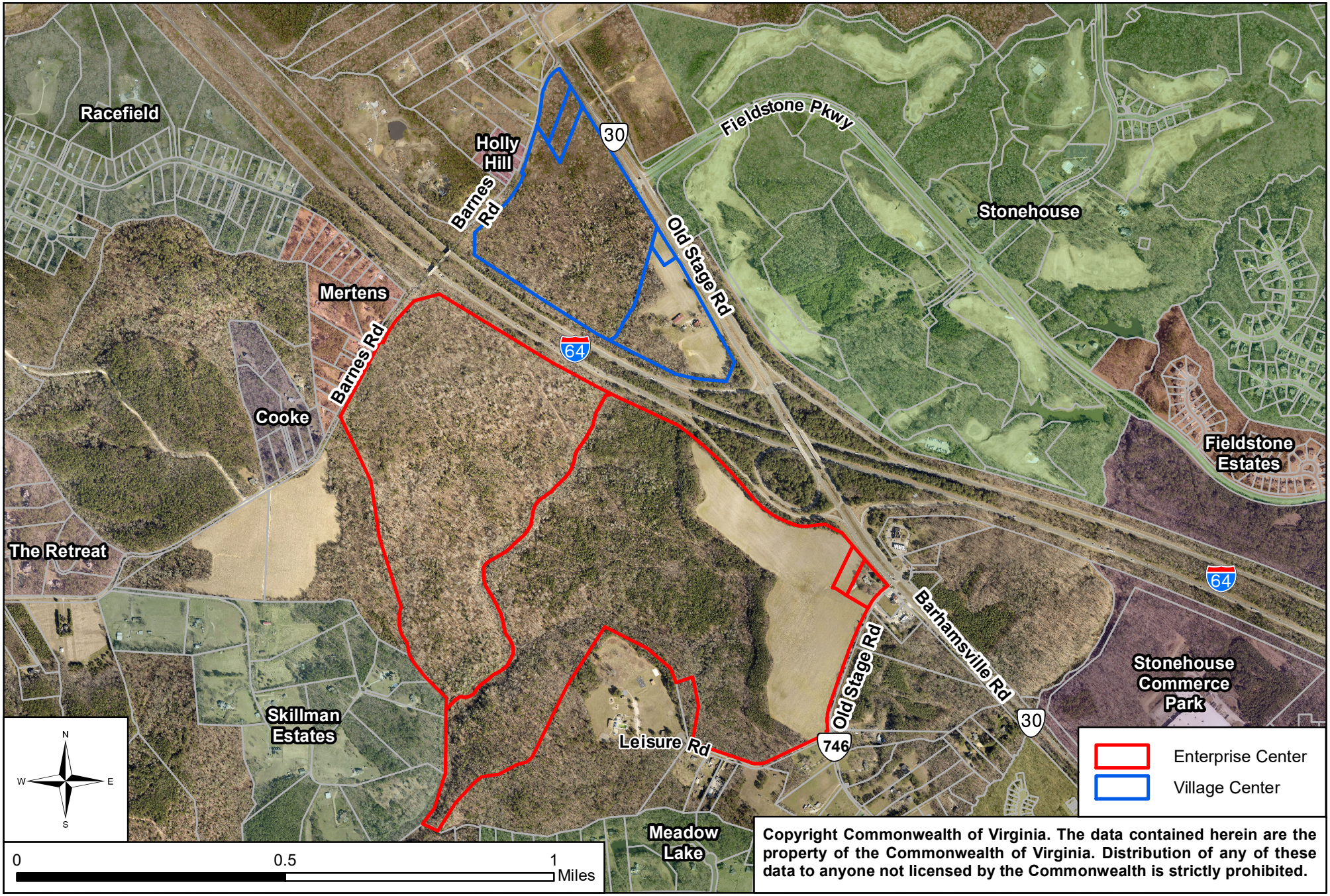
_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

SUP19-6HazelwdVllgCtr-res

JCC Z-19-0006, SUP-19-0005 & SUP-19-0006: Hazelwood Enterprise Center & Village Center



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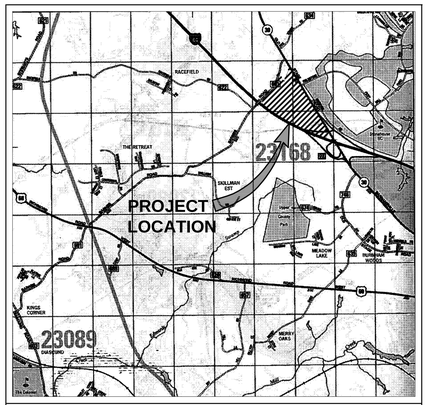
SPECIAL USE PERMIT
FOR
VILLAGE CENTER
AT
HAZELWOOD FARMS

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

GENERAL NOTES

1. TOPOGRAPHIC INFORMATION IS BASED ON 1-FOOT CONTOUR INTERVALS PROVIDED BY AN AERIAL SURVEY FLOWN IN 2015.
2. SHEET 2, ENVIRONMENTAL INVENTORY, INDICATES 25% SLOPES, SOIL INVENTORY, WETLANDS, THE APPROXIMATE LOCATION OF RESOURCE PROTECTION AREAS (RPA) AND ASSOCIATED BUFFERS, AND PERENNIAL STREAM DETERMINATIONS. FOR FURTHER INFORMATION ON THE ENVIRONMENTAL INVENTORY, REFER TO THE COMMUNITY IMPACT STATEMENT.
3. THIS PROJECT IS LOCATED WITHIN THE WARE CREEK AND DIASCUND CREEK RESERVOIR WATERSHEDS.
4. CURB AND GUTTER STREETS ARE PROPOSED.
5. ALL PUBLIC STREETS WITHIN THE DEVELOPMENT WILL BE DESIGNED PER APPLICABLE VDOT STANDARDS.
6. HYDROLOGIC UNIT CODES
   Y062 WARE CREEK
   JL27 DIASCUND CREEK RESERVOIR
7. MAXIMUM BUILDING HEIGHT = 60'



VICINITY MAP
(Approximate Scale: 1"=2000')

Copyright ADC The Map People permitted use number 21004223

COUNTY PROJECT NO.: SUP-19-005
ORIGINAL SUBMITTAL DATE: 2/7/2019
APPROVAL DATE:

INDEX OF SHEETS

SHEET NO.	SHEET DESCRIPTION
MP-1	COVER SHEET
MP-2	EXISTING CONDITIONS PLAN
MP-3	CONCEPTUAL LAND USE AND SHARED USE PATH PLAN
MP-4	CONCEPTUAL STORMWATER MASTER PLAN
MP-5	CONCEPTUAL UTILITY PLAN
MP-6	CONCEPTUAL RT. 30 ROAD IMPROVEMENTS PLAN

SITE DATA:

SITE ADDRESS: 9505, 9517,9689 & 9701 OLD STAGE RD. & 9400 BARNES RD., WILLIAMSBURG, VIRGINIA 23185

ZONING: B-1, GENERAL BUSINESS

PARCELS:

T.M. 0430100017 (PART 1)	52.82 AC.±
T.M. 0440100002	2.83 AC.±
T.M. 0440100003	2.31 A.C.±
T.M. 0440100008	0.98 A.C.±
T.M. 0440100009 (PART 1)	20.05 A.C.±
T.M. 0440100009 (PART 2)	0.06 A.C.±
TOTAL ACREAGE:	79.06 A.C.±

FLOOD HAZARD MAP: THIS PROPERTY IS IN FLOOD ZONE "X" AS SHOWN ON MAP NUMBER 51095C0037D, PANEL 0037D, FOR COMMUNITY NUMBER 510201, DATED 12/16/2015 OF THE FLOOD INSURANCE RATE MAPS FOR JAMES CITY COUNTY, VIRGINIA. ZONE "X" IS DEFINED AS AREAS OUTSIDE THE 500 YEAR FLOOD PLAIN.

Rev.	Date	Description	Initials By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
1	8/20/19	UPDATED PER JCC COMMENTS	JAG

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Hampton Roads | Central Virginia | Middle Peninsula

SPECIAL USE PERMIT
FOR
VILLAGE CENTER
AT
HAZELWOOD FARMS
JAMES CITY COUNTY VIRGINIA
STONEHOUSE DISTRICT

Project Contacts:	JAG
Project Number:	W10325-01
Scale: NONE	Date: 2/7/19

Sheet Title: COVER SHEET

Sheet Number
MP-1

S:\CIB\2019\10325-01 Hazelwood Farms 418 Jones\Planning\Master Planning\Northern 3 UPdt\210301 MP1 cover.dwg 3/12/2021 4:58:40 PM Corey.gere

HAZELWOOD PROPERTY AREA

PARCEL ID	ZONING	COMP PLAN	SITE AREA
0430100017	B-1	GENERAL BUSINESS	52.82± AC
0440100002	B-1	GENERAL BUSINESS	2.83± AC
0440100003	B-1	GENERAL BUSINESS	2.31± AC
0440100008	B-1	GENERAL BUSINESS	0.98± AC
0440100009	B-1	GENERAL BUSINESS	20.11± AC
TOTAL AREA			79.06± AC

ENVIRONMENTAL IMPACTS

TIDAL WETLANDS:	NONE ON SITE
TIDAL SHORES:	NONE ON SITE
NON-TIDAL WETLANDS IN RPA:	12,001 S.F., 0.28 AC.
100 FT RPA BUFFER:	88212 S.F., 2.03 AC.
25% SLOPE IMPACTS	NONE ON SITE

SOIL No.	SOIL NAME	HYDROLOGICAL GROUP	TYPICAL SLOPES	EROSION FACTOR (K)	EROSION FACTOR (T)
10B	CRAVEN FINE SANDY LOAM	D	2–6%	0.32–0.37	3
11C	CRAVEN–UCHEE COMPLEX	D	6–10%	0.32–0.37	3
15E	EMPORIA COMPLEX	B	15–25%	0.20–0.28	4
19B	KEMPSVILLE–EMPORIA FINE SANDY LOAMS	A	2–6%	0.24–0.32	3
29A	SLAGLE FINE SANDY LOAM	C	0–2%	0.24	3
29B	SLAGLE FINE SANDY LOAM	C	2–6%	0.24	3
35	UDORTHENTS LOAMY	*	–	–	–

INFORMATION TAKEN FROM "SOIL SURVEY OF JAMES CITY AND YORK COUNTIESAND THE CITY OF WILLIAMSBURG, VIRGINIA" ISSUED IN APRIL, 1985, BY THE UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICEIN COOPERATION WITH VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY.

SOIL SUSCEPTIBILITY TO EROSION CLASSIFICATION (K)
0.23 AND LOWER – LOW ERODIBILITY
0.23 TO 0.36 – MODERATE ERODIBILITY
0.36 AND UP – HIGH ERODIBILITY

THE MAP SHOWN IS A "BEST FIT MODEL" OF THE SCS MAPS WITH EXISTING BASE INFORMATION.

DENOTES 25% OR GREATER SLOPES

LIMITS OF SOIL DELINEATION

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

N/F MOSS CREEK MARKET PLACE LLC 9690 OLD STAGE RD PARCEL ID: 0440100004 ZONED A-1

N/F MOSS CREEK MARKET PLACE LLC 9686 OLD STAGE RD PARCEL ID: 0440100034 ZONED A-1

N/F WIGGS, WENDY E 9601 BARNES RD PARCEL ID: 0430100007 ZONED A-1

N/F EVELAND, JOSEPH ROGER 9595 BARNES RD PARCEL ID: 0430100006A ZONED A-1

HAZELWOOD FARMS, LLC PARCEL ID: 0440100002 2.8± AC ZONED B-1

N/F HERTZLER, CALEB A 9593 BARNES RD PARCEL ID: 0430100008 ZONED A-1

HAZELWOOD FARMS, LLC PARCEL ID: 0440100003 2.3± AC ZONED B-1

N/F STEWART, LOIS W & JAMES E 9591 BARNES RD PARCEL ID: 0430100009 ZONED A-1

N/F STEWART, LOIS W & JAMES E 9583 BARNES RD PARCEL ID: 0430100010 ZONED A-1

N/F NEFF, BARRY F JR 9567 BARNES RD PARCEL ID: 0430200005 ZONED A-1

N/F SHAVE, NORRIS L 9563 BARNES RD PARCEL ID: 0430200004 ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU 9557 BARNES RD PARCEL ID: 0430200003 ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU 9551 BARNES RD PARCEL ID: 0430200002 ZONED A-1

N/F STAVROU COMPANY LLC C/O 9547 BARNES RD PARCEL ID: 0430200001 ZONED A-1

N/F HERTZLER, STEVEN L & MARY E 9537 BARNES RD PARCEL ID: 0430100012A ZONED A-1

BARNES ROAD STATE ROUTE 601 100' R/W

N/F ASSOCIATION AT STONEHOUSE INC (THE) 9330 FIELDSTONE PARKWAY PARCEL ID: 0440100024B ZONED PR PUD RESIDENTIAL

FIELDSTONE PARKWAY

N/F STONEHOUSE 2.0 LLC 9310 FIELDSTONE PARKWAY PARCEL ID: 0440100021 ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC 9300 FIELDSTONE PARKWAY PARCEL ID: 0440100027 ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC (THE) PROPERTY ADDRESS NOT GIVEN PARCEL ID: 0440100026 ZONED PC PUD COMMERCIAL

NORTH BOUND

SOUTH BOUND

OLD STAGE ROAD STATE ROUTE 30 VARIABLE WIDTH R/W

OVERPASS ROAD

END OF LIMITED ACCESS FENCE

VDOT LIMITED ACCESS FENCE

HAZELWOOD FARMS, LLC & HAZELWOOD R IRREVOCABLE FAMILY PARCEL ID: 0440100009 ZONED B-1

HAZELWOOD FARMS, LLC & HAZELWOOD R IRREVOCABLE FAMILY PARCEL ID: 0440100008 ZONED B-1

HAZELWOOD FARMS, LLC & HAZELWOOD R IRREVOCABLE FAMILY TRUST PARCEL ID: 0440100009 20.1± AC ZONED B-1

HAZELWOOD FARMS, LLC PARCEL ID: 0430100017 52.8± AC ZONED B-1

LIMITS OF WETLANDS

100' RPA BUFFER

ANTICIPATED WETLANDS IMPACT 5,900 S.F.± 0.14 AC.±

ANTICIPATED WETLANDS IMPACT 1,815 S.F.± 0.04 AC.±

ANTICIPATED WETLANDS IMPACT 1,068 S.F.± 0.02 AC.±

ANTICIPATED WETLANDS IMPACT 3,218 S.F.± 0.07 AC.±

LIMITS OF WETLANDS

LIMITS OF WETLANDS

WOODS TRAIL

TELECOMM. PEDESTAL

PAVED DRIVE

GRAVEL DRIVE

HOUSE

POLE SHED

DILAPIDATED CHICKEN HOUSE

DILAPIDATED BARN

VDOT DRAINAGE EASEMENT

INTERSTATE 64
VARIABLE WIDTH R/W
LIMITED ACCESS HIGHWAY
STATE HIGHWAY PROJECT
0064-047-101, RW-201

WEST BOUND

EAST BOUND

Rev.	Date	Description	By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
1	8/20/19	UPDATED PER JCC COMMENTS	JAG

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JAMES CITY COUNTY VIRGINIA
STONEHOUSE DISTRICT

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title:
EXISTING CONDITIONS PLAN

Sheet Number
MP-2

S:\JOBS\W10325\Engineering\Civil\Drawings\Plan Set\Exhibits\Existing Conditions Plan.dwg 2/2/2021 2:55:47 PM JGallagher

DEVELOPMENT TABULATION

LANDBAY	AREA DESIGNATION	PROPOSED USE	TOTAL AREA (AC)	PERCENT OF TOTAL SITE	MAX GROSS FLOOR AREA (RATIO)
1	E, G	COMMERCIAL, COMMERCIAL OFFICE, RETAIL COMMERCIAL, RESTAURANT COMMERCIAL, OFFICE, RESTAURANT	±12.35	15.62%	±85,000 SF (0.158)
2	E, G	COMMERCIAL, COMMERCIAL OFFICE, RETAIL COMMERCIAL, RESTAURANT COMMERCIAL, OFFICE, RESTAURANT	±8.82	11.16%	±60,000 SF (0.156)
3	E, G	COMMERCIAL, COMMERCIAL OFFICE, RETAIL COMMERCIAL, RESTAURANT COMMERCIAL, OFFICE, RESTAURANT	±4.95	6.27%	±33,000 SF (0.153)
4	E, G	COMMERCIAL, COMMERCIAL OFFICE, RETAIL COMMERCIAL, RESTAURANT COMMERCIAL, OFFICE, HOTEL, RESTAURANT	±14.19	17.95%	±167,000 SF (0.270)
5	E, F, G, I	COMMERCIAL, OFFICE, RETAIL, WHOLESALE & WAREHOUSE, INSTITUTIONAL OR PUBLIC USES	±38.74	49.00%	±360,000 SF (0.213)
		TOTALS	±79.06	100.00%	–
		MAXIMUM COMBINED	–	–	510,000 SF± (0.148) SEE NOTE

NOTES:
1. "FRONTAGE RETAIL AREA WITHIN" LAND BAYS 1–3 SHALL BE LIMITED IN NUMBER TO NO MORE THAN TO 2 FAST FOOD W/DRIVE THRU., 1 CONVENIENCE STORE W/FUEL SALES, 1 BANK W/DRIVE THRU. SPECIAL CONSIDERATION SHOULD BE GIVEN TO SCREEN DRIVE THRU WINDOWS FROM ROUTE 30.
2. NO SINGLE GROCERY STORE SHALL EXCEED 70,000 S.F. ON LAND BAY 5.
3. MAXIMUM SQUARE FOOTAGE IS COMBINED AND SHALL BE ALLOTTED BASED ON THE ORDER OF APPROVED PLANS FOR RESPECTIVE SITES.
4. BUILDING COVERAGE FOR EACH LAND BAY OR THEIR SUBDIVIDED PARCELS CANNOT EXCEED 30%.

LEGEND:

- PRIMARY COMMERCIAL ACCESS
- SECONDARY COMMERCIAL ACCESS
- PROPERTY BOUNDARY
- APPROXIMATE INTERNAL DEVELOPMENT BOUNDARY
- MULTI-USE PATH
- FRONTAGE RETAIL AREA: SEE NOTE 1

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

Rev.	Date	Description	By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
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JAMES CITY COUNTY
VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title:
CONCEPTUAL LAND USE AND SHARED USE PATH PLAN

Sheet Number
MP-3

S:\Projects\W10325-01\Civil\Plan Sheets\Plan Sheets\W10325-01 Plan Sheets.dwg, 2/7/2019 3:49:51 PM, Jeffrey Grogan, 1:1, 1:1, Microsoft PDF Printer, Jeffrey Grogan

TREATMENT TRAIN OPTIONS:

- VEGETATED FILTER STRIP
- PERMEABLE PAVEMENT
- BIORETENTION BASIN
- DRY SWALE
- FILTERRA

ENVIRONMENTAL IMPACTS

TIDAL WETLANDS:	NONE ON SITE
TIDAL SHORES:	NONE ON SITE
NON-TIDAL WETLANDS IN RPA:	10,186 S.F., 0.24 AC.
100 FT RPA BUFFER:	88212 S.F., 2.03 AC.
25% SLOPE IMPACTS	NONE ON SITE

NOTES: 1. ALL WET PONDS SHOWN IN APPROXIMATE LOCATIONS FOR PLANNING CONSIDERATION ONLY. FINAL LOCATION OF STORMWATER MANAGEMENT FEATURES TO BE DETERMINED DURING SITE PLAN PREPARATION.

2. STORMWATER MANAGEMENT FOR ALL AREAS SHALL BE DESIGNED TO STAND ALONE. THESE SITES SHALL BE REQUIRED TO SHOW AN APPROVED MASTER STORMWATER PLAN (FOR PHASED DEVELOPMENT) FOR EACH PARCEL AREA.

STORMWATER MANAGEMENT NARRATIVE

A STORMWATER MANAGEMENT PLAN IS PROPOSED FOR THIS SITE TO MEET THE GENERAL CRITERIA OF THE COMMONWEALTH OF VIRGINIA AND JAMES CITY COUNTY'S STORMWATER REQUIREMENTS. STORMWATER IS TO BE MANAGED BY A SERIES OF BEST MANAGEMENT PRACTICES AND PIPE DRAINAGE NETWORKS THAT ULTIMATELY DISCHARGE INTO DOWNSTREAM WATERWAYS. PER EACH PARCEL, WET PONDS WILL SERVE AS THE FINAL MEANS OF WATER QUALITY CONTROL. THESE PONDS WILL HAVE A NATURAL AESTHETIC AND ATTENUATE FLOW. DISCHARGES FROM THESE PONDS WILL BE LESS IN QUANTITY THAN CURRENT EXISTING CONDITIONS WHICH WILL MINIMIZE THE POSSIBILITY OF EROSION. UPSTREAM BIORETENTION PONDS, FILTERRAS, DRY SWALES, AND OTHER LOW IMPACT DEVELOPMENT MEASURES WILL CONTRIBUTE TO STORMWATER QUALITY CONTROL AND WILL FEED INTO THE DOWNSTREAM WET PONDS. PER COMPLIANCE WITH THE VIRGINIA RUNOFF REDUCTION METHOD, ALL PROPOSED SITE WORK WILL BE MANAGED BY THESE STORMWATER MEASURES TO NEGATE DOWNSTREAM WETLANDS IMPACTS AND POLLUTION FROM ENTERING INTO THE CHESAPEAKE BAY.

LEGEND:

- PRIMARY COMMERCIAL ACCESS
- SECONDARY COMMERCIAL ACCESS
- PROPERTY BOUNDARY
- APPROXIMATE INTERNAL DEVELOPMENT BOUNDARY
- MULTI-USE PATH

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

N

Rev.	Date	Description	Initials
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
1	8/20/19	UPDATED PER JCC COMMENTS	JAG

N/F MOSS CREEK MARKET PLACE LLC
9690 OLD STAGE RD
PARCEL ID: 0440100004
ZONED A-1

N/F MOSS CREEK MARKET PLACE LLC
9686 OLD STAGE RD
PARCEL ID: 0440100034
ZONED A-1

N/F WIGGS, WENDY E
9601 BARNES RD
PARCEL ID: 0430100007
ZONED A-1

N/F EVELAND, JOSEPH ROGER
9595 BARNES RD
PARCEL ID: 0430100006A
ZONED A-1

N/F HERTZLER, CALEB A
9593 BARNES RD
PARCEL ID: 0430100008
ZONED A-1

N/F STEWART, LOIS W & JAMES E
9591 BARNES RD
PARCEL ID: 0430100009
ZONED A-1

N/F STEWART, LOIS W & JAMES E
9583 BARNES RD
PARCEL ID: 0430100010
ZONED A-1

N/F NEFF, BARRY F JR
9567 BARNES RD
PARCEL ID: 0430200005
ZONED A-1

N/F SHAVE, NORRIS L
9563 BARNES RD
PARCEL ID: 0430200004
ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU
9557 BARNES RD
PARCEL ID: 0430200003
ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU
9551 BARNES RD
PARCEL ID: 0430200002
ZONED A-1

N/F STAVROU COMPANY LLC C/O
9547 BARNES RD
PARCEL ID: 0430200001
ZONED A-1

N/F HERTZLER, STEVEN L & MARY E
9537 BARNES RD
PARCEL ID: 0430100012A
ZONED A-1

N/F ASSOCIATION AT STONEHOUSE INC (THE)
9330 FIELDSTONE PARKWAY
PARCEL ID: 0440100024B
ZONED PR PUD RESIDENTIAL

N/F STONEHOUSE 2.0 LLC
9310 FIELDSTONE PARKWAY
PARCEL ID: 0440100021
ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC
9300 FIELDSTONE PARKWAY
PARCEL ID: 0440100027
ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC (THE)
PROPERTY ADDRESS NOT GIVEN
PARCEL ID: 0440100026
ZONED PC PUD COMMERCIAL

FIELDSTONE PARKWAY
STONEHOUSE
PROPOSED TRAFFIC SIGNAL
NORTH BOUND
SOUTH BOUND
OLD STAGE ROAD
STATE ROUTE: 30
VARIABLE WIDTH R/W
CLOSED CROSSOVER PER VDOT
OVERPASS ROAD

LAND BAY 1
537,833 S.F. (12.35 AC.)
30' PERIMETER BUFFER
NORTH 'A' ENTRANCE
INTERNAL ROAD
APPROXIMATE LOCATION OF WET POND
LIMITS OF WETLANDS
100' RPA BUFFER
ANTICIPATED WETLANDS IMPACT
5,900 S.F.±
0.14 AC.±

LAND BAY 2
384,239 S.F. (8.82 AC.)
NORTH 'B' ENTRANCE

LAND BAY 3
215,752 S.F. (4.95 AC.)
ANTICIPATED WETLANDS IMPACT
1,068 S.F.±
0.02 AC.±
50' PERIMETER BUFFER

LAND BAY 4
618,280 S.F. (14.19 AC.)
APPROXIMATE LOCATION OF WET POND
RPA BUFFER
ANTICIPATED WETLANDS IMPACT
3,218 S.F.±
0.07 AC.±
LIMITS OF WETLANDS

LAND BAY 5
1,687,546 S.F. (38.74 AC.)
APPROXIMATE LOCATION OF WET POND
50' PERIMETER BUFFER

BARNES ROAD
STATE ROUTE: 601
VARIABLE WIDTH R/W

HAZELWOOD FARMS, LLC
PARCEL ID: 0430100017
52.8± AC
ZONED B-1

WEST BOUND
EAST BOUND
INTERSTATE 64
VARIABLE WIDTH R/W
LIMITED ACCESS HIGHWAY
STATE HIGHWAY PROJECT
0064-047-101, RW-201

AES CONSULTING ENGINEERS
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Williamsburg, Virginia 23188
Phone: (757) 253-0040
Fax: (757) 220-8994
www.aesva.com
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SPECIAL USE PERMIT FOR
VILLAGE CENTER AT HAZELWOOD FARMS
STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title: CONCEPTUAL STORMWATER MASTER PLAN

Sheet Number: MP-4

S:\10300\10325\01-Implement Facility 433 Approved Plans\Village\Design\Master Plan\Village Master Plan.dwg, 3/12/2021 4:27:27 PM, Danny Smith

LEGEND:

- PRIMARY COMMERCIAL ACCESS
- SECONDARY COMMERCIAL ACCESS
- PROPERTY BOUNDARY
- APPROXIMATE INTERNAL DEVELOPMENT BOUNDARY
- MULTI-USE PATH

UTILITY LEGEND

EXISTING		PROPOSED
	WATER	
	SANITARY GRAVITY SEWER	
	FORCE MAIN	

PROJECTED WATER USAGE

Type of Use	Design Units	Flow (GPD/Unit)	Total Flow (GPD)	Duration (hrs)	Avg Flow (GPM)	Peak Flow (GPM)
Shopping Center	375,000 SF	0.2	75,000	12	104.17	416.67
Office	135,000 SF	0.1	13,500	12	18.75	75.00
Total			**88,500**		**122.92**	**491.67**

PROJECTED WASTEWATER FLOWS

Type of Use	Design Units	Flow (GPD/Unit)	Total Flow (GPD)	Duration (hrs)	Avg Flow (GPM)	Peak Flow (GPM)
Shopping Center	375,000 SF	0.2	75,000	12	104.17	312.50
Office	135,000 SF	0.1	13,500	12	18.75	56.25
Total			**88,500**		**122.92**	**368.75**

NOTE:
1. ALL PARCEL AREAS TO BE SERVED BY JCSA GRAVITY SEWER AND WATER. SEE NARRATIVE IN COMMUNITY IMPACT STATEMENT FOR DETAILS.
2. UPGRADES TO IMPELLERS AT JCSA PS 9-16 PS 10-1 SHALL BE MADE PRIOR TO ISSUANCE OF 3RD CERTIFICATE OF OCCUPANCY ON THE PROPERTY.

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

Rev.	Date	Description	By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
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N/F MOSS CREEK MARKET PLACE LLC 9690 OLD STAGE RD PARCEL ID: 0440100004 ZONED A-1

N/F MOSS CREEK MARKET PLACE LLC 9686 OLD STAGE RD PARCEL ID: 0440100034 ZONED A-1

N/F WIGGS, WENDY E 9601 BARNES RD PARCEL ID: 0430100007 ZONED A-1

N/F EVELAND, JOSEPH ROGER 9595 BARNES RD PARCEL ID: 0430100006A ZONED A-1

N/F HERTZLER, CALEB A 9593 BARNES RD PARCEL ID: 0430100008 ZONED A-1

N/F STEWART, LOIS W & JAMES E 9591 BARNES RD PARCEL ID: 0430100009 ZONED A-1

N/F STEWART, LOIS W & JAMES E 9583 BARNES RD PARCEL ID: 0430100010 ZONED A-1

N/F NEFF, BARRY F JR 9567 BARNES RD PARCEL ID: 0430200005 ZONED A-1

N/F SHAVE, NORRIS L 9563 BARNES RD PARCEL ID: 0430200004 ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU 9557 BARNES RD PARCEL ID: 0430200003 ZONED A-1

N/F STAVROU COMPANY LLC C/O CHARITA STAVROU 9551 BARNES RD PARCEL ID: 0430200002 ZONED A-1

N/F STAVROU COMPANY LLC C/O 9547 BARNES RD PARCEL ID: 0430200001 ZONED A-1

N/F HERTZLER, STEVEN L & MARY E 9537 BARNES RD PARCEL ID: 0430100012A ZONED A-1

N/F STONEHOUSE 2.0 LLC 9310 FIELDSTONE PARKWAY PARCEL ID: 0440100021 ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC (THE) 9330 FIELDSTONE PARKWAY PARCEL ID: 0440100024B ZONED PR PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC 9300 FIELDSTONE PARKWAY PARCEL ID: 0440100027 ZONED PC PUD RESIDENTIAL

N/F ASSOCIATION AT STONEHOUSE INC (THE) PROPERTY ADDRESS NOT GIVEN PARCEL ID: 0440100026 ZONED PC PUD COMMERCIAL

STONEHOUSE

EX. 16" WATERLINE

EXTEND PROPOSED FORCEMAIN TO CONNECT TO EXISTING JCSA SANITARY SEWER

CONNECT TO EX. JCSA WATERMAIN

APPROXIMATELY 600 LF OF OFFSITE 12" WATER LINE EXTENSION

FIELDSTONE PARKWAY

PROPOSED TRAFFIC SIGNAL

NORTH BOUND

SOUTH BOUND

OLD STAGE ROAD
STATE ROUTE 30
VARIABLE WIDTH R/W

NORTH A/C ENTRANCE

INTERNAL ROAD

CLOSED CROSSOVER PER VDOT

OVERPASS ROAD

NORTH A/C ENTRANCE

INTERNAL ROAD

LAND BAY 1
537,833 S.F. (12.35 AC.)

LAND BAY 2
384,239 S.F. (8.82 AC.)

LAND BAY 3
618,280 S.F. (14.19 AC.)

LAND BAY 4
618,280 S.F. (14.19 AC.)

LAND BAY 5
1,687,546 S.F. (38.74 AC.)

30' PERIMETER BUFFER

APPROX. LOCATION OF SANITARY SEWER PUMP STATION

LIMITS OF WETLANDS

100' RPA BUFFER

LIMITS OF WETLANDS

50' PERIMETER BUFFER

RPA BUFFER

LIMITS OF WETLANDS

50' PERIMETER BUFFER

CORRIDOR TO BE RESERVED TO ACCOMMODATE JCSA EASEMENT FOR POTENTIAL FUTURE WATERMAIN LOOP (FINAL LOCATION TO BE DETERMINED AT TIME OF SITE PLAN ON SUBJECT PARCEL(S))

BARNES ROAD
STATE ROUTE 601
100' R/W

WEST BOUND

INTERSTATE 64
VARIABLE WIDTH R/W
LIMITED ACCESS HIGHWAY
STATE HIGHWAY PROJECT
0064-047-101, RW-201

EAST BOUND

5248 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
Phone: (757) 253-0040
Fax: (757) 220-8994
www.aesva.com

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Hampton Roads | Central Virginia | Middle Peninsula

SPECIAL USE PERMIT
FOR
VILLAGE CENTER
AT
HAZELWOOD FARMS
STONEHOUSE DISTRICT
JAMES CITY COUNTY
VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title:
CONCEPTUAL UTILITY PLAN

Sheet Number
MP-5

S:\JOBS\W10325\01 Hazelwood Farms 143 acres\Planning\Rezone Planning\Rezone SUP\W10325-MP5 Conceptual Utility.dwg, 2/2/2021 4:24:27 PM, GeorgeAnn

N/F
ASSOCIATION AT STONEHOUSE INC (THE)
9330 FIELDSTONE PARKWAY
PARCEL ID:
0440100024B
ZONED PR PUD RESIDENTIAL

FIELDSTONE PARKWAY

SIGNALIZED INTERSECTION STA 313+08

STA 315+00

NORTH BOUND

STA 310+00

309+00

310+00

311+00

312+00

313+00

314+00

315+00

OLD STAGE ROAD
STATE ROUTE 30
VARIABLE WIDTH R/W

SOUTH BOUND

MATCHLINE – SEE BELOW

NORTH #1 ENTRANCE

GRAPHIC SCALE
20' 0' 20' 40'
SCALE: 1" = 20'

N/F
ASSOCIATION AT STONEHOUSE INC
9300 FIELDSTONE PARKWAY
PARCEL ID:
0440100027
ZONED PC PUD RESIDENTIAL

END TAPER
STA 321+09

GRAPHIC SCALE
20' 0' 20' 40'
SCALE: 1" = 20'

CLOSE CROSSOVER
STA 321+35

STA 320+00

NORTH BOUND

OLD STAGE ROAD
STATE ROUTE 30
VARIABLE WIDTH R/W

316+00

317+00

318+00

319+00

320+00

321+00

322+00

323+00

CLOSE CROSSOVER
AS DIRECTED BY VDOT

MATCHLINE – SEE ABOVE

SOUTH BOUND

PROPOSED RIGHT IN/RIGHT OUT

NORTH #2 ENTRANCE

Rev.	Date	Description	By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
1	8/20/19	UPDATED PER JCC COMMENTS	JAG

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SPECIAL USE PERMIT
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VILLAGE CENTER
AT
HAZELWOOD FARMS

STONEHOUSE DISTRICT
JAMES CITY COUNTY
VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=20'	Date: 2/7/19

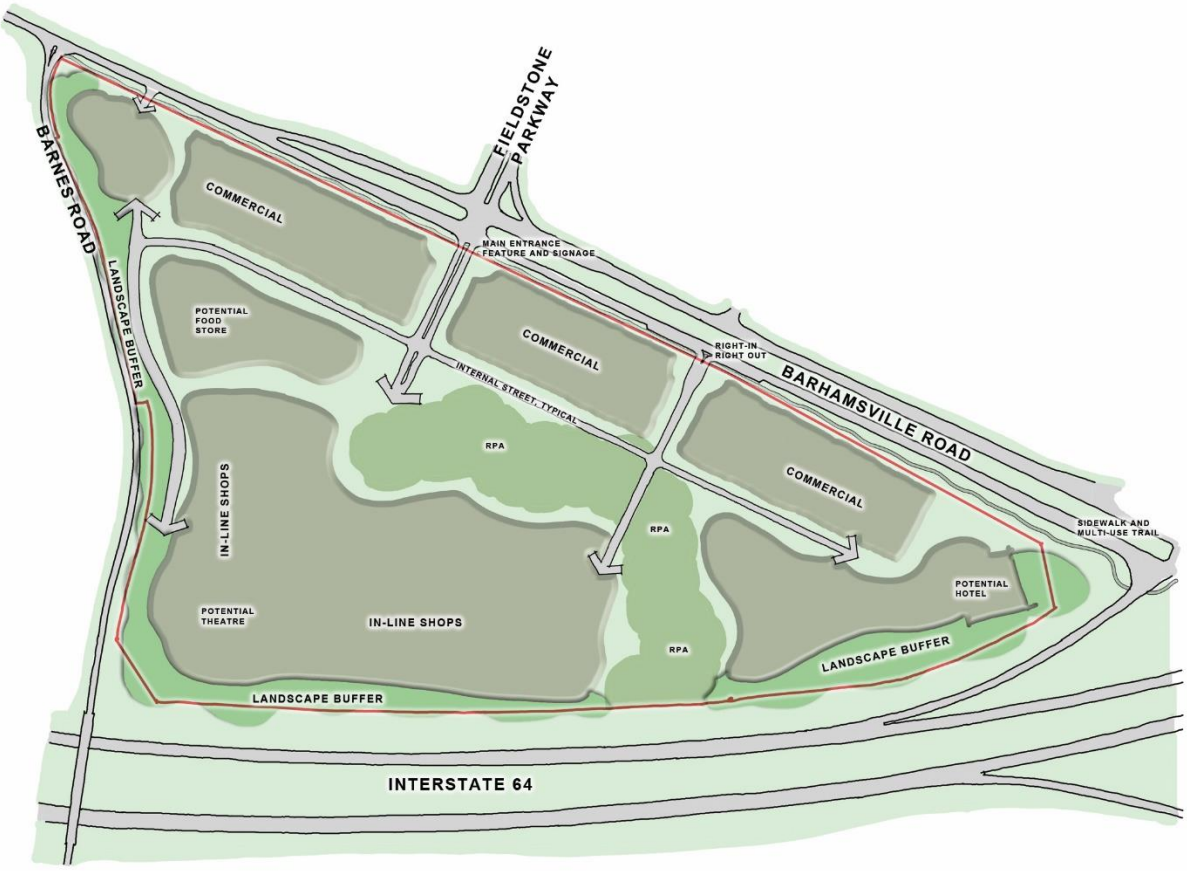
Sheet Title:
CONCEPTUAL RT. 30 ROAD IMPROVEMENTS PLAN

Sheet Number
MP-6

S:\JOBS\W10325\01\Graphics\Exhibits\MP-6.dwg 2/12/2021 4:36:34 PM Darryl.grim

Design Guidelines
for
Hazelwood Farms Village Center

James City County, Virginia
September 22, 2021



prepared for:
Hazelwood Realtors, LLC
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804-512-5892

prepared by:
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Williamsburg, VA 23188
757-253-0040
www.aesva.com

Contents

Overview 2

General Description 4

Vehicular and Pedestrian Circulation 5

Public Access Improvements 6

Streetscapes 7

Parking and Access 8

Building Pattern and Form 8

General 8

Visual Character 10

Building Elements: 11

Special Requirements for Specific Building Types 12

Landscape and Open Space Standards 14

General Requirements 14

Open Spaces and Pedestrian Ways 14

Parking Areas 14

Signage 15

Overview

The property is located in the Stonehouse district of James City County, Virginia, at the intersection of Interstate 64 and Route 30/Barhamsville Road. It lies entirely to the west side of Route 30/Barhamsville Road and is subdivided by Interstate 64 into two major sections. These guidelines are concerned with the north section, heretofore referred to as the "Village Center."

The Village Center has easy access from the interstate for west-bound traffic and shares a major intersection with the Stonehouse residential community. Thus the Village Center is master planned as a mixed use development to create a walkable downtown for the Stonehouse district of James City County. The master plan further encourages forward-thinking accommodations for the automobile, with ease of parking and circulation without sacrificing a quality pedestrian experience.

These standards are intended to comply with the James City County Zoning Ordinance with the expectation of a "Special User Permit" (SUP) under the current "B-1" zoning category per Division 10, "General Business District." Wherein any discrepancies or ambiguities may occur, these guidelines shall not be interpreted to allow standards which are less restrictive than the Zoning Ordinance. These guidelines are also written to satisfy the conditions of Landscape Standards, in accordance with Section 24-98(3) of the Zoning Ordinance.

The Developer shall be responsible for administration of these Design Standards and shall engage a licensed Architect ("Review Architect") to interpret their application for all aspects of the project through a formal, documented review process. Selection of the Review Architect shall be at the sole discretion of the Developer. The responsibility for administration of the Design Standards may be assigned to another entity (such as a "property owners association") in the future, at the sole discretion of the Developer.

It is recognized by the Owner and agencies having jurisdiction that these guidelines are written with an overarching intent of establishing a standard of quality and consistency in the architecture and site development for the property. It is furthermore understood that actual development and detailed planning may occur in the less immediate future when real estate market trends, best practices of land planning and transportation technology have changed in ways that cannot be imagined or anticipated at this time. As such these guidelines may be re-visited in the future and may be appropriately amended to reflect such changes at the discretion of the developer, property owner or property owners association, with the review and approval of the James City County Planning Director.

Design submission procedures and forms shall be developed and formalized by the developer prior to submission to James City County for building permits or site plan approvals. At a minimum, those procedures shall include:

- Conceptual Review of proposed site development of a given parcel as well as any implied master plan adjustments.
- Conceptual Review of proposed exterior architectural development with rendered perspectives and/or elevations, consistent with footprints depicted on the site development plan and indicating grade adjustments with reasonable accuracy.

- Final building design and site plan submissions with proposed materials and colors at appropriate scale and detail.
- Final building material and color selections submitted and documented with samples of predominant materials
- Final landscape and hardscape selections submitted and documented with photographs of key elements, such as street furnishing (e.g. bike racks, street light posts, trash receptacles, benches, etc…)

The developer shall commit to "sustainable" land planning and building design, incorporating best practices of LEED, Earthcraft, or other equivalent "Green Building" certification and assessment tools, in compliance with the "Endorsement of Green Building Incentives" policy of James City County (case no. ZO-00005-2011). If the developer elects to obtain formal certification through such a program, it is recognized that they would be entitled to the benefits outlined in that official resolution.

General Description

The Village Center is envisioned as an entertainment, retail, office and business support complex. While connected to the Stonehouse residential development with cycling and pedestrian ways, this parcel is located at ideally for arrival by automobile. Thus, a portion of the site is to be organized in a more traditional regional shopping center development pattern, with in-line shops and parking courts. An appropriate community anchor, such as a movie theater, is proposed on center with the main property access.

Along Route 30/Barhamsville Road, commercial/retail establishments are proposed, but with a required pedestrian approach from a parallel internal street. For the remainder of the parcel, numerous small, common parking areas are to be incorporated in the final master plan, in lieu of a single large parking field. The eastern most portion of the property is the most prominent. The master plan anticipates a larger use, such as a hotel or multi-story office building at that location.

The parcel is naturally subdivided by a small amount of environmentally sensitive wetlands. Buffers are to be utilized to both protect these areas and feature them as a park for pedestrians, bikers and vehicles. On-street parking along the face of the in-line shops and/or pick-up/drop-off zones are to be incorporated to promote a pedestrian character, while also anticipate future accommodations for semi-autonomous self-parking vehicles.

Figure 1: Village Center Diagrammatic Master Plan

Vehicular and Pedestrian Circulation

The heart of the Village Center is organized around a collection of parking courts which are bounded by out-parcels on two sides, a series of in-line shops on a two other sides, and park land on the remaining. While planned for convenient access from the interstate, it is also connected to the Stonehouse residential development by a bike path and a pedestrian friendly boulevard.

Arrival by automobile is through a sequence of spaces designed to calm traffic and cede preference to the pedestrian. In anticipation of a future with autonomous or semi-autonomous (self-parking) vehicles, accommodations are proposed for vehicle drop-off and pick-up convenient to each shop or service. Parking is arranged in relatively small lots to complement residential scale architecture and includes parallel parking to promote pedestrian safety and an urban character. Charging stations for electric cars are to be distributed within the larger parking areas with adequate infrastructure to accommodate increased demand over time. Bike Racks are to be included at major services (e.g. restaurants) and public spaces to encourage the use of bicycles within the Village.

So, what might this look like? While it is the purpose of these guidelines to allow for creative solutions, below is an "illustrative plan" to serve as an example. This is a workable solution which provides a network of circulation paths which work together to serve the economic viability of the property while utilizing its environmentally sensitive assets as natural amenities. Other approaches may be equally viable, and acceptable under these guidelines.

However the specific layout of the streets and buildings eventually develops, it should exhibit pedestrian connectivity:

- Main vehicular entrances to the site should also include pedestrian and biking connections to the multi-use trail along Route 30/Barhamsville Road.
- Internal streets should be served by sidewalks that themselves connect to building entrances.
- The sidewalk system is to be well thought-out such that traversing from any one building on the site to any other can be accomplished in a clear and logical manner, without interruption, along internal streets, through passive parks and woodlands, from each parking court, and within each sub-parcel.
- Allowance should be made in the detail planning of the site for two (2) Bus Stops that coincide with designated pedestrian ways.

Public Access Improvements

Vehicular and non-vehicular public access to Village Center is provided by improvements to Rt. 30, VDOT shared use paths on Rt. 30 frontage, and accommodations for bus service.

Vehicular access to the site includes the following road improvements:

- A primary full access entrance aligned at the Rt. 30/Fieldstone Parkway intersection with a divided median entrance to Village Center, additional turn lanes for site access and signalization. Future improvements by Stonehouse are integrated into plans.
- A secondary right turn in and out entrance on Rt. 30 south of Fieldstone Parkway.

The improvements at Rt. 30/Fieldstone Parkway provide the capacity to accommodate traffic from Village Center and other planned developments in the area.

Non-vehicular access is to be provided by VDOT shared use paths (10 foot wide):

- On the west side of Rt. 30 from I-64 ramps to end of limited access fence: approximately 1500 feet. This section is within the I-64 limited access fence and is contingent upon Federal and State approval.
- On the west side of Rt. 30 from to I-64 limited access fence to Barnes Road: approximately 2300 feet.
- On the north side of the Rt. 30/Fieldstone Parkway intersection, a shared use path crossing of Rt. 30 from the Village Center entrance connecting to a future shared use path in Moss Creek development: approximately 300 feet.
- Total: approximately 4100 feet.

These shared use paths are to be built to VDOT specifications for VDOT maintenance. These paths will be located with public rights of way or on easements dedicated to public use and VDOT maintenance.

Two bus stops will be included as approved by WATA. Bus stops on public roads may include bump outs designs and will include access to the shared use path system. Bus stops within the private property parking lots will include landings for bus patrons and pedestrian connections to shared used paths.

Streetscapes

Buildings will be oriented to the streets or a public park. Where parking must be behind or to the side of a building, a secondary entrance more convenient to vehicle access is acceptable, but will not eliminate the requirement of a major entrance addressing the street or park.

Architectural elements, businesses and services with street activities such as sidewalk-dining and balcony overlooks are strongly encouraged.

For free-standing buildings especially, buildings should be located on their respective sites so as to reinforce a pedestrian comfort and vitality. Specifically:

1. Parking should be located to the rear or side of each building. Shared parking between free-standing buildings is to be encouraged.
2. Buildings along Route 30/Barhamsville Road should have main entrances facing the internal street with some formal gesture, such as a secondary entrance, facing Route 30/Barhamsville Road. Alternatively, entrances may face to the side, with sidewalk extending to the streets to create a strong visual connection to both the internal street and Route 30/Barhamsville Road.
3. Sidewalks and pedestrian accommodations are to be provided to create obvious, safe and functional connections to the internal street sidewalks.
4. Street Trees and pedestrian scaled lighting are to be installed along internal roads that are complementary to those features located on in-line shops. Coordination of such elements with the owner of the in-line shops building is encouraged. Some latitude will be afforded in the approval process for such coordination.

Parking and Access

1. Parking shall be arranged in a collection of central parking courts and small parking enclaves. "On street" parking along the face of in-line shops, in combination with pick-up/drop-off areas adjacent to the entry elements is encouraged. Such areas, as well as the parking courts themselves, should be designed with an eye toward accommodating future semi-autonomous self-parking cars and include charging stations for electric vehicles.
2. Landscaping within these parking enclaves shall be minimized in favor of more effective landscaping at their perimeter for screening. Parking capacity shall be provided in accordance with the James City County Zoning Ordinance, the location and number to be confirmed as a part of the final site plan development.

Building Pattern and Form

Fundamentally, building masses are to be broken down into smaller, pedestrian scaled elements. There should be a mix of sloped roof elements and parapet-roofed facades. Outer parcel buildings are to have a predominantly 1-1/2 to 2 story expression; thus one-story buildings should appear to have an attic level with dormers or other architectural devices creating that illusion. Large floor plates (exceeding 12,000 sf) are to be avoided; but where necessary building masses are to be visually broken down into smaller elements to give the appearance of multiple smaller buildings. A single building footprint greater than 70,000 or with a depth greater than 90' will be allowed without such treatment to its massing and appearance.

General

1. In-line shops:

The general building form of the in-line shops is anticipated to be a relatively simple series of "boxes" with a parapeted, low-slope roof system. Each tenant space shall have at least one major architectural feature at each of its public entrances. Exterior finishes generally visible to the public shall be of the nature and quality that are consistent with the free-standing buildings, such as brick and siding. Facades on sides of the building that are not visible to public right-of-ways may deviate, but shall be well screened with landscaping and of a color and quality compatible with the rest of the building, such as painted, textured concrete block.

1.1. Entrances to the retail spaces shall have a village character, being more in scale with the pedestrian than the main building form, which is necessarily large. Store entrance elements shall have a consistency of architectural vocabulary, but vary enough to evoke the organic nature of a village. Sloped roofs, dormers, display windows and awnings are encouraged.

1.2. Special attention is to be paid to the spaces between the buildings and between the retail entrance elements, creating a sequence of pedestrian ways which link street-like walk-ways to the parking court and natural green spaces

2. Free-standing Buildings:

Free-standing buildings are generally anticipated to be single-user buildings which are to have a village or small-urban scale. Simple, unadorned building massing is not acceptable.

2.1. They should be predominantly slope-roofed and designed to be seen from all four sides. If the main entrance to the building faces to side parking area, a well landscaped, prominent sidewalk should connect that entrance to the internal street and sidewalk system.

2.2. Architecturally, they should emulate, complement or respond to the architecture of the in-line shops. While reference to corporate chain architecture is not prohibited, it must be customized to appear as part of a consistent development theme.

3. Building Elements:

The height of each building shall be limited by code and zoning ordinance as well as specific tenant requirements. Mechanical equipment shall be screened from view utilizing roof-top equipment or, if ground mounted, fencing and/or landscaping. Tenant entrance elements should exceed the height of the main building form.

Visual Character

1. Architectural Style:

These guidelines are not intended to require a specific architectural style. Rather, once chosen there should be a consistency of architectural style and character throughout the Village. The following visual design criteria are meant to be style-independent, although they clearly lend themselves to historic revival or contemporary-transitional styles.

2. Edge Definition and Screening:

Fences and walls shall be architecturally consistent with the building designs. Walls are to be made of a combination of materials, including brick, decorative cmu, siding, stone, and to a limited extent, stucco. Fences and privacy screens are to be made of wood pickets, pvc lumber, wrought iron, vinyl board on board fencing, or painted metal. Chain link fences are not permitted. Landscaping may be used in conjunction with fences and walls to better define edges or screen views and activities.

3. Scale and Articulation:

3.1. Scale is the relationship in size between buildings and the human form. Articulation is the way in which architectural elements are used to reduce the scale of the masses that compose the building form. Buildings shall be designed to appear smaller through the articulation of the overall massing and organizing it as a collection of smaller component masses. The use of architectural elements such as bays, balconies, porches, loggias and arcades add interest to building facades and aid in relating the scale of any building to human dimensions. Roofs may be articulated through the use of dormers, lanterns, monitors, widow's watches and other roof¬top elements.

Each of these devices adds character and interest to the buildings of the development which, in turn, reinforces the village character intended by these guidelines.

3.2. There shall be an adequate variety of architectural elements along all facades to distinguish individual shops while remaining stylistically consistent within the entire development.

4. Building Elements:

4.1. Building Materials - General

4.1.1. Building walls: brick, stucco, clad wood, wood shingle, wood clapboard, wood board and batten, and fiber cement siding.

4.1.2. Exposed Foundation Walls: Brick or brick facing, or stucco finished poured concrete or concrete block.

4.1.3. Materials shall transition and terminate appropriately. If a material transition is desired, such transition shall occur at interior corners, not outside corners. Materials shall be utilized to express component massing and shall not be treated as surface decoration. No more than two wall materials may occur on any individual building.

4.1.4. Chimneys: brick, stucco, or tabby (coastal concrete)

4.1.5. Arcades and colonnades: brick, stucco, wood, poly-stone, fiberglass

4.1.6. Porches, columns: painted wood, cellular pvc, painted metal, poly-stone, fiberglass

4.1.7. Posts, spindles, balusters: painted wood, cellular pvc, painted metal, poly-stone, fiberglass

4.1.8. Stoops, exterior stairs: brick, wood, or steel

4.1.9. Decks: wood, composite lumber, or high quality synthetic wood decking

4.1.10. Awning and canopies: canvas-covered metal or wood structure

4.2. Roofs:

4.2.1. Recommended Materials:

- Roofs: Wood shingles, galvanized or painted metal seamed, copper, lead-coated copper, slate, synthetic slate, architectural grade asphalt or fiberglass shingle.
- Live Roofs: Live roofs are permissible, to be approved on a case-by-case basis and should be integral to the architectural character of the entire building.
- Gutters and downspouts: galvanized aluminum, painted metal, copper
- Flashing: copper, lead coated copper, galvanized aluminum

4.2.2. Roof Shapes:

- Buildings shall have a varied character of traditionally shaped roofs.
- Principal Roofs: Gabled, hipped, hipped gables, gabled hips or gambrel in a symmetrical fashion with a slope of 6:12 to 12:12.
- Secondary Roofs: Shed with minimum slope of 2:12.
- Roof Terraces: Permitted when accessible from an interior space or in the form of a special rooftop element.
- Flat Roofs: Permitted as a primary roof when interrupted with other sloped or parapeted roof elements. Permitted as a secondary roof when in the form of a

special rooftop element or tower. Flat roofs generally are to have parapets, balustrades or railings.

- Parapets: Horizontal
- Dormers: Shed, Pitched or eyebrow
- Special roof-top elements: Symmetrically situated or aligned with the rhythm of structural bays and fenestration.
- Roof-top mechanical enclosures: Concealed from view by sloped roofs of the character described above.

4.3. Fenestration

4.3.1. Window Glazing: Refelctive glass (such as black spandrel) is unacceptable and will not be permitted. All window glazing should allow visibility to the interior of the building.

4.3.2. Recommended Materials:

- Windows: wood, painted metal, vinyl, metal clad wood
- Bay windows: wood, metal clad wood, painted metal, with metal tops
- Doors: painted wood, metal clad wood, painted metal, fiberglass resin
- Garage doors: painted wood, metal with incorporated glazing, clad wood
- Shutters: wood, fiberglass resin
- Security doors and grilles: metal

4.3.3. Configuration:

- Windows: Rectangular with a minimum proportion of 1.5 vertical to 1 horizontal.
- Bay windows: rectangular or chamfered.
- Doors: rectangular with rectangular transoms, if used. Glazing within doors shall be consistent with window glazing.
- Garage doors: 16’ max. in width, articulated to appear as multiple doors where possible.
- Shutters: Operable or given the convincing appearance of being operable and sized to fully cover the opening.
- Security doors and grilles: metal
- Service Doors (rear facade only): Overhead coiling metal or folding metal.

Special Requirements for Specific Building Types

1. Convenience Stores: Convenience Stores shall be designed so as to safely and effectively separate vehicular from pedestrian traffic with techniques that allow for convenient access by automobile but without sacrificing pedestrian access and connectivity. Convenience Stores with Fuel Sales and canopy must have a canopy that is visually subservient to the main store building. Canopies must relate to the store building architecturally in form, color and materials. This includes columns, ceilings, and all exposed trim, fascias and roofing. The roof element itself shall reference vernacular roof forms (gabled, hipped, mono-pitched, mansard, etc..) while being consistent with the main building form. A predominant ceiling height is limited to 15’ maximum, so as not to dominate the main building form. Use of exposed trusses and/or decorative elements that reduce the industrial feel of the canopy is strongly encouraged. There shall be no more than two signs on the canopy and

shall be integrated into the canopy design so as not to appear “mounted” as an afterthought. Halo lighting is allowed. The background of any backlit signs shall be opaque, allowing only lettering and logos to broadcast light. String or tape lighting is not allowed. Electronic lettering in canopy signs is not allowed.

2. Hotels: It is anticipated that a multi-story hotel may be an optimal use within the Village Center, given its proximity to the interstate interchange. Such a facility should be designed with a sensitivity to the established theme of the Village Center and the local vernacular architecture. In addition to general criteria above, hotels will also be subject to the following requirements:

2.1. To make the building consistent with the surrounding vernacular architecture, it should endeavor to incorporate design elements that are evocative of its surroundings in their use of materials, scale and architectural embellishment.

2.2. Emphasis in the design should be given to the ground-floor, as the portion of the building that is most relatable to the pedestrian scale. Ground floor commercial uses that are easily accessed from the balance of the Village Center are encouraged. Design elements that take advantage of views toward the Village Center and its environmental assets are also encouraged.

2.3. The design of the building should also make a nod to the vernacular architecture by the use of sloped roof elements at or above the top floor.

2.4. Façade elements between the top and ground floors should be composed of a balanced pattern of fenestration elements, to include windows, balconies and bays. A monotonous repetition of the same window is not acceptable.

3. Site Design:

3.1. Any use containing a drive-through element shall be located to the side or at the rear of the building and shall not face Route 30

3.2. No building may have a footprint greater than 70,000 square feet and no two buildings may have a combined footprint greater than 90,000 square feet. Floor plates may not be larger than 12,000 square feet without being divided into what appears to be two or more buildings.

3.3. Building depths may not be greater than 90 feet without being divided into what appears to be two buildings.

Landscape and Open Space Standards

General Requirements

Landscaped open spaces, parking areas and pedestrian ways shall have emphasis placed on their edges either with buildings or plantings to create the effect of "outdoor rooms." Walk-ways adjacent to buildings shall reinforce the sense of a public street. Walk-ways adjacent to open spaces shall be lined with trees to reinforce the edge of the open space. Landscaping along Route 30/Barhamsville Road should provide visibility into the development while creating an effective buffer for parking and "back of house" building elements. Other property edges should retain natural buffers, to the extent practical, to maintain a character consistent with the surrounding area. The main road into the development, should be tree-lined and formal, creating a natural extension of, but not necessarily duplicative treatment as, Fieldstone Parkway.

Open Spaces and Pedestrian Ways

1. Pedestrian ways are to be planted with trees spaced at a consistent spacing, at a magnitude appropriate to their species (e.g. 40' on center for Pin Oak). Shade/Canopy type trees are the preferred tree type for all formal open spaces; ornamental trees may be used to emphasize special open spaces and pedestrian ways. In all cases, species and planting sizes are to be selected to be in keeping with the scale of the space in which they will reside. Street-lights in public ways shall be spaced so-as not to conflict with tree plantings and be of a pedestrian scale and design, a maximum of 16' in height.

2. Developer shall provide for a multi-use trail and sidewalk along Route 30/Barhamsville Road site boundary. The trail shall be 8'-0" to 10'-0" in width, minimum. Precise design and character of both is to be determined in coordination with any VDOT required improvements at Barahmsville Road.

Parking Areas

1. Parking shall be arranged in small parking enclaves. On-street parking is encouraged adjacent to the entry side of the buildings. Pick-up and Drop-off areas are also encouraged in anticipation of future semi-autonomous self-driving vehicle technology.
2. Landscaping within parking enclaves shall be minimized in favor of more effective landscaping at their perimeter for screening.

3. Parking layout is to be simple and logical. Fencing and landscape screening is to be utilized to effectively screen parking areas from adjacent properties and public right-of-ways. Lighting in parking areas shall be taller than the pedestrian oriented fixtures, providing a reasonable degree of ambient lighting for public safety.

Signage

1. Signs are to be submitted as part of building design and park design submissions.
2. Monument signs are encouraged. Pedestrian oriented, architecturally detailed post-mounted signs (such as those in the Merchant Square district of Colonial Williamsburg) are also encouraged. Similarly detailed wall-mounted blade signs are encouraged. Simple pole-mounted signs are prohibited.
3. Building face signs must be coordinated with the architectural design of the building and sized to fit naturally into a sign band or other location anticipated in the building design. Roof mounted signs are prohibited.
4. Where allowed by ordinance, a secondary building face sign facing a public street is allowed, but must be sized and designed to coordinate with the building architecture.
5. All signs must conform with the James City County sign ordinances and be approved by James City County subsequent to approval by the developer.
6. There is to be a significant entrance feature, facing the Stonehouse residential development. The entrance feature should be aesthetically pleasing to the eye and incorporate similar lines, materials, colors and signage font as StoneHouse residential development located opposite of the entrance. The intent will be to create the appearance of being an extension of the neighborhood ambiance. However, while complementary it should be more pedestrian in scale and urban in character. A detailed landscape plan should accompany the entrance design and may incorporate a monument sign complying with the James City County sign ordinances. Signage may be utilized to identify the development, major tenants, or both.

Community Impact Statement

Special Use Permit

for

The Village Center

at

Hazelwood Farms

Prepared For

Hazelwood Farms, LLC
P.O. Box 27
Toano, Virginia 23168

And
Timothy O. Trant II
Kaufman & Canoles
P.O. Box 6000
Williamsburg, Virginia 23188

February 7, 2019
(Revised on April 2021)

AES Project Number: W10325-01

Prepared by:

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TABLE OF CONTENTS

I. INTRODUCTION....3

II. THE PROJECT TEAM 5

III. PLANNING CONSIDERATIONS AND PROJECT DESCRIPTION....6

IV. ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES....7
- A. Public Water Facilities 7
- B. Public Sewer Facilities 8
- C. Fire Protection and Emergency Services 8
- D. Solid Waste....9
- E. Franchise Utility Service Providers 9

V. ANALYSIS OF ENVIRONMENTAL IMPACTS 9

VI. ANALYSIS OF STORMWATER MANAGEMENT (SWM) / BEST MANAGEMENT PRACTICES (BMP) 9

VII. ANALYSIS OF IMPACTS TO TRAFFIC....11

VIII. CONCLUSION....11

LIST OF TABLES
- Table 1-Projected Water usages....7
- Table 2- Projected Wastewater Flows 8

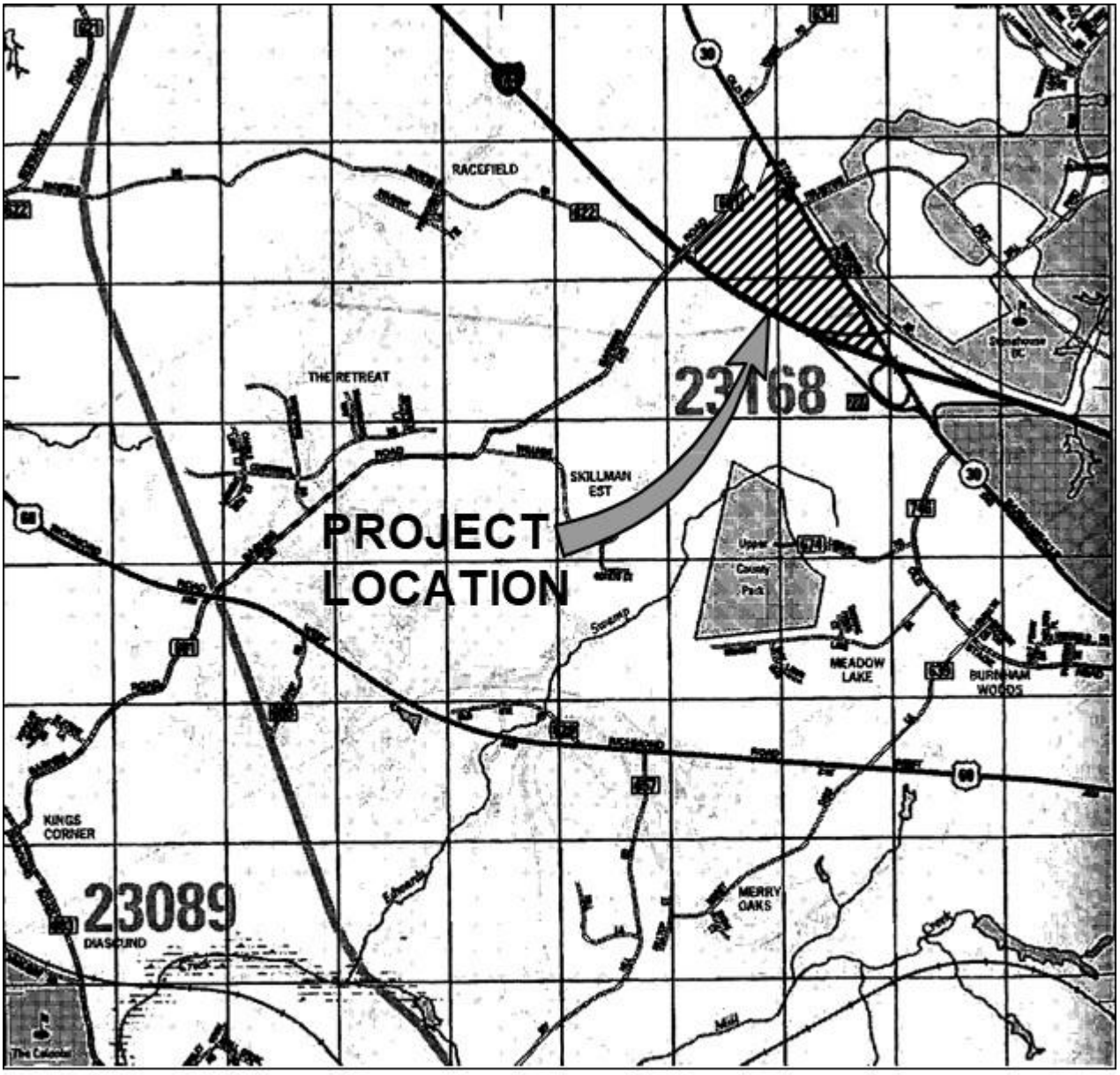
LIST OF EXHIBITS
- Exhibit 1-Location Map 4

APPENDIX
- Traffic Impact Analysis……Under Separate Cover
- Phase I Cultural Resources Assessment……..……
- Endangered Species Report ……..…..

I. INTRODUCTION

On behalf of Hazelwood Farms, LLC, Timothy O. Trant II of Kaufman & Canoles, P.C. proposes to request a Special Use Permit for the Hazelwood Farms property in the Stonehouse district that is referred to as the Village Center (Northern parcel). The property consists of approximately 79.06 acres total, consisting of 5 parcels (3) in the Name of Hazelwood Farms, LLC and (2) in the name of Hazelwood Farms, LLC & Hazlewood RM III Trustee ET ALS, All parcels are zoned in the B-1 (General Business) and are within the Primary Service Area (PSA). The property is located on the Northwest side of Interstate 64 and accessible by the South side of Old Stage Road (Rte. 30). This Special Use Permit is being sought to allow for up to 510,000 square foot of various retail, grocery, bank, office, self-storage, restaurant, hotel, convenience store, fuel station and other commercial uses consistent with the B-1 zoning within a common development on these properties in the Stonehouse District in James City County.

Exhibit 1 – Location Map



VICINITY MAP
(Approximate Scale: 1"=2000')

Copyright ADC The Map People permitted use number 21004223

II. THE PROJECT TEAM

The organizations that participated in the preparation of the information provided in this impact study are as follows:

- Owner -Hazelwood Farms, LLC
- Legal -Kaufman & Canoles
- Land Planning -AES Consulting Engineers
- Civil Engineering -AES Consulting Engineers
- Architectural -Hopke & Associates
- Environmental -Kerr Environmental
- Traffic -DRW Consultants, LLC

III. PROJECT DESCRIPTION AND PLANNING CONSIDERATIONS

Project Description

The owner is proposing to build a commercial development to include various business uses to include possible retail, grocery, bank, self-storage, restaurant, and other commercial uses consistent with the B-1 zoning within approximately 79 acres in the Stonehouse District in James City County.

Potential Special Permit Uses

- Any convenience stores that sell and dispense fuel
- Commercial in excess of 10,000 square feet of floor area
- Commercial that generates more than 100 additional trips during peak hour of operation
- Fast Food with Drive Thru
- Banks with Drive Thru

Planning Considerations

The Village Center at Hazelwood Farms, lies within the Primary Service Area (PSA) of the County, is designated within the Stonehouse Mixed Use area within the Comprehensive Plan and fronts on a Community Character Corridor (US Rte. 30).

The Primary Service Area (PSA) is an important planning tool within James City County and it encourages efficient use of public facilities and services, avoids overburdening such facilities and services, helps ensure facilities are available where and when needed, increases public benefit per dollar spent, promotes public health and safety through improved emergency response time, and minimizes well and septic failures. As this Site is within the PSA it has been identified as one where James City County has planned for growth with the knowledge that services can be brought to the site and that there is ample capacity in these systems to support this project.

The project frontage along Old Stage Road (US Rte. 30) and is designated as an open/agricultural in the Community Character Corridor classification. The County “acknowledges that views along these roads can have a significant impact on how citizens and visitors perceive the character of an area.” It is the intent of this project to enhance the character of this area of the County with the implementation of Design Guidelines that will help to frame the development

within the proposed business zoning.

The site is designated to be within the Stonehouse Mixed Use area on the Comprehensive Plan. That mixed use area is noted to be suitable for business development for light industrial, office/business park, with an emphasis to avoid “strip” style development. It is the intent of this project to enhance the character of this area through the use of our Master Plan and design guidelines (including the Enterprise Center under separate application) to develop a retail/commercial center that avoids the “strip” center feel and enhances the experience for the existing residential and commercial areas in the upper portion of the County.

IV. ANALYSIS OF IMPACTS TO PUBLIC FACILITIES AND SERVICES

The subject property of this Special Use Permit application is located within the Primary Service Area of James City County. Identified on the zoning maps, the Primary Service Area is an area where urban development is encouraged to occur. Public water and public sanitary sewer services (and other public services such as police, fire and life rescue, and transportation) are presently provided to parcels within the Primary Service Area.

A. Public Water Facilities

The subject property will be served with potable water by the existing JCSA water distribution system in the area. JCSA currently maintains a 16" water main along the north side of Fieldstone Parkway. The existing water system shall be extended from Fieldstone parkway across Old Stage Road to service the proposed development.

The project's internal water system will consist of a combination of 12 and 8-inch water mains, providing the project adequate volumes and pressures for consumption and fire protection. Verification of the adequacy of the JCSA existing water system and design of the on-site water main extensions will be further analyzed and location of piping confirmed with modeling techniques based upon field testing during the site design. As part of discussions with representatives of the James City Service Authority, there are concerns about the future needs within the northern portions of James City County that may require a system loop across Interstate 64. Accommodation for a system loop will be made additional modeling will be preformed at the site plan stage to ensure adequate supply and pressures exist within the system.

Water consumption for the proposed project is estimated at with a Daily Water Demand of 88,500 gallons per day. Peak Hour Water Demand for this project is estimated at approximately 492 gallons per minute (see Table 1 for more detail)

.

TABLE 1 - PROJECTED WATER USAGE

Type of Use	Design Units	Flow (GPD/Unit)	Total Flow (GPD)	Duration (hrs)	Avg Flow (GPM)	Peak* Flow (GPM)
Shopping Center	375,000 SF	0.2	75,000	12	104.17	416.67
Office	135,000 SF	0.1	13,500	12	18.75	75.00
Total			**88,500**		**122.92**	**491.67**

*Peak Flow = 4 * Avg. Flow

B. Public Sewer Facilities

The commercial properties and buildings proposed within this development are proposed to be served by a sanitary sewer pumping station and 6" force main that will connect to the JCSA system. The proposed force main and pump station are anticipated to be owned and operated by JCSA at the time the system is connected to the public sewer system. For the exisiting sewer along Fieldstone there is the option to connect to either a gravity sewer system or a 12" force main sanitary sewer system. Portions of the sewer system along Fieldstone Parkway have not been dedicated to JCSA and it is understood that any connection to these not yet dedicated systems will require testing and assurances to JCSA that the existing system and downstream stations have capacity to accept the flow. At this time based upon future development forecasting, it is anticipated that pump station upgrades may be necessary to both LS 9-1 and LS 10-1. The owner agrees to make the necessary accommodations at the time of site plan approvals to ensure system adequacy.

The estimated average daily flow generated from the proposed development is 88,500 gallons per day (GPD) with a peak flow rate of 369 gallons per minute (GPM). See Table 2 below for details of projected wastewater flows.

Table 2 – Wastewater Flows

Type of Use	Design Units	Flow (GPD/Unit)	Total Flow (GPD)	Duration (hrs)	Avg Flow (GPM)	Peak* Flow (GPM)
Shopping Center	375,000 SF	0.2	75,000	12	104.17	312.50
Office	135,000 SF	0.1	13,500	12	18.75	56.25
Total			**88,500**		**122.92**	**368.75**

* Peak Flow = 3 * Avg. Flow

C. Fire Protection and Emergency Services

There are currently five fire stations providing fire protection and Emergency Medical Service (EMS) to James City County. Each station is placed within the County in such a way as to help achieve the response goal of six minutes or less. Every station is staffed by three shifts of career and volunteer Firefighters. Station crews are responsible for the pre-planning of target hazards in their area as well as safety inspections of private businesses within the response district

In addition, there exists a mutual aid agreement with the York County and City of Williamsburg for backup assistance. The location of the project allows for coverage by one of the county's five stations: James City County Station 1, located on Forge Road, York County Station 5, located on Newman Road, and the City of Williamsburg as a third backup all will be within reasonable response times of the project.

D. 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. Reputable, private contractors will handle the collection of solid waste. Both commerical trash and recyclable material will be removed from this site to a solid waste transfer station.

E. Franchise Utility Service Providers

Virginia Natural Gas, Dominion Enginery, Cox Communications, and Verizon Communications provide, respectively, natural gas, electricity, cable TV/ Internet service, and telephone service to this area. The current policy of these utility service providers is to extend service to new 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.

V. ANALYSIS OF ENVIRONMENTAL IMPACTS

An environmental inventory, wetland delineation, and perennial stream analysis has been prepared by the Kerr Environmental Group 4/15/15. The inventory is incorporated into the provided Master Plan for the development.

VI. ANALYSIS OF STORMWATER MANAGEMENT (SWM) / BEST MANAGEMENT PRACTICES (BMP)

A conceptual stormwater management plan, meeting the general criteria of the Commonwealth of Virginia and James City County's stormwater requirements, was completed as a component of the planning for the proposed The Hazelwood Farm development. The goal of the stormwater management plan is to meet or exceed local and state stormwater requirements. In evaluating preliminary stormwater management solutions of the proposed development on the subject site, the site characteristics are considered. Preliminary site observations and mapping identify the following unique site characteristics to be considered in stormwater management

planning:

A. The property drains to an unnamed tributary of the Diascund Creek watershed which drains under Interstate 64 and through the southern portions of the Hazelwood Farms property.
B. The project currently collects off-site water from Route 30 and portions of Barnes Road.
C. The site currently has one home, various out buildings, 10 acres of crop land, with the remaining portions being forest.
D. All of the project area's existing drainage is surface runoff, ultimately converging to the unnamed tributary of Diascund Creek, located in central and south east of the project site.
E. The project site largely consists of well drained soils with 0 to 6% slopes, with some slopes over 25%. Slopes greater than 25% are primarily found within the RPA buffer.

Stormwater is to be managed by a series of best management practices and pipe drainage networks that ultimately discharge into downstream wetlands. Stormwater management, conceptually, consists of two primary components; large wet ponds and a series of Low Impact Development (LID) features scattered around the project to capture and treat water near its source (buildings and parking lots). The stormwater management plan is intended to meet the general criteria of the Commonwealth of Virginia and James City County's stormwater requirements. Upstream bioretention cells, filterras, dry swales, and other low impact development measures will contribute to stormwater quality control and will feed into the downstream wet pond. Per compliance with the Virginia runoff reduction method, all proposed site work will be managed by these stormwater measures to negate downstream wetlands impacts and pollution from entering into the Chesapeake Bay.

Preliminary analysis of the Stormwater Management and BMP goals using the DEQ Virginia Runoff Reduction Method Spreadsheet is included on the Master Stormwater Management Plan (sheet 4 of the Master Plan set). In this system, the project must reduce the post-development phosphorus load to provide adequate stormwater treatment. The wet pond BMPs are designed to improve water quality and elongate time of concentration for stormwater runoff.

In summary, the preliminary analysis and intent of the stormwater management plan for the Village Center at Hazelwood Farms project demonstrates the stormwater management plan proposed will improve the overall downstream water quality and will help to control the

downstream erosion and water quality from the currently uncontrolled runoff onto the downstream neighboring properties.

VII. ANALYSIS OF IMPACTS TO TRAFFIC

The proposed commercial development has been analyzed by DRW Consultants, LLC and is addressed within the Master plan. The DRW traffic impact analysis is submitted under separate cover.

VIII. ANALYSIS OF CULTURAL RESOURCES IMPACTS

An Archaeological Assessment for James City County; per the County's Archaeological Policy, was prepared by Circa (October 2014) and is attached in the Appendix of this report.

IX. ANALYSIS OF NATURAL RESOURCES IMPACTS

Rouse Environmental Services working on behalf of Kerr Environmental Group conducted an investigation of the site to review it for potential endangered wildlife and plant species. It was determined following an investigation that there were no such species or potential habitats deemed to be present on this property. A copy of their report is attached to this submittal.

X. CONCLUSION

In summary, The Village Center at Hazelwood Farms development is being planned as a commercial site which may include offices/retail, banks, restaurants, retail specialty's, fast food and a hotel within the B-1 Zoning District (General Business). Planning of the site as a commercial village center incorporates design principles to not only attract interstate traffic but to provide a "Village" atmosphere for surrounding residents to enjoy. There is adequate capacity in the system of roads serving this project, as well as adequate public facilities and wet and dry utilities available for the development. The site respects the environmental sensitivity of the watershed by reducing uncontrolled runoff and providing water quality protections. The proposed use meets the intent of the Comprehensive Plan and the community with the tangible public benefits of a neighborhood commercial center.

Ch. 527 Traffic Impact Statement For Village Center And Enterprise Center At Hazelwood Farms

JAMES CITY COUNTY, VIRGINIA

For:
Hazelwood Farms, LLC

By:
DRW Consultants, LLC
Midlothian, VA

January 2019

Ch. 527 Traffic Impact Statement For Village Center And Enterprise Center At Hazelwood Farms

JAMES CITY COUNTY, VIRGINIA

For:
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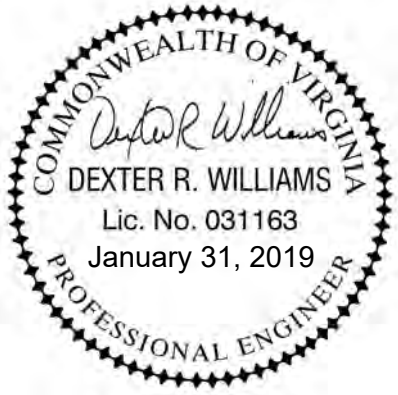
By:
DRW Consultants, LLC
Midlothian, VA



January 2019

TABLE OF CONTENTS

REPORT TEXT	Page
Introduction	1
Executive Summary	2
Background Information	5
Site Locations & Description	5
Study Area	5
Existing Roadways	6
Programmed Improvements	6
Area Land Uses And Zoning	6
Comprehensive Plan Recommendations	7
Analysis Locations	7
Current & Proposed Site Zoning	8
Stonehouse Development Plan	8
Moss Creek Development Plan	8
Hazelwood Farms Proposed Development Plan	8
Related VDOT Requirements	9
Existing Conditions	10
2030 Background Traffic Without Hazelwood Farms	14
Hazelwood Farms Trip Generation, Distribution And Assignment	17
Analysis 2030 Traffic With Hazelwood Farms	19
Moss Creek Trip Generation, Distribution And Assignment	22
Stonehouse Trip Generation, Distribution And Assignment	22
Analysis 2030 Traffic With All Development	23
70 Second Cycle	25
90 Second AM/100 Second Cycle	29
Summary And Conclusions	32

REPORT EXHIBITS	Number
Regional And Area Map	1a
Area Parcel Map	1b
Peak Hour Count Locations	1c
Existing Roadway	1d
Existing Zoning	1e
JCC 2035 Land Use Map	1f
2034 Long Range Transportation Plan	1g
Peak Hour Analysis Locations	1h
Stonehouse Development Phasing Plan	1i
Moss Creek Master Plan	1j
Hazelwood Farms Map Index Sheet	2
Hazelwood Farms North Master Plan	2a
Hazelwood Farms North Access Plan – Rt. 30	2b
Hazelwood Farms South Master Plan	2c
Hazelwood Farms South Access Plan – Rt. 746 Old Stage Road	2d
Hazelwood Farms South Access Plan – Route 30 South	2e
Hazelwood Farms South Access Plan – Route 30 & I-64 EB Ramp A	2f

Route 30 Corridor 2g
2017 AM Peak Hour Traffic Counts 3a
2017 PM Peak Hour Traffic Counts 3b
2018 AM Peak Hour Traffic Counts 4a
2018 PM Peak Hour Traffic Counts 4b
2018 Daily Traffic, Sidewalks, Multi Use Paths, Transit 4c
2018 AM Traffic LOS 4d
2018 PM Traffic LOS 4e
2030 AM Peak Hour Background Traffic - Growth Factor Only 5a
2030 PM Peak Hour Background Traffic - Growth Factor Only 5b
2030 Background Growth Factor Daily Traffic, Sidewalks, Multi Use Paths, Transit 5c
2030 AM Peak Hour Level Of Service Growth Factor Only 5d
2030 PM Peak Hour Level Of Service Growth Factor Only 5e
Hazelwood Trip Generation And Distribution 6-1
Hazelwood North Trip Distribution Percentages Diagram 6-2
Hazelwood South Trip Distribution Percentages Diagram 6-3
Hazelwood North Internal Capture 6-4
Hazelwood South Internal Capture 6-5
Hazelwood AM Peak Hour Trips - 100% North & South 7a
Hazelwood PM Peak Hour Trips - 100% North & South 7b
All Hazelwoood Daily Traffic, Sidewalks, Multi Use Paths, Transit 7c
All Hazelwoood LOS 7d
2030 AM Peak Hour With Hazelwood Only 8a
2030 PM Peak Hour With Hazelwood Only 8b
2030 With Hazelwood Only Daily Traffic, Sidewalks, Multi Use Paths, Transit 8c
2030 With Hazelwood Only AM LOS 8d
2030 With Hazelwood Only PM LOS 8e
Moss Creek Trip Generation & Distribution 9
Moss Creek AM Peak Hour Traffic 9a
Moss Creek PM Peak Hour Traffic 9b
Moss Creek Daily Traffic, Sidewalks, Multi Use Paths, Transit 9c
Stonehouse AM Peak Hour Trips 10a
Stonehouse PM Peak Hour Trips 10b
2030 Total AM Peak Hour Traffic – ALL DEVELOPMENT 11a
2030 Total PM Peak Hour Traffic - ALL DEVELOPMENT 11b
2030 ALL DEVELOPMENT Daily Traffic, Sidewalks, Multi Use Paths, Transit 11c
2030 ALL DEVELOPMENT AM Peak Hour LOS – 70 Second Cycle 11d
2030 ALL DEVELOPMENT PM Peak Hour LOS – 70 Second Cycle 11e
2030 ALL DEVELOPMENT AM Peak Hour LOS – 90 Second Cycle 11f
2030 ALL DEVELOPMENT PM Peak Hour LOS – 100 Second Cycle 11g

REPORT
TEXT

INTRODUCTION

Hazelwood Farms proposes to rezone their property at the I-64/Rt. 30 interchange in James City County. This traffic study is the second phase of study to address the requirements of VDOT Traffic Impact Analysis Regulations (24VAC30-155), commonly known as Chapter 527.

The first phase traffic study included complete background information as well as complete traffic counts and forecasts required for the study. It addressed only PM peak hour traffic analysis for buildout of the area and an evaluation of two Rt. 30 intersections pursuant to VDOT Roundabout Policy (Road Design Manual Appendix F). VDOT review of the first phase study acknowledged that roundabouts are not preferable for Rt. 30 locations and only traffic signals are included in this study.

This second phase study includes traffic signals on Rt. 30 and analysis of existing conditions, future conditions without and with Hazelwood Farms, and future conditions without and with Stonehouse and Moss Creek.

The approved Ch. 527 Pre-Scope of Work Meeting Form and the signed Scope of Work Meeting Checklist are included at the end of the Appendix. This study will also provide information to James City County for its consideration of the proposed rezoning.

EXECUTIVE SUMMARY

Hazelwood Farms location in the Hampton Roads region is shown on the upper section of Exhibit 1a. The lower section of Exhibit 1a shows the two sections of Hazelwood Farms:

1. North Hazelwood Farms (formally named Village Center at Hazelwood Farms): northwest quadrant of the I-64/Rt. 30 interchange. This area is referred to in planning documents as Village Center.
2. South Hazelwood Farms (formally named Enterprise Center at Hazelwood Farms): southwest quadrant of the I-64/Rt. 30 interchange. This area is referred to in planning documents as Enterprise Center.

The directional convention in this report is Rt. 30 runs north and south and I-64 runs east and west, and North Hazelwood Farms and South Hazelwood Farms nomenclature are used.

Exhibit 1b shows the Hazelwood Farms property location with on an area parcel map. I-64 and all other public roads are maintained by VDOT.

Rt. 30 is a minor arterial under VDOT functional classification in the area and has traffic in the 10,000 vehicles per day range. North Hazelwood Farm is anticipated to be developed with all access on Rt. 30 only.

Rt. 746 Old Stage Road is located on the west side of Rt. 30 and has daily traffic in the 1,000 vehicles per day range. South Hazelwood Farms frontage on Rt. 30 is a limited access line, and all property is anticipated to be developed with access on Rt. 746 Old Stage Road. (Note: part of Rt. 30 carries the name Old Stage Road, but the name Old Stage Road only applies to Rt. 746 in this report).

North Hazelwood Farms land use plan is shown on Exhibit 2a. Anticipated development consists of 135,000 square feet office (Area 1) and 375,000 square feet of retail space (Areas 2, 3 and 4). Depending on future conditions, the rear of the property (Area 4) may have less trip generation with alternative warehouse use.

Exhibit 2b shows the access plan for North Hazelwood Farms on Rt. 30. The major access (Entrance 1) will align across from Fieldstone Parkway at a signalized intersection with four-way access. Entrance 2 will have right turn in and out only access at approximately the current location of a crossover on Rt. 30. Per VDOT directive, the existing crossover is to be closed when Entrance 2 is constructed. All site access is anticipated to be VDOT commercial entrances with private internal access.

South Hazelwood Farms land use plan is shown on Exhibit 2c. Anticipated development consists of 2,920,000 square feet warehouse (Areas 1, 2, 4, and 5), 75,000 square feet of retail space (Area 3) and 300 apartments (Area 6).

Exhibit 2d shows the access plan for South Hazelwood Farms. All access for South Hazelwood Farms is on Old Stage Road. The proposed access road (Entrance 1) will be the primary entrance and is planned to be a VDOT subdivision street. Entrance 2 will be the secondary entrance closest to Rt. 30 and is anticipated to be a commercial entrance. Both entrances are proposed to be constructed with single lane roundabouts on Old Stage Road. Roundabouts are a recommended design when left turns are a substantial part of traffic (as is the case here). Access includes reconstruction of Old Stage Road with raised median and added lanes and a traffic signal at the Rt. 30/Old Stage intersection.

The raised median on Old Stage Road will block existing left turns at the Shell Station and McDonald's entrances. The roundabout at Entrance 2 also serves to accommodate U-turns for existing left turn entering the Shell Station and McDonald's entrances.

The Rt. 30 corridor also serves as primary access for two other developments: Stonehouse and Moss Creek shopping center.

Exhibit 1i shows the Stonehouse phasing plan included with the Timmons Group traffic study for Stonehouse in 2015. That study included full development of Phase 1 and 2 and that Stonehouse traffic is included in this study. On Rt. 30, Stonehouse has two access points:

1. Fieldstone Parkway north of I-64 across from North Hazelwood Farms serves the generally residential area of Stonehouse.
2. LaGrange Parkway south of I-64 and Old Stage Road serving Hazelwood Farms the generally warehouse area of Stonehouse.

Exhibit 1j shows the Moss Creek master plan by LandMark from 2006. Trip generation for Moss Creek is included in this study. Moss Creek has two access points:

1. Moss Creek #1 entrance on Rt. 30 with full access and traffic signal.
2. Moss Creek #2 entrance on Fieldstone Parkway with full access.

Development improvements to the Rt. 30 corridor within the study are included at the following intersections from north to south (see Exhibit 2g for reference):

1. Moss Creek #1 Entrance #1 (Station 303+86). Extend 2nd northbound through lane from Fieldstone to drop off right turn at MC1. Widen for southbound left turn lane. Add traffic signal. All work by Moss Creek development.
2. Fieldstone Parkway/North #1 Entrance (Station 313+06). For Stonehouse, future signalization is required with second westbound left turn lane. For North Hazelwood Farms, signalization also required with northbound double left turn lanes, southbound right turn lane, and four eastbound lanes: double left turn lanes, through lane and right turn lane. See Exhibit 2b for details.
3. North #2 Entrance (Station 321+35). Close crossover and add southbound right turn lane. Right turn in/out only. All work by Hazelwood Farms.
4. I-64 Westbound Ramps B & C (Station 337+23). Westbound double left turn lanes and northbound double left turn lanes with signal proffered by Stonehouse. Only signalization required by Hazelwood Farms.
5. I-64 Eastbound Off Ramp A (Station 350+36). Signal addition by North Hazelwood Farms. See Exhibit 2f.
6. I-64 Eastbound On Ramp D (Station 353+47). Extend northbound right turn lane back to Old Stage Road intersection as drop-off lane by South Hazelwood Farms. See Exhibit 2f.
7. Old Stage Road (Station 359+58). South Hazelwood Farms improvements include (see Exhibit 2e):
    a. Four lanes on Old Stage Road eastbound approach: double left turn lanes, through lane and right turn lane.
    b. Two lanes on westbound approach.
    c. Double left turn lane on northbound approach.

d. Add third through lane on northbound approach (Note: this improvement is required for all development traffic, but not required for Hazelwood Farms only.
e. Extend southbound right turn lane back to Ramp A as drop-off lane at Old Stage Road.
f. Add signal.

Traffic analysis for the signalized intersection have been performed for all development build out conditions on the Rt. 30 corridor for the 2030 PM peak hour forecast year. This includes analysis with 70 second cycle lengths used in the 2015 Timmons Group traffic study as well as 90 (AM) and 100 (PM) second cycle lengths. All signalized intersections have overall LOS C or better for all development scenarios and traffic signal cycle lengths.

BACKGROUND INFORMATION

Site Location And Description

Hazelwood Farms site location in the Hampton Roads region is shown on the upper section of Exhibit 1a. The site is located in northern James City County at the I-64 and Rt. 30 interchange (Note: The directional convention in this report is Rt. 30 runs north and south and I-64 runs east and west).

Hazelwood Farms property location with respect to area roads is shown on the lower portion of Exhibit 1a. I-64 and all other public roads are maintained by VDOT. North Hazelwood Farms is in the northwest quadrant of the I-64/Rt. 30 interchange. South Hazelwood Farms is located in the southwest quadrant of the I-64/Rt. 30 interchange.

Exhibit 1b shows Hazelwood Farms property on the county parcel map. Please note the name Old Stage Road includes Rt. 746 as well as Rt. 30 north of Rt. 746. For this report, all of Rt. 30 is referred to as Rt. 30 and Rt. 746 is referred to as Old Stage Road.

The property's land use is now farm and woodlands. General terrain in the area is level plains divided by drainage ravines and wetlands.

Study Area

Weekday AM and PM peak hours have been confirmed with VDOT and James City County for counts and analysis for inclusion in this report.

The existing intersections confirmed with VDOT and James City County for weekday AM and PM peak hour counts and analysis for inclusion in this report are shown on Exhibit 1c as follows:

1. Rt. 30/Barnes Road
2. Rt. 30/Fieldstone Parkway
3. Rt. 30/Overpass Road (count and forecast only)
4. Rt. 30/I-64 westbound ramps
5. Rt. 30/I-64 eastbound ramps
6. Rt. 30/Old Stage Road
7. Old Stage Road/Shell Station entrance (count and forecast only)
8. Old Stage Road/McDonalds entrance (count and forecast only)

All of these intersections are unsignalized.

The I-64/Route 30 interchange ramp junction merges and diverges confirmed with VDOT and James City County for weekday AM and PM peak hour counts and analysis are shown on Exhibit 1c (light blue lettering) as follows:

- Diverge 1 (D1): Eastbound Ramp A Diverge
- Diverge 2 (D2): Westbound Ramp C Diverge
- Merge 1 (M1): Westbound Ramp B Merge
- Merge 2 (M2): Eastbound Loop A Merge
- Merge 3 (M3): Eastbound Ramp D Merge

Peak hour counts are tabulated in the Appendix Exhibit A series.

Existing Roadways

The study area existing intersections, ramp junctions and roads are shown on a road network diagram on Exhibit 1d. Existing lane configurations at the intersections are also shown.

Rt. 30 is a four-lane divided median highway south of Fieldstone Parkway. Rt. 30 tapers to a two-lane road north of Fieldstone Parkway at Barnes Road. The road is posted 55 mph throughout the study area. Rt. 30 is the key arterial in the area and has traffic in the 10,000+ vehicle per day range.

Exhibit 1d shows the existing intersections (all unsignalized) from north to south on Rt. 30 as follows:

1. Rt. 30/Barnes Road. Barnes Road and Rt. 30 are two lane roads without auxiliary lanes. Barnes Road is stop sign controlled.
2. Rt. 30/Fieldstone Parkway. Rt. 30 is four lane divided highway with crossover at Fieldstone Parkway. Fieldstone Parkway is a four-lane divided highway and is stop controlled with left and right turn lanes as shown.
3. Rt. 30/Overpass Road. Rt. 30 is four lane divided highway with crossover at Overpass Road (a dead-end state frontage road).
4. Rt. 30/I-64 Westbound Exit Ramp C & On Ramp B. Rt. 30 is four lane divided highway with crossover at the I-64 westbound ramps. Exit Ramp C has a stop controlled left turn lane at Rt. 30 and a channelized right turn with acceleration lane to northbound Rt. 30. There is a northbound left turn lane.
5. Rt. 30/I-64 Eastbound Exit Ramp A. Rt. 30 is four lane divided highway with crossover at the I-64 eastbound ramp. Exit Ramp A has a stop controlled left turn lane at Rt. 30 and a channelized right turn with acceleration lane to southbound Rt. 30.
6. Rt. 30/Old Stage Road. Rt. 30 is four lane divided highway with crossover at Old Stage Road. Eastbound Old Stage Road and westbound C-store are two lane roads with stop-controlled approaches to Rt. 30. Auxiliary lanes on Rt. 30 are shown.

On Old Stage Road, the Shell Station and McDonald's entrances are combined for simplicity of forecast.

I-64/Rt. 30 is a diamond interchange with the single loop A in the southwest quadrant.

Programmed Improvements

There are no programmed improvements in the area.

Area Land Uses And Zoning

See Exhibit 1e for zoning in the area. North Hazelwood Farms property is all zoned B1 General Business. South Hazelwood Farms is zoned A1 Agriculture and B1 General Business.

There are two convenience stores with gas and the McDonald's at the Rt. 30/Old Stage Road intersection. These are within existing B1 zoning that includes part of South Hazelwood Farms.

Stonehouse east of North Hazelwood Farms and Rt. 30 is zoned PUD-C and PUD-R. It is developed primarily as residential in this area. Moss Creek east of North Hazelwood Farms is zoned MU Mixed Use and is vacant.

Much of the area north, west and south of Hazelwood Farms is zoned A1 Agriculture.

Comprehensive Plan Recommendations

Exhibit 1f shows the JCC 2035 Comprehensive Plan Land Use Map for this area. North Hazelwood Farms (proposed SUP) is consistent with the Mixed Use designation and South Hazelwood Farms (proposed EO zoning) is consistent with the Economic Opportunity designation.

Exhibit 1g-1 shows Map 8 of the James City/York Transportation Study prepared by the Hampton Roads TPO in March 2012. The only improvement shown in the vicinity of Hazelwood Farms is the widening of I-64.

Exhibit 1g-2 shows Hampton Roads 2040 Long Range Transportation Plan. There are no Regional Priority Projects shown in the vicinity of Hazelwood Farms.

Enclosed Exhibit 1g-3 shows the Regional Bikeway Plan for this area.

Enclosed Exhibit 1g-4 shows the JCC Pedestrian Accommodation Master Plan for this area.

The proposed development is consistent with/not in conflict with any comprehensive plan for roads.

Analysis Locations

Exhibit 1h shows the intersection analysis locations with future analysis conditions for build out of all development as follows:

1. Rt. 30/Barnes Road. Unsignalized.
2. Rt. 30/Moss Creek Entrance 1. Signalized.
3. Rt. 30/North #1 Entrance/Fieldstone Parkway. Signalized.
4. Rt. 30/North #2 Entrance. Right turn in and out with Rt. 30 crossover closed.
5. Rt. 30/I-64 Westbound Exit Ramp C & On Ramp B. Signalized.
6. Rt. 30/I-64 Eastbound Exit Ramp A. Signalized Vs. Roundabout.
7. Rt. 30/Old Stage Road. Signalized Vs. Roundabout.
8. Old Stage Road/South #2 Entrance. Roundabout.
9. Old Stage Road/South #1 Entrance. Roundabout.

Exhibit 1h also shows the I-64 ramp junction analysis locations as follows:

- Diverge 1 (D1): Eastbound Ramp A Diverge
- Diverge 2 (D2): Westbound Ramp C Diverge
- Merge 1 (M1): Westbound Ramp B Merge
- Merge 2 (M2): Eastbound Loop A Merge
- Merge 3 (M3): Eastbound Ramp D Merge

Current And Proposed Site Zoning

Hazelwood Farms is comprised of approximately 407 acres of land currently zoned A1 and B1. Rezoning by James City County is required to allow proposed uses.

The following table shows the conceptual development inventory:

TABLE A – PROPOSED REZONING FOR HAZELWOOD FARMS

	Rezoning Area	Acres	Units		
North	B1 to B1 w/Special Use Permit	79	Retail	375,000	sq. ft.
			Office	135,000	sq. ft.
South	A1 & B1 to EO	328	Warehousing	2,920,000	sq. ft.
			Retail	75,000	sq. ft.
			Apartments	300	units

Stonehouse Development Plan

The 2017 Stonehouse Development Phasing Plan prepared by Timmons Group is shown on Exhibit 1i. Timmons Group also did a traffic analysis dated April 16, 2015 that included forecast and analysis for Phases 1 and 2 on the phasing plan. The 2015 zoning addressed only Phases 1 and 2 for traffic impact and proffers.

On Rt. 30, Stonehouse has two access points:

1. Fieldstone Parkway north of I-64 across from North Hazelwood Farms serves the generally residential area of Stonehouse.
2. LaGrange Parkway south of I-64 and Old Stage Road serves the generally warehouse area of Stonehouse.

April 20, 2015 proffers include:

1. traffic signal and pavement markings to add second westbound left turn lane at Rt. 30/Fieldstone Parkway
2. traffic signal and second westbound left turn lane at Rt. 30/westbound I-64 ramps
3. second left turn lane on northbound Rt. 30 at westbound I-64 ramps

Moss Creek Development Plan

Exhibit 1j shows the Moss Creek master plan by LandMark from 2006. Trip generation for Moss Creek is included in this study. Moss Creek has two access points:

1. Moss Creek #1 entrance on Rt. 30 with full access and traffic signal.
2. Moss Creek #2 entrance on Fieldstone Parkway with full access.

Hazelwood Farms Proposed Development Plan

North Hazelwood Farms land use plan is shown on Exhibit 2a. Anticipated development consists of 135,000 square feet office (Area 1) and 375,000 square feet of retail space (Areas

2, 3 and 4). Depending on future conditions, the rear of the property (Area 4) may have less trip generation with alternative warehouse use.

Exhibit 2b shows the access plan for North Hazelwood Farms on Rt. 30. The major access (Entrance 1) will align across from Fieldstone Parkway at a signalized intersection with four-way access. Entrance 2 will have right turn in and out only access at approximately the current location of a crossover on Rt. 30. Per VDOT directive, the existing crossover is to be closed when Entrance 2 is constructed. All site access is anticipated to be VDOT commercial entrances with private road internal circulation.

South Hazelwood Farms land use plan is shown on Exhibit 2c. Anticipated development consists of 2,920,000 square feet warehouse (Areas 1, 2, 4, and 5), 75,000 square feet of retail space (Area 3) and 300 apartments (Area 6).

Exhibit 2d shows the access plan for South Hazelwood Farms. All access for South Hazelwood Farms is on Old Stage Road. The proposed access road (Entrance 1) will be the primary entrance. Entrance 2 will be the secondary entrance closest to Rt. 30. Both entrances are proposed to be constructed with single lane roundabouts. Roundabouts are a recommended design when left turns are a substantial part of traffic (as is the case here). Access includes reconstruction of Old Stage Road with raised median and added lanes and a traffic signal at the Rt. 30/Old Stage intersection, which is the gateway for South Hazelwood Farms.

The raised median on Old Stage Road will block existing left turns at the Shell Station and McDonald's entrances. The roundabout at Entrance 2 also serves to accommodate U-turns for existing left turn entering the Shell Station and McDonald's entrances.

Related VDOT Requirements

Change In Limited Access. Reconstruction of Old Stage Road will require adjustment of the limited access line on Rt. 30 north of Old Stage Road. At Rt. 30, the Old Stage Road reconstruction will add approximately 50 feet of pavement on the Hazelwood Farms side of Old Stage Road. This will require moving the end of the limited access line back toward I-64 50 to 75 feet depending on final design details. Commonwealth Transportation Board approval for this limited access change will be required with approval of plans for widening Old Stage Road.

Secondary Street Acceptance Regulations (SSAR). The cul-de-sac of the proposed public road in South Hazelwood Farms is not permitted by right under SSAR: at least two connections are required. An exception request for VDOT to allow the cul-de-sac has been included with this study for concurrent VDOT review. The basis for the exception is incompatible land use.

Access Management Regulations (AMR) & Signal Justification Report (SJR). Any AMR and SJR approval that may be required will be addressed prior to site approval by conditions for North Hazelwood Farms and proffers for South Hazelwood Farms.

EXISTING CONDITIONS

2017 TRAFFIC COUNTS

Weekday AM and PM peak hour turning movement counts and machine counts were conducted in January 2017. Tabulated traffic counts are in the Technical Appendix Exhibit A series. 2017 AM and PM peak hour counts with balance are shown on Exhibits 3a and 3b.

2018 TRAFFIC

For existing conditions, 2017 counts have been increased to 2018 levels based on growth factors. Exhibit 4a and 4b respectively show 2018 weekday AM and PM peak hour traffic volumes using a 1.1% increase in Rt. 30 traffic over 2017 counts and a 1.2% increase in I-64 traffic over 2017 counts. These growth factors were stipulated in the Ch. 527 Pre-Scope of Work Meeting Form.

Available VDOT daily counts are shown on Exhibit 4c. Exhibit 4c also shows calculated daily counts which have been developed by applying area road k-factors (ratio of peak hour traffic to daily traffic) to PM peak hour counts to calculate daily traffic.

EXISTING PEDESTRIAN/BICYCLE/TRANSIT FACILITIES

Exhibit 4c shows the existing bicycle/pedestrian facilities in the area. The only multi-use path is on Fieldstone Parkway and at Rt. 30. These were built by Stonehouse. There are no other sidewalks or multi-use paths in the area.

There is no transit service in the area. The closest WATA route has a turnaround end on LaGrange Parkway to the south on Rt. 30.

INTERSECTION TRAFFIC ANALYSIS PROCEDURES

Synchro 10 has been used to calculate traffic level of service (LOS) at signalized and unsignalized intersections. 95th percentile Synchro queuing reports and SimTraffic Queuing and Blocking reports are also included. SimTraffic queuing includes average of five simulations per recommended procedures for 95th percentile interval simulations.

The following table describes the six different LOS letter grades for signalized intersections from the Highway Capacity Manual 6th Edition (HCM6):

TABLE B - SIGNALIZED INTERSECTION TRAFFIC LEVELS OF SERVICE

Level Of Service (LOS)	Stopped Delay Per Vehicle (seconds)	Description
A	≤10.0	Low delay. Many vehicles do not stop.
B	>10 - 20	More stopping vehicles than LOS A.
C	>20 - 35	Longer cycle length. Stopping vehicles significant.
D	>35 - 55	Congestion more noticeable. Many vehicles stop.
E	>55 - 80	Long cycle lengths. High delay
F	>80	Considered in excess of acceptable delay.

The following table presents the six different LOS letter grades for unsignalized intersections from HCM6:

TABLE C – UNSIGNALIZED AND ROUNDABOUT INTERSECTION TRAFFIC LEVELS OF SERVICE

Level Of Service (LOS)	Stopped Delay Per Vehicle (seconds)
A	0-10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

It should be noted that HCM6 also defines LOS F as having a volume/capacity (v/c) ratio of greater than 1.0.

RT. 30/FIELDSTONE PARKWAY- 2018

The following table shows unsignalized intersection LOS results at Rt. 30/Fieldstone Parkway:

TABLE 1-1 Rt. 30/FIELDSTONE PARKWAY
2018 UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
WBL	B	14.6	C	19.6		28	25	305	94
WBR	A	9.2	B	11.4		3	3	29	8
SBL	A	8.2	A	9.7	150	0	3	9	7

All lanes have LOS C or better. Queueing on the southbound left turn lane on Rt. 30 at Fieldstone is well within storage.

RT. 30/I-64 WESTBOUND RAMPS - 2018

The following table shows unsignalized intersection LOS results at Rt. 30/I-64 westbound ramps:

TABLE 1-2 Rt. 30/I-64 WESTBOUND RAMPS
2018 UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
WBL	C	15.4	C	19.3		18	28	109	79
NBL	B	10.9	A	8.6	200	15	10	74	55

All lanes have LOS C or better. Queuing on northbound Rt. 30 at the westbound ramps is well within storage.

RT. 30/I-64 EASTBOUND RAMP A - 2018

The following table shows unsignalized intersection LOS results at Rt. 30/I-64 eastbound off ramp:

TABLE 1-3 Rt. 30/I-64 EASTBOUND RAMP
2018 UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
EBL	B	12.1	B	11.8		3	8	35	52

All lanes have LOS B or better.

RT. 30/OLD STAGE ROAD - 2018

The following table shows unsignalized intersection LOS results at Rt. 30/Rt. 746 Old Stage Road:

TABLE 1-4 Rt. 30/OLD STAGE ROAD
2018 UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
EBL/T/R	C	18.2	C	19.3		23	23	70	90
WBL/T/R	B	12.1	B	14.5		20	33	90	87
NBL	A	9.7	A	8.2	200	3	5	30	33
SBL	A	8.2	A	9.3	200	5	5	30	24

All lanes have LOS C or better. Queuing on the northbound and southbound left turn lanes on Rt. 30 are well within storage.

RT. 30/BARNES ROAD - 2018

The following table shows unsignalized intersection LOS results at Rt. 30/Barnes Road:

TABLE 1-5 RT. 30/BARNES ROAD
2018 UNSIGNALIZED

UNSIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
EBL/R	C	19.4	C	20.6		30	15	74	56
NBL/T	A	9.5	A	8.5		3	5	56	105

All lanes have LOS C or better.

I-64 RAMP MERGES/DIVERGES - 2018

The following table shows I-64 ramp merge and diverge LOS:

TABLE 1-6 I-64/RT. 30 RAMPS MERGE/DIVERGE
2018

LOS And Passenger Cars Per Mile Per Lane				
	AM		PM	
I-64 Eastbound Ramp A Diverge	B	12.0	B	12.3
I-64 Eastbound Loop A Merge	B	14.4	B	12.3
I-64 Westbound Ramp B Merge	B	12.3	B	12.1
I-64 Westbound Ramp C Diverge	B	12.1	B	11.8
I-64 Eastbound Ramp D Merge	B	16.5	B	14.2

All merge/diverge movements have LOS B or better.

SUMMARY COMMENTS - 2018

All intersections and ramp merge/diverge movements have LOS C or better with intersection auxiliary lane queuing within storage limits. Exhibits 4d and 4e show LOS results on the network diagram.

2030 BACKGROUND TRAFFIC FORECAST WITHOUT HAZELWOOD FARMS

The forecast analysis year used in this study is 2030 as stipulated in the Ch. 527 Pre-Scope of Work Meeting Form.

2030 PEAK HOUR FORECAST

Background traffic growth factors were stipulated Ch. 527 Pre-Scope of Work Meeting Form. A 1.14 growth factor is applied to all 2017 peak hour traffic counts on Rt. 30. A 1.16 growth factor is applied to I-64. The resulting 2030 background traffic forecast is shown on Exhibits 5a and 5b for the weekday AM and PM peak hours, respectively.

Exhibit 5c shows calculated 2030 daily background traffic calculated from 2030 PM peak hour traffic with k-factors.

2030 PEDESTRIAN AND BICYCLE FACILITIES

There are no planned additions to pedestrian, bicycle or transit facilities. The facilities shown on Exhibit 5c are the same as existing.

RT. 30/FIELDSTONE PARKWAY- 2030 BACKGROUND

The following table shows unsignalized intersection LOS results at Rt. 30/Fieldstone Parkway:

TABLE 2-1 Rt. 30/FIELDSTONE PARKWAY
2030 BACKGROUND UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
WBL	C	15.1	C	21.8		33	28		
WBR	A	9.3	B	11.8		3	3		
SBL	A	8.2	B	10.1	150	0	3		

All lanes have LOS C or better. Queueing on the southbound left turn lane on Rt. 30 at Fieldstone is well within storage.

RT. 30/I-64 WESTBOUND RAMPS - 2030 BACKGROUND

The following table shows unsignalized intersection LOS results at Rt. 30/I-64 westbound ramps:

TABLE 2-2 Rt. 30/I-64 WESTBOUND RAMPS
2030 BACKGROUND UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
WBL	C	16.0	C	20.0		20	23		
NBL	B	11.3	A	8.8	200	15	10		

All lanes have LOS C or better. Queuing on northbound Rt. 30 at the westbound ramps is well within storage.

RT. 30/I-64 EASTBOUND RAMP A - 2030 BACKGROUND

The following table shows unsignalized intersection LOS results at Rt. 30/I-64 eastbound off ramp:

TABLE 2-3 Rt. 30/I-64 EASTBOUND RAMP
2030 BACKGROUND UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
EBL	B	12.3	B	12.0		3	10		

All lanes have LOS B or better.

RT. 30/OLD STAGE ROAD - 2030 BACKGROUND

The following table shows unsignalized intersection LOS results at Rt. 30/Rt. 746 Old Stage Road:

TABLE 2-4 Rt. 30/OLD STAGE ROAD
2030 BACKGROUND UNSIGNALIZED

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	Synchro		SimTraffic Q&B	
						AM	PM	AM	PM
EBL/T/R	C	18.1	C	20.4		20	25		
WBL/T/R	B	12.0	B	14.4		18	25		
NBL	A	8.7	A	9.5	200	5	5		
SBL	A	8.3	A	8.3	200	3	5		

All lanes have LOS C or better. Queuing on the northbound and southbound left turn lanes on Rt. 30 are well within storage.

RT. 30/BARNES ROAD - 2030 BACKGROUND

The following table shows unsignalized intersection LOS results at Rt. 30/Barnes Road:

TABLE 2-5 RT. 30/BARNES ROAD
2030 BACKGROUND UNSIGNALIZED

UNSIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage Length	HCM 6th		SimTraffic Q&B	
						AM	PM	AM	PM
EBL/R	C	19.9	C	22.5		30	18		
NBL/T	A	9.6	A	8.5		3	5		

All lanes have LOS C or better.

I-64 RAMP MERGES/DIVERGES - 2030 BACKGROUND

The following table shows I-64 ramp merge and diverge LOS:

TABLE 2-6 I-64/RT. 30 RAMPS MERGE/DIVERGE
2030 BACKGROUND

LOS And Passenger Cars Per Mile Per Lane				
	AM		PM	
I-64 Eastbound Ramp A Diverge	B	12.9	B	14.8
I-64 Eastbound Loop A Merge	B	15.6	B	14.9
I-64 Westbound Ramp B Merge	B	13.2	B	14.8
I-64 Westbound Ramp C Diverge	B	12.9	B	14.8
I-64 Eastbound Ramp D Merge	B	17.4	B	16.6

All merge/diverge movements have LOS B or better.

SUMMARY COMMENTS - 2030 BACKGROUND

All intersections and ramp merge/diverge movements have LOS C or better with intersection auxiliary lane queuing within storage limits. Exhibits 5d and 5e show LOS results on the network diagram.

HAZELWOOD FARMS TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Trip generation for Hazelwood Farms has been calculated using Trip Generation Manual, 10th Edition (TGM10), published by the Institute of Transportation Engineers (ITE).

The development includes the following anticipated uses and estimated sizes:

TABLE D – PROPOSED REZONING FOR HAZELWOOD FARMS

	Acres	Units		
North	79	Shopping Center	375,000	sq. ft.
		Office	135,000	sq. ft.
South	328	Warehousing	2,920,000	sq. ft.
		Shopping Center	75,000	sq. ft.
		Apartments	300	units

Exhibit 6-1 shows trip generation for Hazelwood Farms as follows:

- Table 1 shows trip generation for North Hazelwood Farms. Internal capture percentage is calculated on Exhibit 6-4 and applied to total trips in Table 1 to show internal trips. % pass by trips for the shopping center are calculated using the equation in the Trip Generation Manual Handbook and the pass by trip percentage is applied to total trips to calculate pass by trips. Primary trips are total trips remaining after internal capture and pass by trip reductions.
- Table 4 shows trip generation for South Hazelwood Farms. Internal capture percentage is calculated on Exhibit 6-5 and applied to total trips in Table 4 to show internal trips. % pass by trips for the shopping center are calculated using the equation in the Trip Generation Manual Handbook and the pass by trip percentage is applied to total trips to calculate pass by trips. Primary trips are total trip remaining after internal capture and pass by trip reductions.

Primary trip distribution for Hazelwood Farms trips was derived from trip distribution in the 2015 Stonehouse study by Timmons Group and counts. Trip distribution percentages for North Hazelwood Farms are shown on the road network on Exhibit 6-2 and for South Hazelwood Farms on Exhibit 6-3. These trip distribution percentages were stipulated in the Ch. 527 Pre-Scope of Work Meeting Form.

North Hazelwood Farms primary trip distribution is tabulated in Table 2 on Exhibit 6-1. Primary trips are assigned in Appendix Exhibits I5 and I6. North Hazelwood Farms pass by trip distribution is tabulated in Table 3 on Exhibit 6-1 based on background traffic. Pass by trips are assigned in Appendix Exhibit I7 and I8.

South Hazelwood Farms primary trip distribution is tabulated in Table 5 on Exhibit 6-1. Primary trips are assigned in Appendix Exhibits I9 and I10. South Hazelwood Farms pass by trip distribution is tabulated in Table 6 on Exhibit 6-1 based on background traffic. Pass by trips are assigned in Appendix Exhibit I11 and I12.

North and South Hazelwood Farms off site trips are shown on Exhibit 7a for the AM peak hour, Exhibit 7b for the PM peak hour, and Exhibit 7c for daily traffic.

OLD STAGE ROAD TRIP DIVERSIONS

The raised median on Old Stage Road to be constructed with South Hazelwood Farms access will change the route for trips using the McDonald's and Shell Station entrances on Old Stage Road. Appendix Exhibits E1 and E2 respectively show AM and PM diversion of these trips. Appendix Exhibits E3 and E4 respectively show 2030 AM and PM peak hour traffic with diversion of these trips

HAZELWOOD FARMS TRUCK TRIPS

15% trucks are assumed for the warehouse component of South Hazelwood Farms. All other uses are assumed to have 2% trucks.

Appendix Exhibits E5 and E6 show truck trip assignments for North Hazelwood Farms.

Appendix Exhibit 6-1 shows the calculation of truck trips for South Hazelwood Farms. 15% trucks are calculated for warehousing and 2% for other uses in Table 2. Table 5 shows tabulated trip distribution and Appendix Exhibit E7 and E8 respectively show AM and PM truck trip assignments for South Hazelwood Farms.

HAZELWOOD FARMS PEDESTRIAN AND BICYCLE FACILITIES

Exhibit 2a shows a multi-use path along the North Hazelwood Farms Rt. 30 frontage as part the master plan. Exhibit 2c shows multi-use paths as part of the South Hazelwood Farms frontage on Old Stage Road from Rt. 30 to Leisure Road and on the South Entrance #1 access road.

Exhibit 7c shows the multi-use paths and a pedestrian connection across Rt. 30 north of Fieldstone Parkway. A pedestrian connection north of Fieldstone Parkway is preferable to south of Fieldstone Parkway because north of Fieldstone Parkway has 10,000 fewer vehicles per day than south of Fieldstone Parkway. North of Fieldstone Parkway also aligns with a multi-use path to be built by Moss Creek along the north side of Fieldstone Parkway (see Exhibits 1j and 11c).

ANALYSIS OF 2030 TRAFFIC WITH HAZELWOOD FARMS

Total 2030 AM peak hour traffic with Hazelwood Farms is shown on Exhibit 8a. Total 2030 PM peak hour traffic with Hazelwood Farms is shown on Exhibit 8b. 2030 daily traffic with Hazelwood Farms is shown on Exhibit 8c.

RT. 30/FIELDSTONE PARKWAY- 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/Fieldstone Parkway:

TABLE 3-1 Rt. 30/FIELDSTONE PARKWAY
2030 HAZELWOOD ONLY 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	23.8	C	20.3	Length	AM	PM	AM	PM
EBL2	C	29.8	C	23.4	150	20	91	36	202
EBT	C	29.7	C	28.9		5	28	8	64
EBR	C	20.6	B	13.6	200	0	82	83	246
WBL	C	32.2	C	27.3	250	117	65	155	89
WBT/R	C	26.3	C	34.8		19	22	43	44
NBL2	C	24.8	C	22.3	300	55	209	125	315
NBT2	B	10.6	B	15.5		67	169	130	406
NBR	B	11.3	B	17.4	350	0	9	0	0
SBL	B	15.7	C	23.7	150	11	18	64	42
SBT2	C	28.2	C	30.5		342	127	289	133
SBR	B	16.5	C	23.4	200	0	0	83	65

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS and all lane groups are LOS C or better.

RT. 30/I-64 WESTBOUND RAMPS - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/I-64 westbound ramps:

TABLE 3-2 Rt. 30/I-64 WESTBOUND RAMPS
2030 HAZELWOOD ONLY 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	12.2	B	11.9	Length	AM	PM	AM	PM
WBL	C	32.8	C	34.6		137	107	120	109
NBL	C	35.0	C	25.9	200	138	143	117	183
NBT2	A	6.8	A	6.8		71	209	100	134
SBT2	A	8.0	B	13.0		94	194	433	215
SBR	A	0.0	A	0.2	300	0	0	163	0

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS is LOS B and all lane groups are LOS C or better.

RT. 30/I-64 EASTBOUND RAMP A - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/I-64 eastbound ramp A:

TABLE 3-3 Rt. 30/I-64 EASTBOUND RAMP
2030 HAZELWOOD ONLY 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	3.2	A	5.3	Length	AM	PM	AM	PM
EBL	C	30.9	C	29.1		84	129	134	153
NBT2	A	0.7	A	2.0		5	18	57	78
SBT2	A	0.3	A	2.6		0	29	120	72

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS is LOS B and all lane groups are LOS C or better.

RT. 30/OLD STAGE ROAD - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/Old Stage Road:

TABLE 3-4 Rt. 30/OLD STAGE ROAD
2030 HAZELWOOD ONLY 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	16.7	B	19.3	Length	AM	PM	AM	PM
EBL2	C	29.6	C	30.6	200	65	125	110	162
EBT	C	27.3	C	23.9		14	15	22	29
EBR	B	16.5	B	14.9	200	0	34	83	145
WBL/T	C	30.8	C	30.8		40	33	54	52
WBR	C	29.7	C	30.0		0	0	65	67
NBL2	C	29.2	C	31.1	200	72	81	106	101
NBT2	B	15.5	B	18.6		111	206	67	129
NBR	B	13.7	B	13.7		0	0	19	16
SBL	B	17.1	C	21.8	200	36	42	71	51
SBT2	A	9.9	B	10.8		83	68	92	76
SBR	A	8.9	A	9.5		10	0	85	66

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS is LOS B and all lane groups are LOS C or better.

RT. 30/BARNES ROAD – 2030 WITH HAZELWOOD FARMS

The following table shows unsignalized intersection LOS results at Rt. 30/Barnes Road:

TABLE 3-5 RT. 30/BARNES ROAD
2030 HAZELWOOD ONLY UNSIGNALIZED

UNSIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	HCM 6th		SimTraffic Q&B	
					Length	AM	PM	AM	PM
EBL/R	C	23.1	D	32.7		35	28	89	79
NBL/T	A	9.9	A	8.8		3	5	92	177

All lanes have LOS D or better.

OLD STAGE ROAD/SOUTH #2 ENTRANCE – 2030 WITH HAZELWOOD FARMS

The following table shows roundabout intersection LOS results at the Old Stage Road/South #2 entrance:

TABLE 3-6 OLD STAGE ROAD/South #2 Entrance
2030 HAZELWOOD ONLY ROUNDABOUT

ROUNDABOUT LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	SIDRA		SimTraffic Q&B	
Overall	A	6.0	A	5.8	Length	AM	PM	AM	PM
EBL/T	A	7.4	A	7.4		41	41	36	79
WBT	A	4.9	A	4.4		29	25	18	24
WBR	A	4.0	A	3.8		16	16	0	0
SBL/R	A	7.2	A	6.8		37	36	42	78

All approach lanes have LOS A. All queues are less than 90 feet.

OLD STAGE ROAD/SOUTH #1 ENTRANCE – 2030 WITH HAZELWOOD FARMS

The following table shows roundabout intersection LOS results at the Old Stage Road/South #1 entrance:

TABLE 3-7 OLD STAGE ROAD/South #1
2030 HAZELWOOD ONLY ROUNDABOUT

ROUNDABOUT LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	SIDRA		SimTraffic Q&B	
Overall	A	4.5	A	4.8	Length	AM	PM	AM	PM
EBL/T	A	3.7	A	4.1		4	5	21	30
WBT/R	A	5.0	A	4.4		30	24	12	9
SBL/R	A	3.7	A	5.4		10	30	23	52

All approach lanes have LOS A. All queues are less than 60 feet.

I-64 RAMP MERGES/DIVERGES - 2030 WITH HAZELWOOD FARMS

The following table shows I-64 ramp merge and diverge LOS:

TABLE 3-8 I-64/RT. 30 RAMPS MERGE/DIVERGE
2030 HAZELWOOD ONLY 70 SECOND

LOS And Passenger Cars Per Mile Per Lane				
	AM		PM	
I-64 Eastbound Ramp A Diverge	B	12.9	B	14.8
I-64 Eastbound Loop A Merge	B	15.8	B	16.5
I-64 Westbound Ramp B Merge	B	13.8	B	17.3
I-64 Westbound Ramp C Diverge	B	12.9	B	14.8
I-64 Eastbound Ramp D Merge	B	18.1	B	19.4

All merge/diverge movements have LOS B or better.

SUMMARY COMMENTS - 2030 WITH HAZELWOOD FARMS

All signalized intersections have LOS C or better overall and for each turning movement. For unsignalized Barnes Road, eastbound AM was LOS C and PM is LOS D. Roundabouts have LOS A overall and for approaches. All I-64 ramp merges and diverge sections have LOS B.

Exhibits 8d and 8e show LOS results on the network diagram.

MOSS CREEK TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Trip generation for Moss Creek was provided in the LandMark Design Group traffic study for Moss Creek revised March 2006. Those trips are shown in Table 1 on Exhibit 9.

Primary trip distribution for Moss Creek trips is shown in Table 2 on Exhibit 9. Trip distribution to north Rt. 30 and Fieldstone Parkway are taken from the LandMark study. The remainder of primary trips is distributed throughout the remainder of the network in general accordance with North Hazelwood Farms distribution. Moss Creek primary trips as assigned on Appendix Exhibits D1 and D2.

Moss Creek pass by trips are distributed in Table 3 on Exhibit 9. Moss Creek pass by trips are assigned on Appendix Exhibits D3 and D4.

All Moss Creek AM peak hour traffic assignment is shown on Exhibit 9a and all Moss Creek PM peak hour traffic is shown on Exhibit 9b. Daily traffic for Moss Creek is shown on Exhibit 9c. Exhibit 9c also shows the multi-purpose path and bike lane to be included with the Moss Creek development.

Moss Creek truck assignments are shown on Appendix Exhibits C5 and C6 for the AM and PM peak hours respectively.

STONEHOUSE TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Exhibits 10a and 10b respectively show AM and PM peak hour traffic for Stonehouse phases 1 and 2 presented in the Timmons Group traffic study for Stonehouse in 2015. Exhibit 10c shows daily traffic for Stonehouse based on trip generation k-factor.

Stonehouse truck assignments are shown on Appendix Exhibits F1 and F2 for the AM and PM peak hours respectively.

ANALYSIS OF 2030 TRAFFIC WITH ALL DEVELOPMENT

Total 2030 AM peak hour traffic with all three developments is shown on Exhibit 11a. Total 2030 PM peak hour traffic with all three developments is shown on Exhibit 11b. 2030 daily traffic with all development is shown on Exhibit 11c.

Appendix Exhibits F3 and F4 show total trips in 2030 with all development for the AM and PM peak hours respectively. Appendix Exhibits F3 and F4 show truck percentages for turning movements in 2030 with all development for the AM and PM peak hours respectively.

Development improvements to the Rt. 30 corridor within the study are included at the following intersections from north to south (see Exhibit 2g for reference):

1. Moss Creek #1 Entrance #1 (Station 303+86). Extend 2nd northbound through lane from Fieldstone to drop off right turn at MC1. Widen for southbound left turn lane. Add traffic signal. All work by Moss Creek development.
2. Fieldstone Parkway/North #1 Entrance (Station 313+06). For Stonehouse, future signalization is required with second westbound left turn lane. For North Hazelwood Farms, signalization also required with northbound double left turn lanes, southbound right turn lane, and four eastbound lanes: double left turn lanes, through lane and right turn lane. See Exhibit 2b for details.
3. North #2 Entrance (Station 321+35). Close crossover and add southbound right turn lane. Right turn in/out only. All work by Hazelwood Farms.
4. I-64 Westbound Ramps B & C (Station 337+23). Westbound double left turn lanes and northbound double left turn lanes with signal proffered by Stonehouse. Signalization also proffered by South Hazelwood Farms.
5. I-64 Eastbound Off Ramp A (Station 350+36). Signal addition proffered by North Hazelwood Farms. See Exhibit 2f.
6. I-64 Eastbound On Ramp D (Station 353+47). Extend northbound right turn lane back to Old Stage Road intersection as drop-off lane by South Hazelwood Farms. See Exhibits 2f.
7. Old Stage Road (Station 359+58). South Hazelwood Farms proffered improvements include (see Exhibit 2e):
    a. Four lanes on Old Stage Road eastbound approach: double left turn lanes, through lane and right turn lane.
    b. Two lanes on westbound approach.
    c. Double left turn lane on northbound approach.
    d. Add third through lane on northbound approach.
    e. Extend southbound right turn lane back to Ramp A as drop-off lane at Old Stage Road.
    f. Add signal.

Synchro and SimTraffic reports are included in the Technical Appendix as follows for signalized and unsignalized (two way stop) intersections:

TABLE E: 2030 FULL DEVELOPMENT ANALYSIS REPORT EXHIBITS

Report	70 Second Cycle		90/100 Second Cycle	
	AM	PM	AM - 90	PM - 100
HCM2000 Signalized Intersection	J9	J10	J11	J12
HCS6 Unsignalized Intersection	K9	K10	K11	K12
Synchro 10 Queues	L9	L10	L11	L12
SimTraffic Queuing & Blocking	M9	M10	M11	M12

Analyses for roundabouts are not included for full buildout conditions because the traffic assignments on Old Stage Road at the Hazelwood Farms South entrances have the same traffic as Hazelwood only conditions.

The 90 second AM and 100 second PM cycles were optimized by Synchro for coordinated signal operation.

I-64 ramp merge and diverges LOS are including in the Appendix Exbibit T series for full build out.

Exhibit 11c shows 2030 daily traffic with all development and all pedestrian/bicycle facilities.

2030 TRAFFIC WITH ALL DEVELOPMENT – 70 SECOND CYCLE

RT. 30/FIELDSTONE PARKWAY- 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-1 shows signalized intersection LOS and queuing for Rt. 30/Fieldstone Parkway:

TABLE 4-1 Rt. 30/FIELDSTONE PARKWAY
2030 ALL DEVELOPMENT 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	22.1	C	20.8	Length	AM	PM	AM	PM
EBL2	C	33.1	C	26.3	150	15	91	39	126
EBT	C	29.7	C	27.0		5	28	8	38
EBR	B	17.0	B	12.9	200	0	95	76	198
WBL2	C	32.2	C	31.2	250	85	67	146	138
WBT/R	C	25.3	C	32.0		26	39	45	70
NBL2	C	23.1	B	19.1	300	62	118	122	361
NBT2	B	13.1	B	15.8		137	321	118	547
NBR	B	17.6	A	2.2	350	2	3	0	77
SBL	B	13.2	B	18.0	150	17	20	64	57
SBT2	C	25.0	C	34.3		385	245	267	208
SBR	B	15.1	C	33.1	200	0	4	57	73

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS C or better with overall LOS C. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/I-64 WESTBOUND RAMPS - 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-2 shows signalized intersection LOS and queuing for Rt. 30/I-64 westbound ramps:

TABLE 4-2 Rt. 30/I-64 WESTBOUND RAMPS
2030 ALL DEVELOPMENT 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	19.3	B	15.4	Length	AM	PM	AM	PM
WBL	C	32.2	C	29.6		174	117	120	110
NBL	C	26.0	C	23.1	200	109	153	117	175
NBT2	A	8.5	A	6.3		141	178	100	108
SBT2	B	18.3	C	20.7		444	376	433	294
SBR	A	0.1	A	0.2	300	0	0	0	0

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS C or better as well as overall LOS B. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/I-64 EASTBOUND RAMP A - 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-3 shows signalized intersection LOS and queuing for Rt. 30/I-64 eastbound ramps:

TABLE 4-3 Rt. 30/I-64 EASTBOUND RAMP
2030 ALL DEVELOPMENT 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	5.4	A	5.9	Length	AM	PM	AM	PM
EBL	C	28.8	C	29.0		112	166	134	174
NBT2	A	1.5	A	4.1		43	84	57	174
SBT2	A	4.4	A	2.2		48	11	120	105

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS C or better as well as overall LOS A.

RT. 30/OLD STAGE ROAD - 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-4 shows signalized intersection LOS for Rt. 30/Old Stage Road:

TABLE 4-4 Rt. 30/OLD STAGE ROAD
2030 ALL DEVELOPMENT 70 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	23.8	C	28.7	Length	AM	PM	AM	PM
EBL2	C	28.0	C	30.6	200	62	125	101	164
EBT	C	26.0	C	23.9		14	15	23	26
EBR	B	15.9	B	14.9	200	0	34	88	147
WBL/T	C	30.8	C	30.8		40	33	65	56
WBR	C	29.7	C	30.0		0	0	70	80
NBL2	C	30.2	C	31.1	200	73	81	98	110
NBT/R3	B	16.2	C	29.8		139	430	109	245
SBL	C	27.8	C	26.0	200	47	36	68	58
SBT2	C	28.0	C	33.2		411	377	242	235
SBR	C	20.6	A	6.9		20	10	85	78

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS C or better with overall LOS C. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/MOSS CREEK - 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-5 shows signalized intersection LOS and queuing for Rt. 30/Old Stage Road:

TABLE 4-5 Rt. 30/MOSS CREEK 2030 ALL DEVELOPMENT 70 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	9.4	C	24.1	Length	AM	PM	AM	PM
WBL	C	30.8	C	30.7		74	133	89	149
WBR	C	27.7	C	24.7		22	45	32	94
NBT	A	2.9	C	33.9		88	893	129	731
NBR	A	0.4	A	2.9		0	3	41	250
SBL	A	2.9	D	39.1	200	19	100	65	176
SBT	B	11.0	A	7.3		637	208	206	201

Most turning movements are LOS C or better with LOS D for the southbound left turn as well as overall LOS C. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/BARNES ROAD – 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

Table 4-6 shows unsignalized intersection LOS and queuing for Rt. 30/Barnes Road:

TABLE 4-5 Rt. 30/MOSS CREEK 2030 ALL DEVELOPMENT 70 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	9.4	C	24.1	Length	AM	PM	AM	PM
WBL	C	30.8	C	30.7		74	133	89	149
WBR	C	27.7	C	24.7		22	45	32	94
NBT	A	2.9	C	33.9		88	893	129	731
NBR	A	0.4	A	2.9		0	3	41	250
SBL	A	2.9	D	39.1	200	19	100	65	176
SBT	B	11.0	A	7.3		637	208	206	201

The eastbound Barnes Road approach has LOS F while northbound Rt. 30 traffic has LOS A and southbound Rt. 30 traffic doesn't register any delay.

I-64 RAMP MERGES/DIVERGES - 2030 WITH ALL DEVELOPMENT

TABLE 4-7 I-64/RT. 30 RAMPS MERGE/DIVERGE 2030 ALL DEVELOPMENT 70 SECOND				
LOS And Passenger Cars Per Mile Per Lane				
	AM		PM	
I-64 Eastbound Ramp A Diverge	B	12.9	B	14.8
I-64 Eastbound Loop A Merge	B	16.4	B	17.9
I-64 Westbound Ramp B Merge	B	15.2	C	20.5
I-64 Westbound Ramp C Diverge	B	12.9	B	14.8
I-64 Eastbound Ramp D Merge	B	19.9	C	23.5

SUMMARY COMMENTS - 2030 WITH ALL DEVELOPMENT 70 SEC CYCLE

With the 70 second cycle length, all turning movements at signalized intersections on Rt. 30 have LOS C except for the Moss Creek intersection with LOS D for the southbound left turn. Overall signalized LOS is LOS C or better at all intersections.

Exhibits 11d and 11e show LOS results on the network diagram.

2030 TRAFFIC WITH ALL DEVELOPMENT – 90/100 SECOND CYCLE

Synchro traffic signal optimization was used for the Rt. 30 corridor to determine cycle lengths for signal coordination on the corridor. The results were 90 seconds for the AM peak hour and 100 seconds for the PM peak hour. Green time splits at intersections were also set using Synchro optimization.

RT. 30/FIELDSTONE PARKWAY- 2030 WITH ALL DEVELOPMENT 90/100 SEC CYCLE

Table 5-1 shows signalized intersection LOS and queuing for Rt. 30/Fieldstone Parkway:

TABLE 5-1 Rt. 30/FIELDSTONE PARKWAY
2030 ALL DEVELOPMENT 90/100 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	23.5	C	22.9	Length	AM	PM	AM	PM
EBL2	D	37.8	D	41.0	150	19	110	43	151
EBT	D	39.6	D	40.2		5	34	10	53
EBR	C	23.6	C	25.7	200	0	117	87	200
WBL2	D	40.3	D	47.1	250	104	91	161	158
WBT/R	D	37.7	D	44.9		31	47	45	70
NBL2	C	31.5	C	31.7	300	97	232	154	236
NBT2	B	11.6	B	12.6		130	282	118	343
NBR	B	16.7	A	9.2	350	6	20	0	0
SBL	B	16.0	C	21.0	150	25	27	60	66
SBT2	C	23.6	C	23.9		311	198	194	236
SBR	B	16.2	A	5.5	200	0	4	38	85

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS D or better with overall LOS C. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/I-64 WESTBOUND RAMPS - 2030 WITH ALL DEVELOPMENT 90/100 SEC CYCLE

Table 5-2 shows signalized intersection LOS and queuing for Rt. 30/I-64 westbound ramps:

TABLE 5-2 Rt. 30/I-64 WESTBOUND RAMPS
2030 ALL DEVELOPMENT 90/100 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	19.2	B	19.6	Length	AM	PM	AM	PM
WBL	D	42.0	D	48.4		212	169	116	114
NBL	D	46.4	C	34.7	200	112	213	160	235
NBT2	A	7.9	A	3.0		45	51	109	173
SBT2	A	9.3	C	25.5		164	436	240	321
SBR	A	0.1	A	0.3	300	0	0	0	0

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS D or better as well as overall LOS B. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/I-64 EASTBOUND RAMP A - 2030 WITH ALL DEVELOPMENT 90/100 SEC CYCLE

Table 5-3 shows signalized intersection LOS and queuing for Rt. 30/I-64 eastbound ramps:

TABLE 5-3 Rt. 30/I-64 EASTBOUND RAMP 2030 ALL DEVELOPMENT 90/100 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	10.2	A	8.0	Length	AM	PM	AM	PM
EBL	D	40.0	D	45.9		142	240	156	183
NBT2	A	9.0	A	4.3		87	124	113	170
SBT2	A	6.7	A	2.8		116	96	129	116

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS D or better as well as overall LOS A.

RT. 30/OLD STAGE ROAD - 2030 WITH ALL DEVELOPMENT 90/100 SEC CYCLE

Table 5-4 shows signalized intersection LOS for Rt. 30/Old Stage Road:

TABLE 5-4 Rt. 30/OLD STAGE ROAD 2030 ALL DEVELOPMENT 90/100 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	25.3	C	24.3	Length	AM	PM	AM	PM
EBL2	D	41.4	D	46.9	200	85	176	121	225
EBT	D	37.0	D	35.5		18	20	27	34
EBR	C	27.1	C	25.1	200	20	72	99	192
WBL/T	D	42.1	D	46.8		51	44	63	55
WBR	D	40.0	D	45.0		0	0	71	99
NBL2	D	37.0	D	50.2	200	92	114	120	128
NBT/R3	B	19.5	C	20.9		176	408	145	264
SBL	D	41.3	D	52.8	200	78	63	77	61
SBT2	C	23.6	B	15.1		341	255	219	200
SBR	B	19.0	B	11.9		32	0	125	70

SimTraffic queue shown is maximum report value for multi-lane groups

All turning movements are LOS D or better with overall LOS C. Auxiliary lane queues are accommodated by storage length provided.

RT. 30/MOSS CREEK - 2030 WITH ALL DEVELOPMENT 90/100 SEC CYCLE

Table 5-5 shows signalized intersection LOS and queuing for Rt. 30/Old Stage Road:

TABLE 5-5 Rt. 30/MOSS CREEK 2030 ALL DEVELOPMENT 90/100 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	9.2	B	18.9	Length	AM	PM	AM	PM
WBL	D	50.8	E	69.9		99	243	107	249
WBR	D	38.3	D	38.6		28	47	21	123
NBT	A	3.2	B	18.0		64	454	93	498
NBR	A	1.8	A	2.0		0	1	36	87
SBL	A	2.4	C	32.0	200	15	116	55	201
SBT	A	8.3	A	5.7		428	179	186	230

Overall LOS B with turning movements LOS A through E. Auxiliary lane queues are accommodated by storage length provided.

Exhibits 11f and 11g show LOS results on the network diagram.

SUMMARY AND CONCLUSIONS

70 SECOND CYCLE RESULTS

70 second cycle traffic signal analysis was incorporated into this study because:

1. 70 second cycle length was used in the 2015 Stonehouse study by Timmons Group.
2. JCC has LOS C objective for turning movements.
3. Traffic signals do not operate to provide LOS C on turning movements: that is not a performance criterion.
4. Only short cycles (i.e., shorter than realistic) produce LOS C for turning movements.

With 70 second cycles lengths, development of Hazelwood Farms alone and with development of Stonehouse and Moss Creek produce LOS C on turning movements as well overall intersection LOS C for the four Rt. 30 signalized intersections serving Hazelwood Farms (Fieldstone Parkway, I-64 westbound ramps, I-64 eastbound off-ramp and Old Stage Road). The only LOS for signalized intersections less than LOS C is LOS D for the exiting left turn from Moss Creek to Rt. 30.

2018 traffic studies for Stonehouse by Gorove-Slade used cycle length less than 70 seconds for Rt. 30/Fieldstone and Rt. 30/westbound I-64 ramps (mitigated).

90 SECOND AM/100 SECOND PM CYCLE RESULTS

90/100 second cycle traffic signal analysis is far more typical of how signals are designed and operated. There are LOS D results mostly located on minor street approaches for the four Rt. 30 signalized intersections serving Hazelwood Farms. All signalized intersections have overall LOS C or better. In some instances, overall delay at the intersection decreased in seconds delay relative to 70 second cycle results.

In almost all instances, signalized intersection delay for northbound and southbound through movements on Rt. 30 decreased from 70 second cycle levels. This illustrates the essence of traffic signal design: green time on minor streets is minimized with related increases in delay to allow greater green time and reduced delay for major street through movements, which are the bulk of the traffic. Forcing traffic signal timing to produce LOS C for turning moments is not an element of modern traffic signal efficient design and operation.

RT. 30/MOSS CREEK DESIGN

At the Rt. 30/Moss Creek intersection, there is overall LOS A and B with LOS D for some minor street movements and LOS E for the PM peak hour westbound left turn movement. This intersection is essentially one northbound through lane and one southbound through, and thus is an inferior design to the other four signalized intersections. The traffic study for Moss Creek also used artificially reduced signal timing (less than 50 seconds) to get LOS C for turning movements.

RT. 30/BARNES ROAD

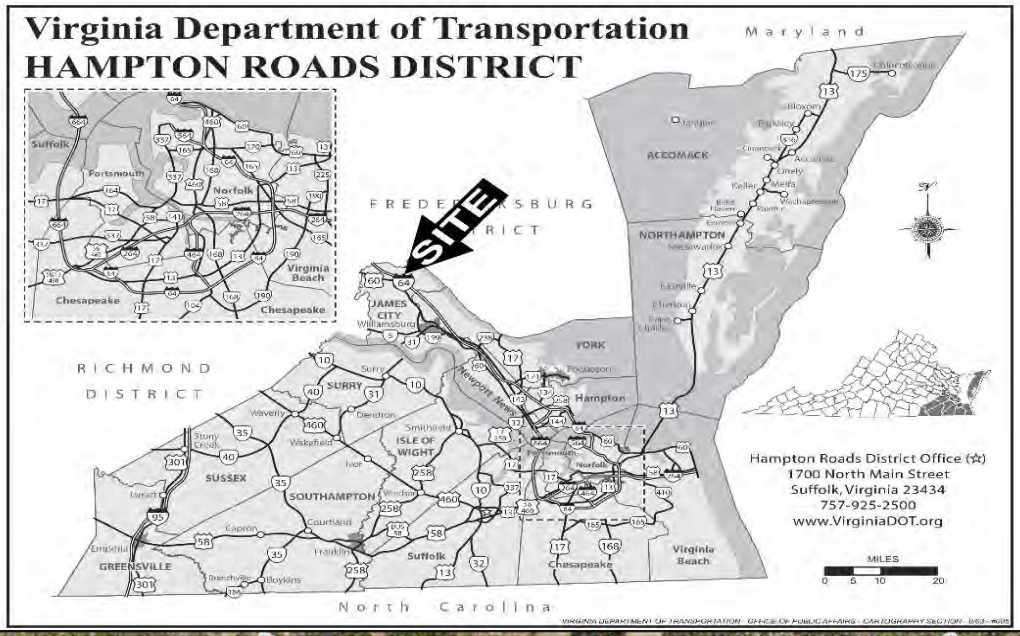
With all development in 2030, the eastbound approach on Barnes Road is LOS F in the PM peak hour. Some alternatives for this intersection include:

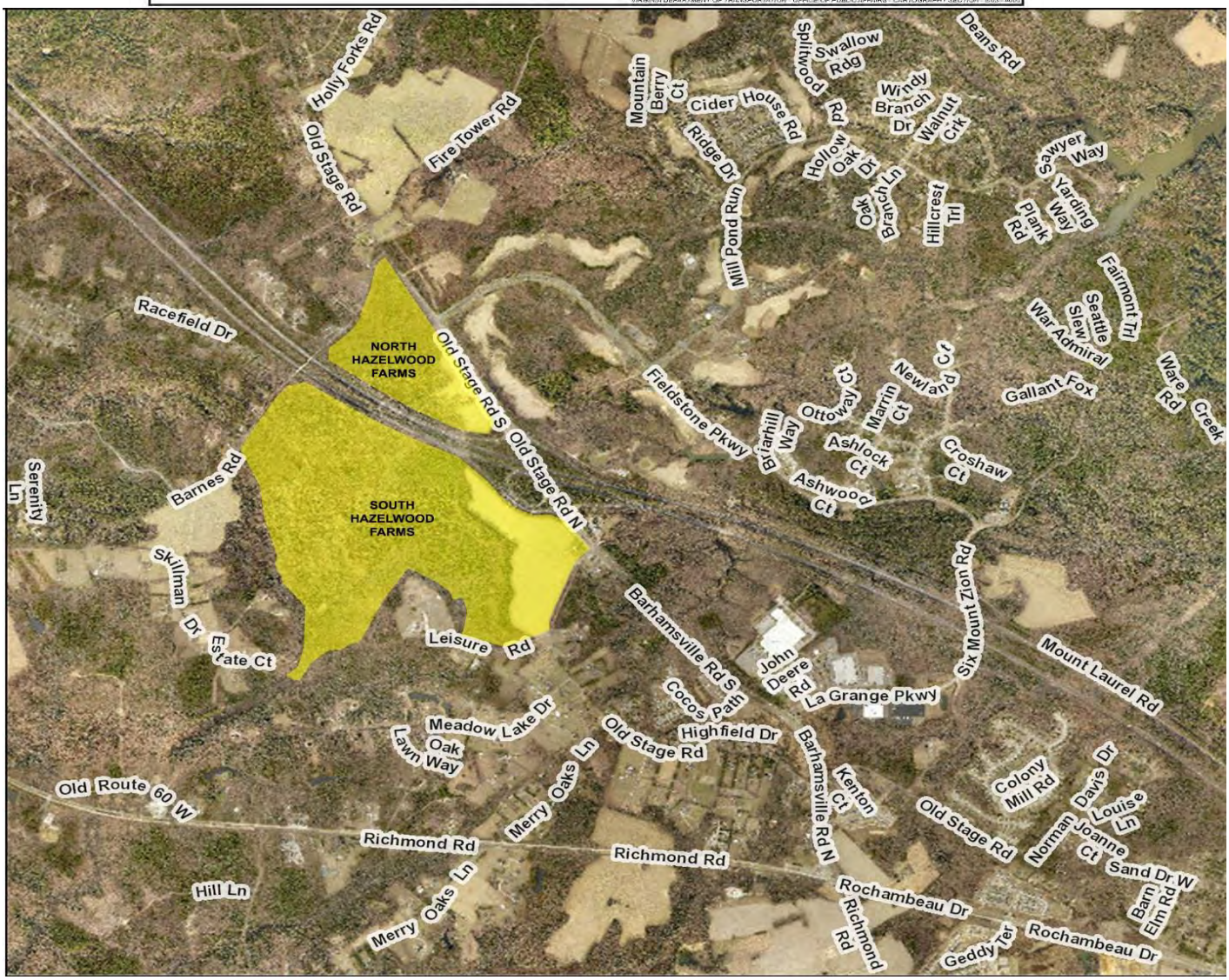
1. Add a left turn lane on the eastbound approach. This produces LOS F for the resulting separate left turn lane.
2. Prohibit eastbound left turn and divert to U-turn at Fieldstone Parkway. This produces LOS B for the eastbound approach with a slight increase in delay at the Rt. 30/Fieldstone Parkway intersection.
3. Widen Rt. 30 to four lanes. With wide median and yield bar treatments in the median, this produces LOS C for the eastbound approach.

CONCLUSIONS

The proffered improvements by Stonehouse and Hazelwood Farms at four intersections on Rt. 30 accommodates all future traffic. Moss Creek access on Rt. 30 is under designed and warrants further consideration during development plan review. If traffic on Barnes Road at Rt. 30 becomes a problem, the problem eastbound left turns can be diverted to the Rt. 30/Fieldstone Parkway to be constructed Stonehouse and Hazelwood Farms developments.

REPORT EXHIBITS





HAZELWOOD FARMS
REGIONAL AND AREA MAPS

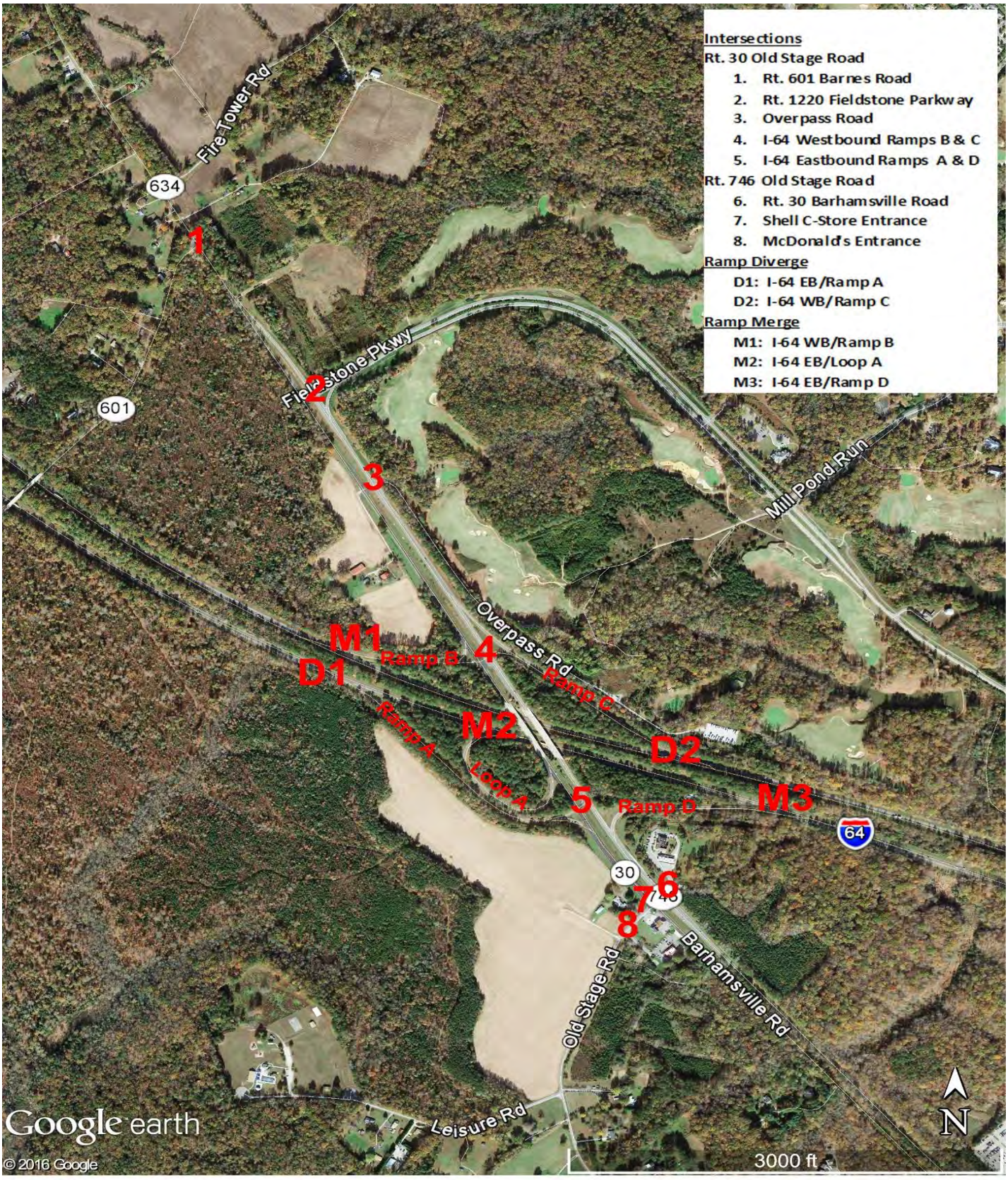
DRW Consultants, LLC
804-794-7312

Exhibit 1a

HAZELWOOD FARMS
AREA PARCEL MAP

DRW Consultants, LLC
804-794-7312

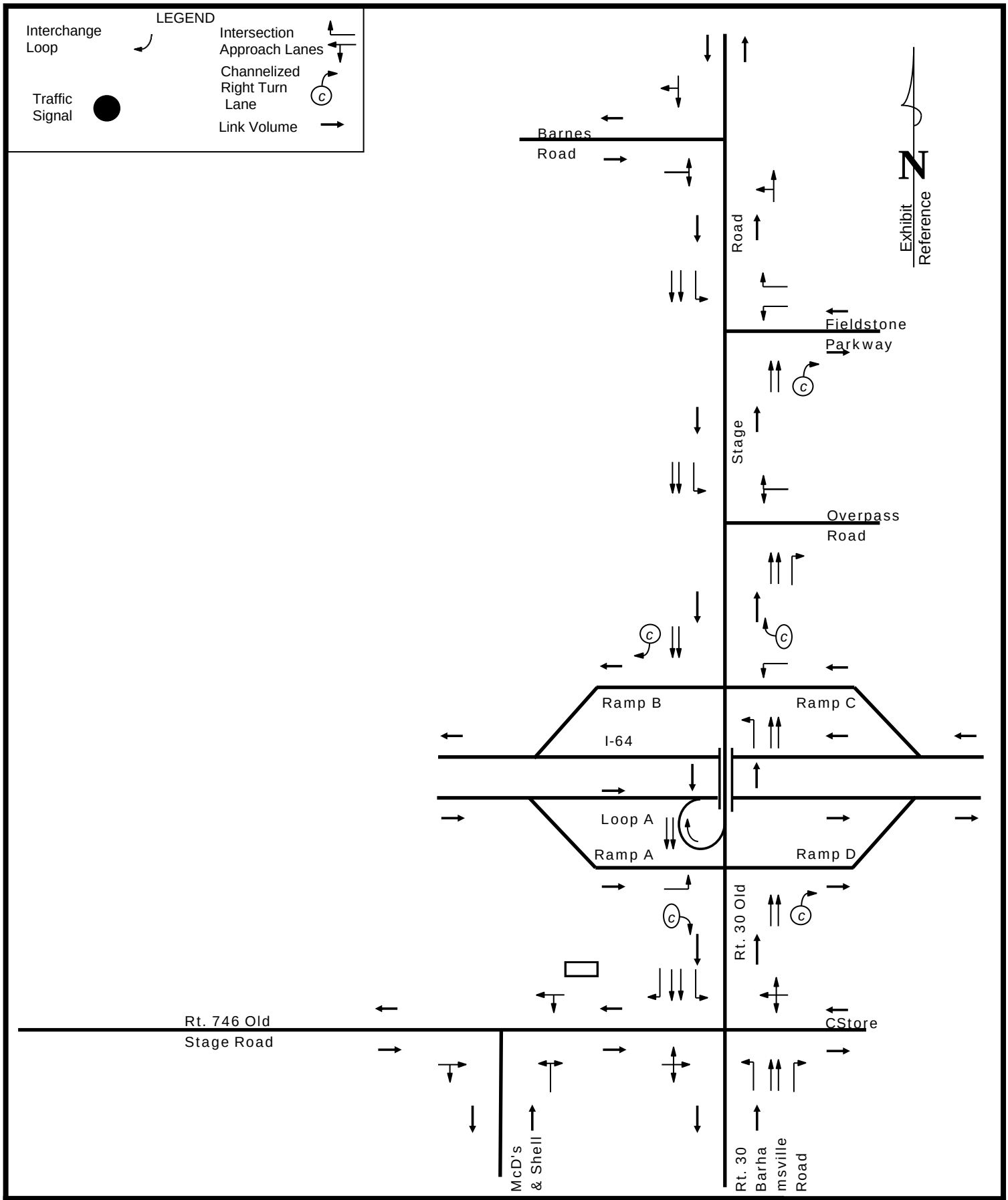
Exhibit 1b



HAZELWOOD FARMS
PEAK HOUR COUNT LOCATIONS

DRW Consultants, LLC
804-794-7312

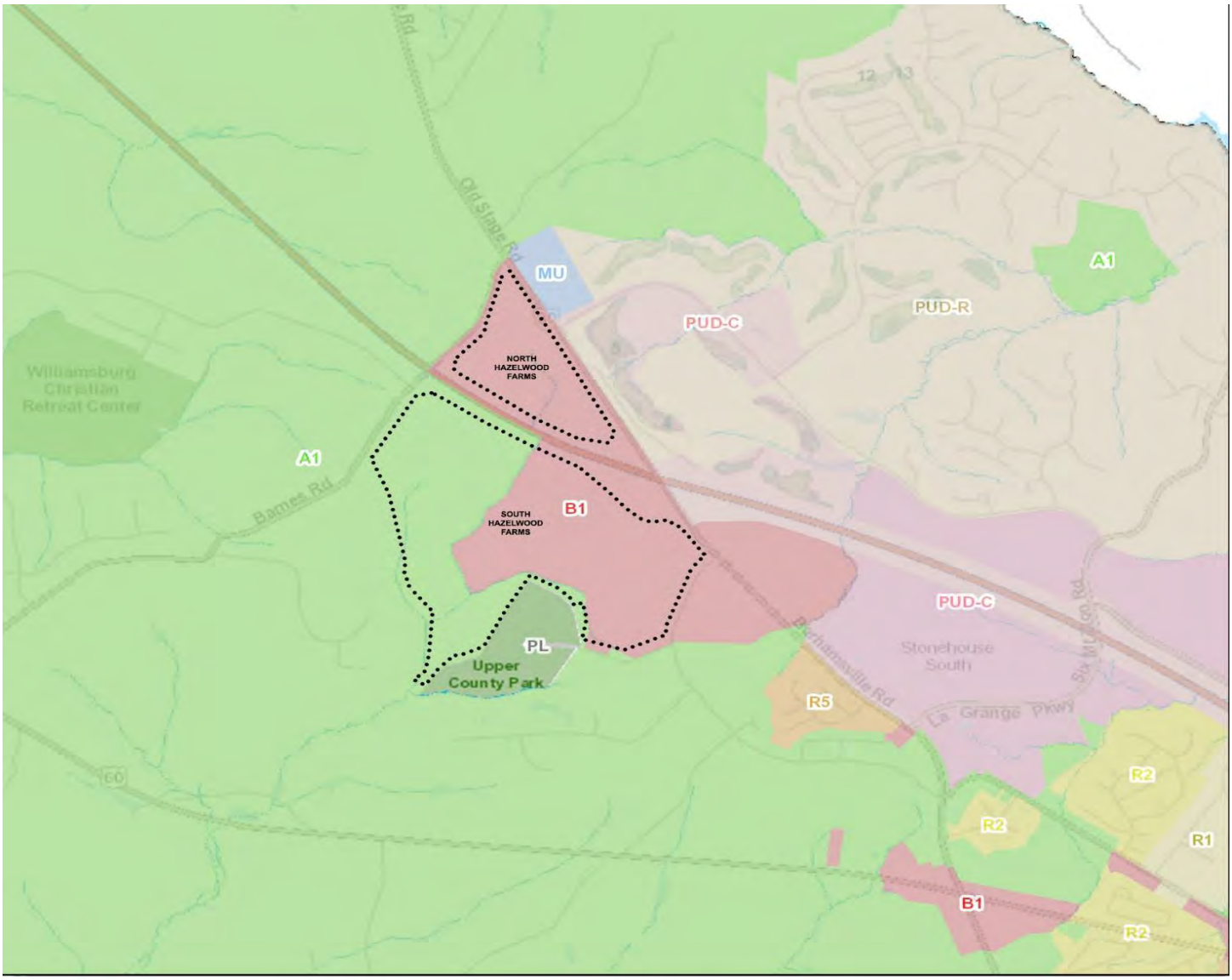
Exhibit 1c



HAZELWOOD FARMS
EXISTING ROADWAYS

DRW Consultants, LLC
804-794-7312

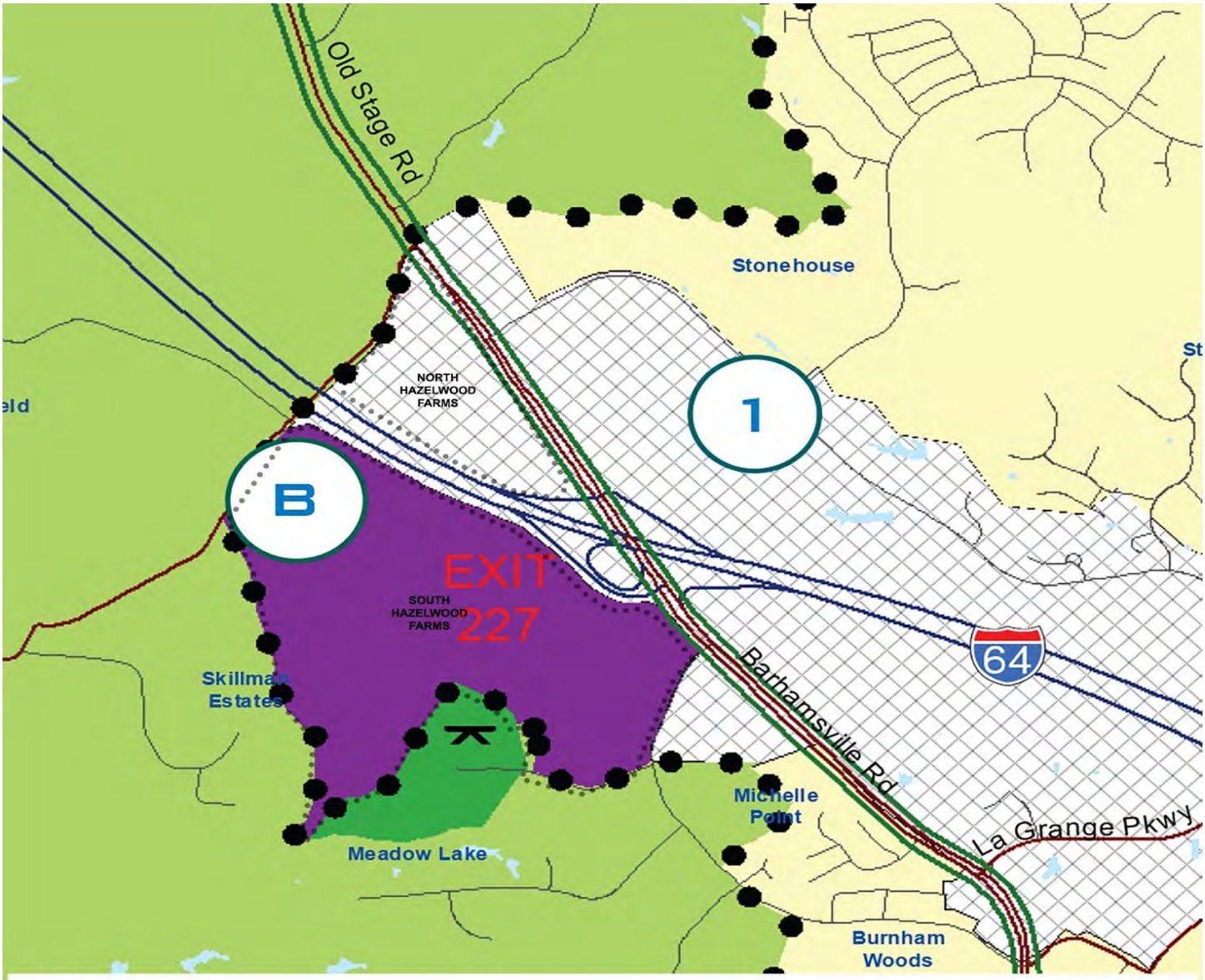
Exhibit 1d



HAZELWOOD FARMS
EXISTING ZONING

DRW Consultants, LLC
804-794-7312

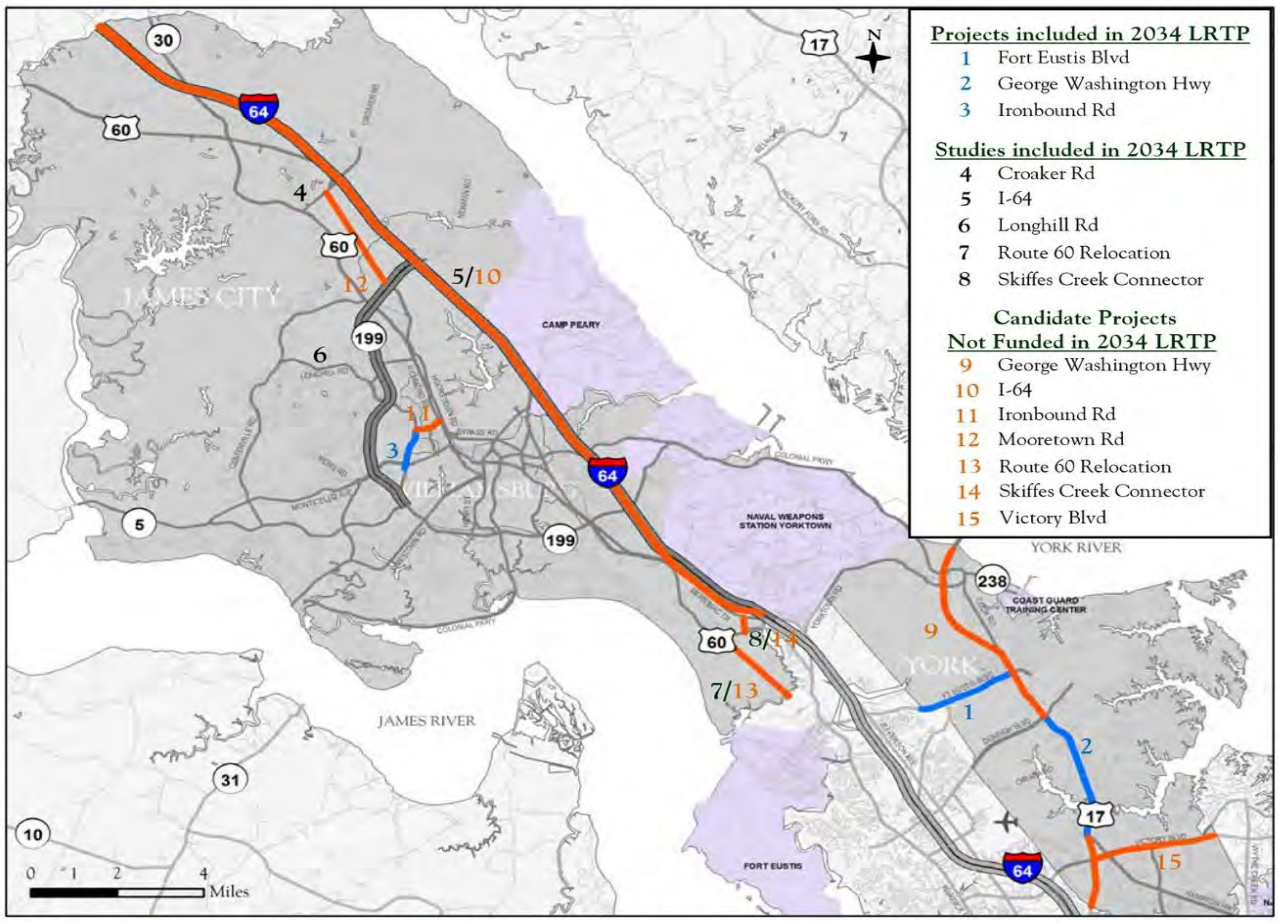
Exhibit 1e



HAZELWOOD FARMS
JAMES CITY COUNTY 2035 LAND USE MAP

DRW Consultants, LLC
804-794-7312

Exhibit 1f



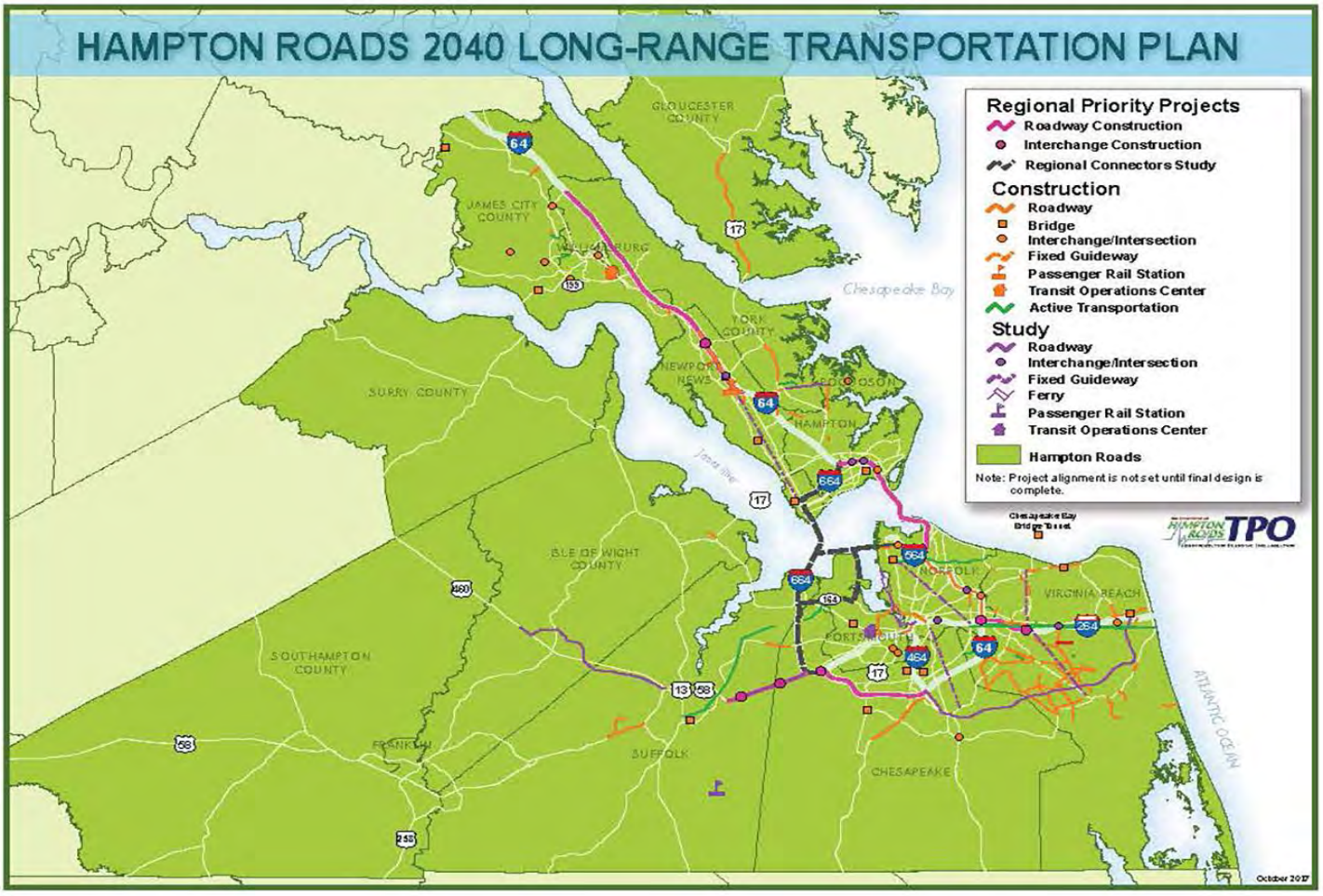
Map 8 – Projects/Studies Included in the 2034 LRTP and Candidate Projects Not Funded in the 2034 LRTP

Data Source: HRTPO.

2034 LONG RANGE TRANSPORTATION PLAN
JAMES CITY COUNTY/WILLIAMSBURG/YORK COUNTY
COMPREHENSIVE TRANSPORTATION STUDY
HAMPTON ROADS TPO MARCH 2012

DRW Consultants, LLC
804-794-7312

Exhibit 1g-1



HAMPTON ROADS 2040 LONG-RANGE TRANSPORTATION PLAN
HAMPTON ROADS TPO

DRW Consultants, LLC
804-794-7312

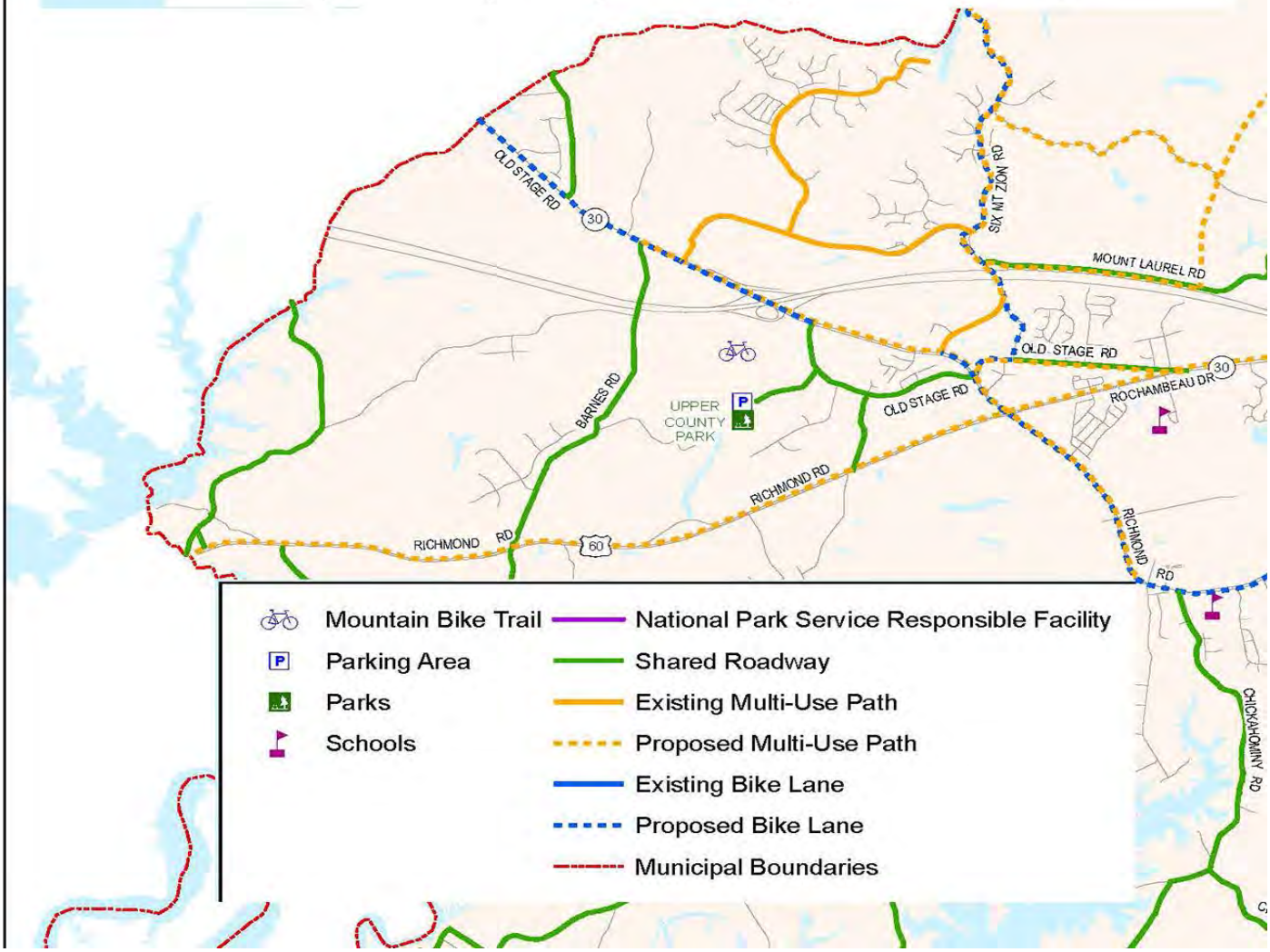
Exhibit 1g-2

Regional Bikeways

James City County, Williamsburg, and York County, Virginia

Adopted by City of Williamsburg City Council 6/10/93
Adopted by York County Board of Supervisors 6/17/93
Adopted by James City County Board of Supervisors 6/21/93

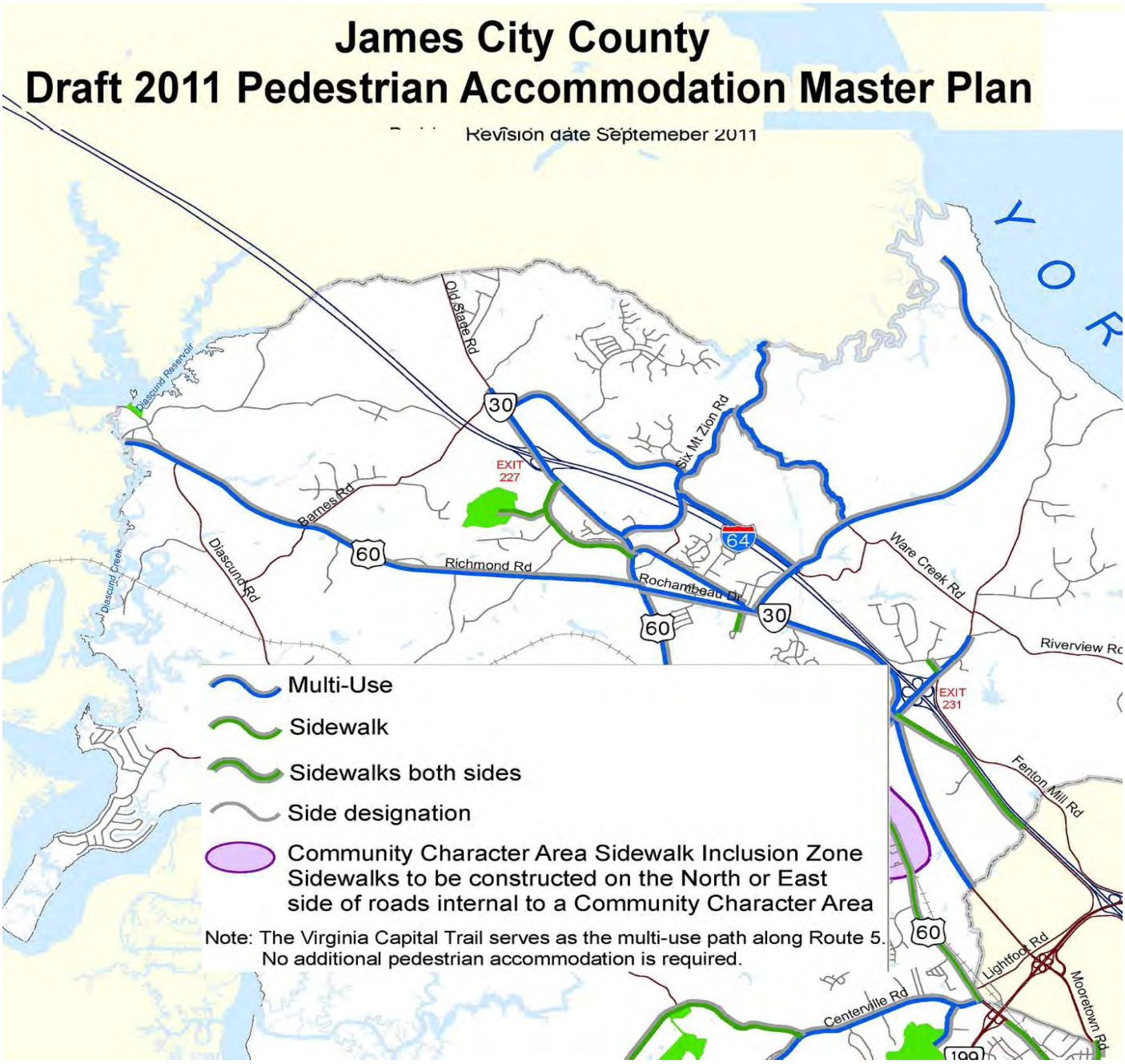
Revised by City of Williamsburg City Council 11/12/98, 10/12/06, **1/10/13**
Revised by York County Board of Supervisors 10/6/99, 12/6/05, **9/3/13**
Revised by James City County Board of Supervisors 11/10/98, **9/10/13**



REGIONAL BIKEWAYS
JAMES CITY COUNTY , WILLIAMSBURG, AND YORK COUNTY
REVISED 2013

DRW Consultants, LLC
804-794-7312

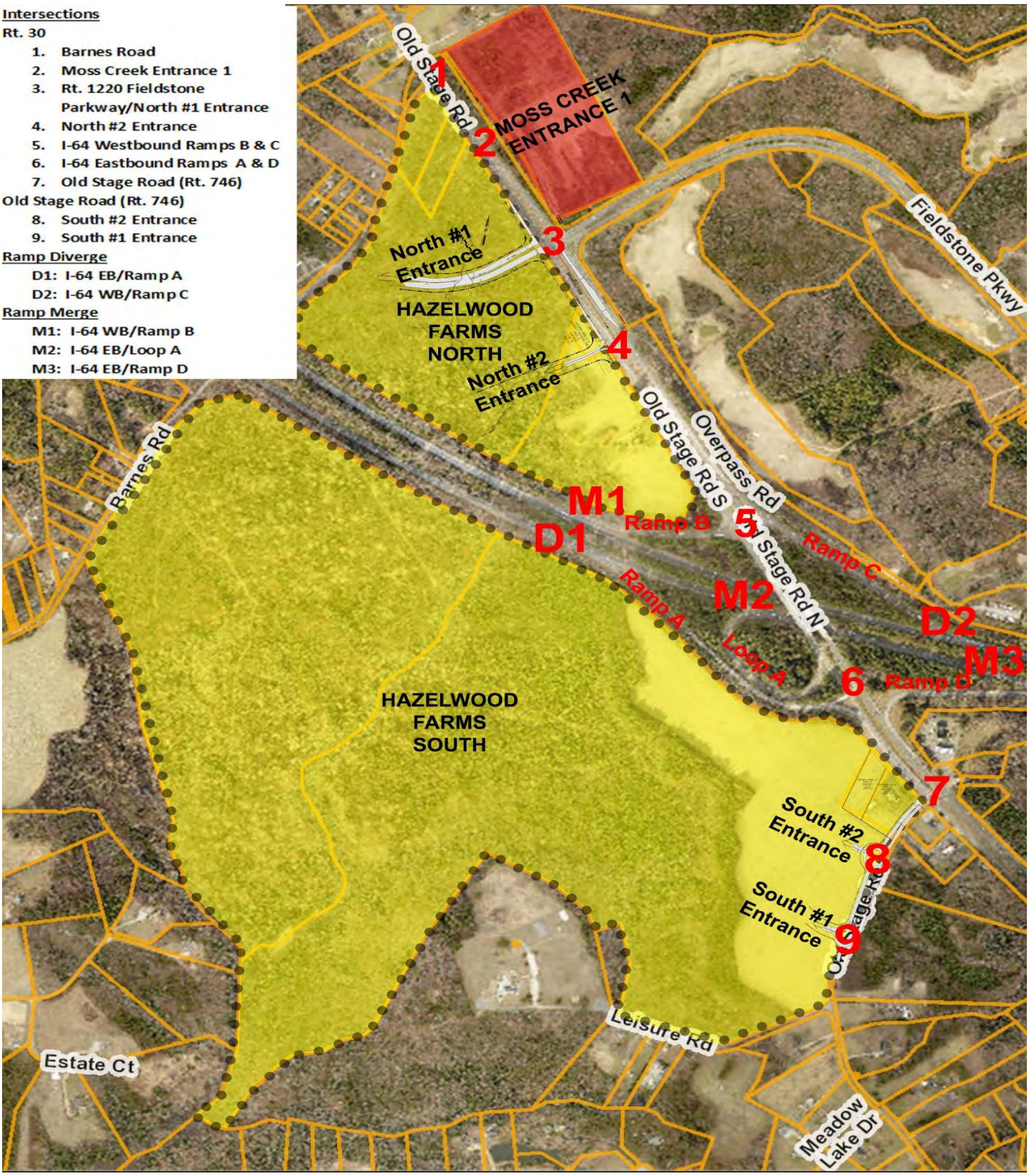
Exhibit 1g-3



JAMES CITY COUNTY
DRAFT 2011 PEDESTRIAN
ACCOMMODATION MASTER PLAN

DRW Consultants, LLC
804-794-7312

Exhibit 1g-4



HAZELWOOD FARMS
PEAK HOUR ANALYSIS LOCATIONS

DRW Consultants, LLC
804-794-7312

Exhibit 1h

NEW KENT COUNTY

YORK RIVER

TRACT 8

TRACT 7

TRACT 6

TRACT 5

TRACT 4

TRACT 3

TRACT 2

TRACT 1A

TRACT 1B

TRACT 9

TRACT 10A

TRACT 10B

TRACT 11A

TRACT 11B

TRACT 12

TRACT 13

SCHOOL

LAND BAY 14

LB 1

LB 3

LB 5

LB 8

NORTH HAZELWOOD FARMS

SOUTH HAZELWOOD FARMS

FUTURE PARKWAY

FIELDSTONE PKWY

A GRANGE PKWY (RT 1045)

EXIT 227

INTERSTATE 64

FIRE TOWER RD (RT 634)

OLD STAGE RD (RT 30)

OLD STAGE RD (RT 746)

BARHAMSVILLE RD (RT 30)

RICHMOND RD (RT 60)

ROCHAMBEAU DR (RT 30)

SIX MT ZION RD (RT 606)

WARE CREEK RD (RT 606)

MT LAUREL RD (RT 606)

CROAKER RD (RT. 607)

SYCAMORE LANDING RD (RT. 607)

CROAKER LANDING RD (RT. 605)

MASSENA DR

WOODLAND RD

RIDGE RD

RIDGE DR

OLD GROVE LN

CIDER HOUSE RD

SPLITWOOD RD

LEATHERLEAF DR

MILL POND RUN

NAD 83

HATCH LEGEND

- PHASE 1
- PHASE 2
- PHASE 3
- PHASE 4

SCALE 1"=1,000'

0 1,000' 2,000'

THIS DRAWING PREPARED AT THE
Corporate Headquarters
1001 Boulders Parkway | Richmond, VA 23225
TEL 804.200.6500 FAX 804.560.1016 www.timmons.com

YOUR VISION ACHIEVED THROUGH OURS.

TIMMONS GROUP

REVISION DESCRIPTION

DATE

DATE 3-12-2015

DRAWN BY A.CAMPBELL

DESIGNED BY S. WORTHINGTON

CHECKED BY

SCALE 1"=1,000'

STONEHOUSE

STONEHOUSE DISTRICT - JAMES CITY COUNTY - VA

DEVELOPMENT PHASING PLAN

EXHIBIT 1i

JOB NO. 34549

SHEET NO. 1 OF 1

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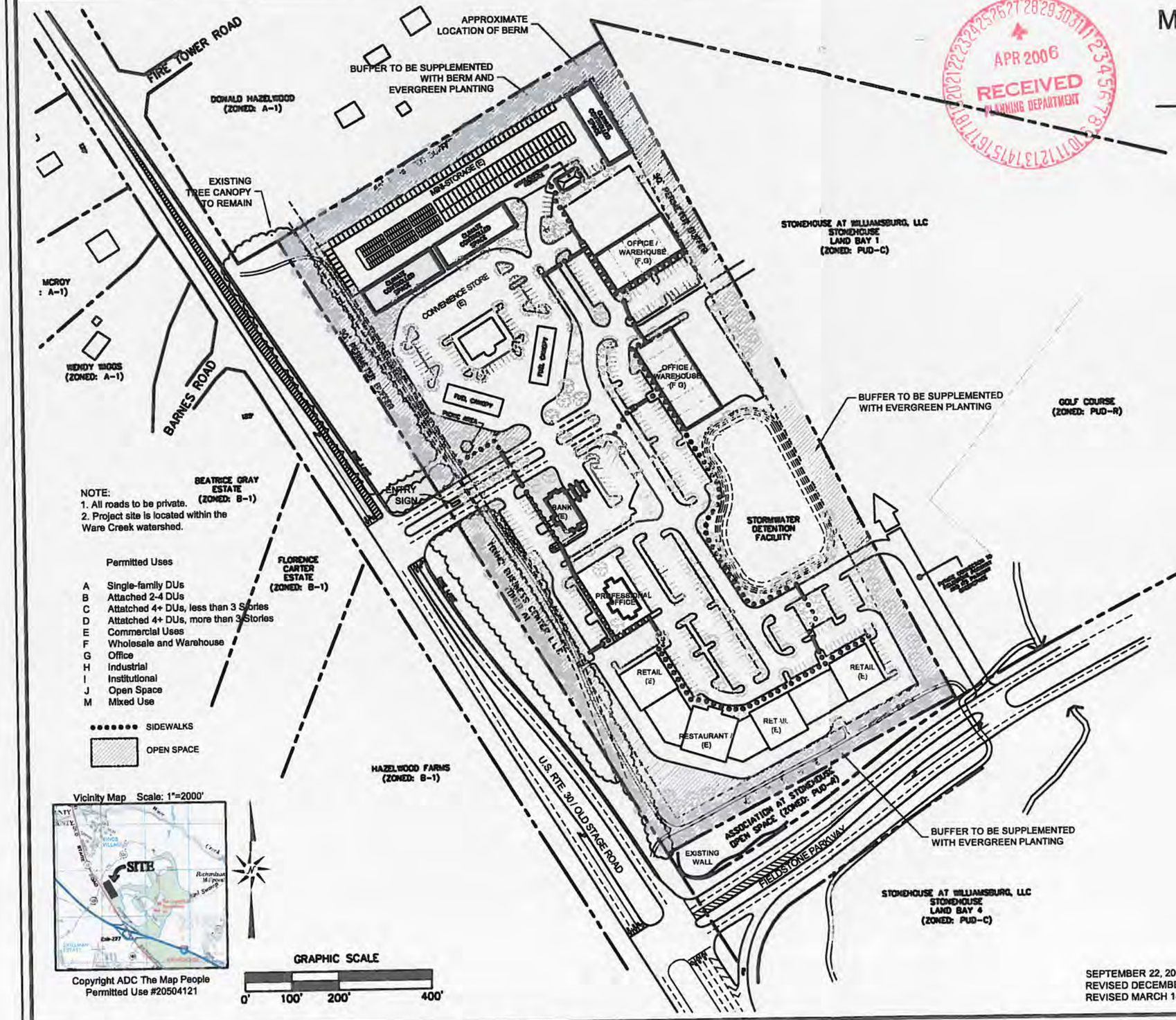
Z-12-05 BOS adopted 5/9/06



NOTE:
1. All roads to be private.
2. Project site is located within the Ware Creek watershed.

Permitted Uses

- A Single-family DUs
- B Attached 2-4 DUs
- C Attatched 4+ DUs, less than 3 Stories
- D Attatched 4+ DUs, more than 3 Stories
- E Commercial Uses
- F Wholesale and Warehouse
- G Office
- H Industrial
- I Institutional
- J Open Space
- M Mixed Use

SIDEWALKS

OPEN SPACE

Vicinity Map Scale: 1"=2000'

Copyright ADC The Map People
Permitted Use #20504121

GRAPHIC SCALE

0' 100' 200' 400'

APR 2006
RECEIVED
PLANNING DEPARTMENT

PROPOSED MASTER PLAN
MOSS CREEK COMMERCE CENTRE
AT STONEHOUSE

9690 OLD STAGE ROAD
JAMES CITY COUNTY, VIRGINIA

SITE SUMMARY:

PARCEL ID #:	0440100004 and 044010034
GROSS SITE AREA:	21.9 AC +/-
NET DEVELOPABLE AREA:	21.9 AC.+/-
EXISTING ZONING:	A1 (GENERAL AGRICULTURAL)
PROPOSED ZONING:	MU (MIXED USE)
PERIMETER BUFFER REQU'D.:	50'
MIN. LOT SIZE, FRONT YARD:	N/A
REAR YARD AND SIDE YARD:	N/A
OPEN SPACE REQU'D.:	10% (2.19 AC. +/-)
OPEN SPACE PROVIDED:	2.19 AC. +
NON-RESIDENTIAL FLOOR AREA.:	3.1 AC
FLOOR AREA DENSITY:	.14
IMPERVIOUS COVER:	9.5 +/-AC (43%+/-)

PROGRAM SUMMARY:

- 3,574 S.F. BANK WITH 3 DRIVE-THRU LANES
- 3,910 S.F. CONVENIENCE STORE WITH FUELING
- 54,250 S.F. MINI-STORAGE FACILITY:
  - ~ 3-CLIMATE CONTROLLED BUILDINGS
  - ~ 5' X 10' STORAGE SPACE (120 IUNITS)
  - ~ 10' X 20' STORAGE SPACE (28 UNITS)
  - ~ 10' X 15' STORAGE SPACE (60 UNITS)
  - ~ 10' X 25' STORAGE SPACE (28 UNITS)
  - ~ OFFICE/CARETAKER BLDG.
- 44,475 S.F. RETAIL WITH RESTAURANT ANCHOR
- 26,400 S.F. OFFICE/WAREHOUSE SPACE
- 3,628 S.F. PROF. OFFICE BLDG.

NOTE: ALL QUANTITIES ARE APPROXIMATE, BASED ON ASSUMED BOUNDARY, TOPOGRAPHIC AND PHYSICAL FEATURES INFORMATION. LANDSCAPING IS SHOWN FOR ILLUSTRATIVE PURPOSES ONLY.

Parking Calculations

	Formula	Qty.	Required
Bank	1 per 250 s.f.	3,574 s.f.	14
Convenience Store	1 per 250 s.f.	3910 s.f.	16
Retail	1 per 200 s.f.	*29,358 s.f.	147
Office**	1 per 250 s.f.	11,428 s.f.	45
Mini-Storage & Climate Storage	1 per 100 Units & 2 per caretaker residence	236 Units & 1 res.	4
Restaurant	1 per 250	7,777 s.f.	31
Warehouse	1 per 2 employees	T.B.D.	-

TOTAL PARKING PROVIDED: 355

EXHIBIT
1j

* BASED ON NET AREA EQUAL TO 80% OF GROSS AREA
** INCLUDES PROF. OFFICE AND 1/2 S.F. OF OFFICE/WAREHOUSE
(Calculations are approximate, may change with final site plan)

SEPTEMBER 22, 2004
REVISED DECEMBER 28, 2005
REVISED MARCH 14, 2006

Job # 2004085-000.00
LFV Drawing # 15818W

LANDMARK DESIGN GROUP
Engineers · Planners · Surveyors
Landscape Architects · Environmental Consultants
4029 IRONBOUND ROAD SUITE 100
WILLIAMSBURG, VIRGINIA
(757) 253-2075 FAX: (757) 229-0049

Rev.	Date	Description	Revised

EXHIBIT 2a

EXHIBIT 2b

EXHIBIT 2c

EXHIBIT 2d

EXHIBIT 2e

EXHIBIT 2f

STA 290+00
STA 295+00
STA 300+00
STA 305+00
STA 310+00
STA 315+00
STA 320+00
STA 325+00
STA 330+00
STA 335+00
STA 340+00
STA 345+00
STA 350+00
STA 355+00
STA 360+00
STA 365+00
STA 370+00
STA 375+00
STA 380+00

TELEGRAPH ROAD
OLD STAGE ROAD OVERPASS ROAD
WEST BOUND
INTERSTATE 64
EAST BOUND
BARNES ROAD
BRIDGE DECK
BRIDGE DECK
BARHAMSVILLE ROAD
OLD STAGE ROAD
8' MULTI-USE TRAIL
LISBURNE ROAD

GRAPHIC SCALE
300' 0' 300' 600'
SCALE: 1" = 300'

5248 Olde Towne Road, Suite 1
Williamsburg, VA 23188
Phone: (757) 253-0040
Fax: (757) 220-8994
www.aeseva.com

AES CONSULTING ENGINEERS
Hampton Roads | Central Virginia | Middle Peninsula

HAZELWOOD FARM
EXHIBIT INDEX

JAMES CITY COUNTY VIRGINIA

STONEHOUSE DISTRICT

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=300'	Date: 2/7/19

Sheet Title:

OVERALL EXHIBITS

Sheet Number
2

S:\JOB\W10325\01\Hazlewood Farms #3 xrefs\Plans\Master Planning\Exhibits for ID Williams\W10325-01 Overall Exhibit.dwg, 2/6/2019 2:58:56 PM, mlevins

STA 295+00

STA 300+00

STA 305+00

STA 310+00

STA 315+00

STA 320+00

STA 325+00

STA 330+00

STA 335+00

ENTRANCE #1

MOSS CREEK

MOSS CREEK ENTRANCE #2

FIELDSTONE PKWY
STATE ROUTE 1531

OLD STAGE ROAD
STATE ROUTE 30

BARNES ROAD
STATE ROUTE 601

OVERPASS ROAD

NORTH #1 ENTRANCE

NORTH #2 ENTRANCE

RIGHT IN/RIGHT OUT

NORTH BOUND

SOUTH BOUND

WEST BOUND

EAST BOUND

INTERSTATE 64

RAMP A

RAMP B

RAMP C

PROPOSED TRAFFIC SIGNAL

PEDESTRIAN CROSSING

200' TAPER

200' RTL

STONEHOUSE

AREA 1

AREA 2

AREA 3

AREA 4

50' LANDSCAPE BUFFER

100' LANDSCAPE BUFFER

100' RPA BUFFER

RPA BUFFER

LIMITS OF WETLANDS

WETLANDS 9.31 AC.

N/F
MOSS CREEK MARKET PLACE LLC
9686 OLD STAGE RD
PARCEL ID:
0440100034

N/F
ASSOCIATION AT STONEHOUSE INC (THE)
9330 FIELDSTONE PARKWAY
PARCEL ID:
0440100024B
ZONED PR PUD RESIDENTIAL

N/F
ASSOCIATION AT STONEHOUSE INC
9300 FIELDSTONE PARKWAY
PARCEL ID:
0440100027
ZONED PC PUD RESIDENTIAL

N/F
EVELAND, JOSEPH ROGER
9595 BARNES RD
PARCEL ID:
0430100006A
ZONED A-1

N/F
STEWART, LOIS W & JAMES E
9593 BARNES RD
PARCEL ID:
0430100008
ZONED A-1

N/F
STEWART, LOIS W & JAMES E
9591 BARNES RD
PARCEL ID:
0430100009
ZONED A-1

N/F
STEWART, LOIS W & JAMES E
9583 BARNES RD
PARCEL ID:
0430100010
ZONED A-1

N/F
NEFF, BARRY F JR
9567 BARNES RD
PARCEL ID:
0430200005
ZONED A-1

N/F
SHAVE, NORRIS L
9563 BARNES RD
PARCEL ID:
0430200004
ZONED A-1

N/F
STAVROU COMPANY LLC C/O
CHARITA STAVROU
9557 BARNES RD
PARCEL ID:
0430200003
ZONED A-1

N/F
STAVROU COMPANY LLC C/O
CHARITA STAVROU
9551 BARNES RD
PARCEL ID:
0430200002
ZONED A-1

N/F
STAVROU COMPANY LLC C/O
9547 BARNES RD
PARCEL ID:
0430200001
ZONED A-1

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

N

Rev.	Date	Description	Revised

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NORTH HAZELWOOD FARM
LAND USE PLAN

JAMES CITY COUNTY VIRGINIA

STONEHOUSE DISTRICT

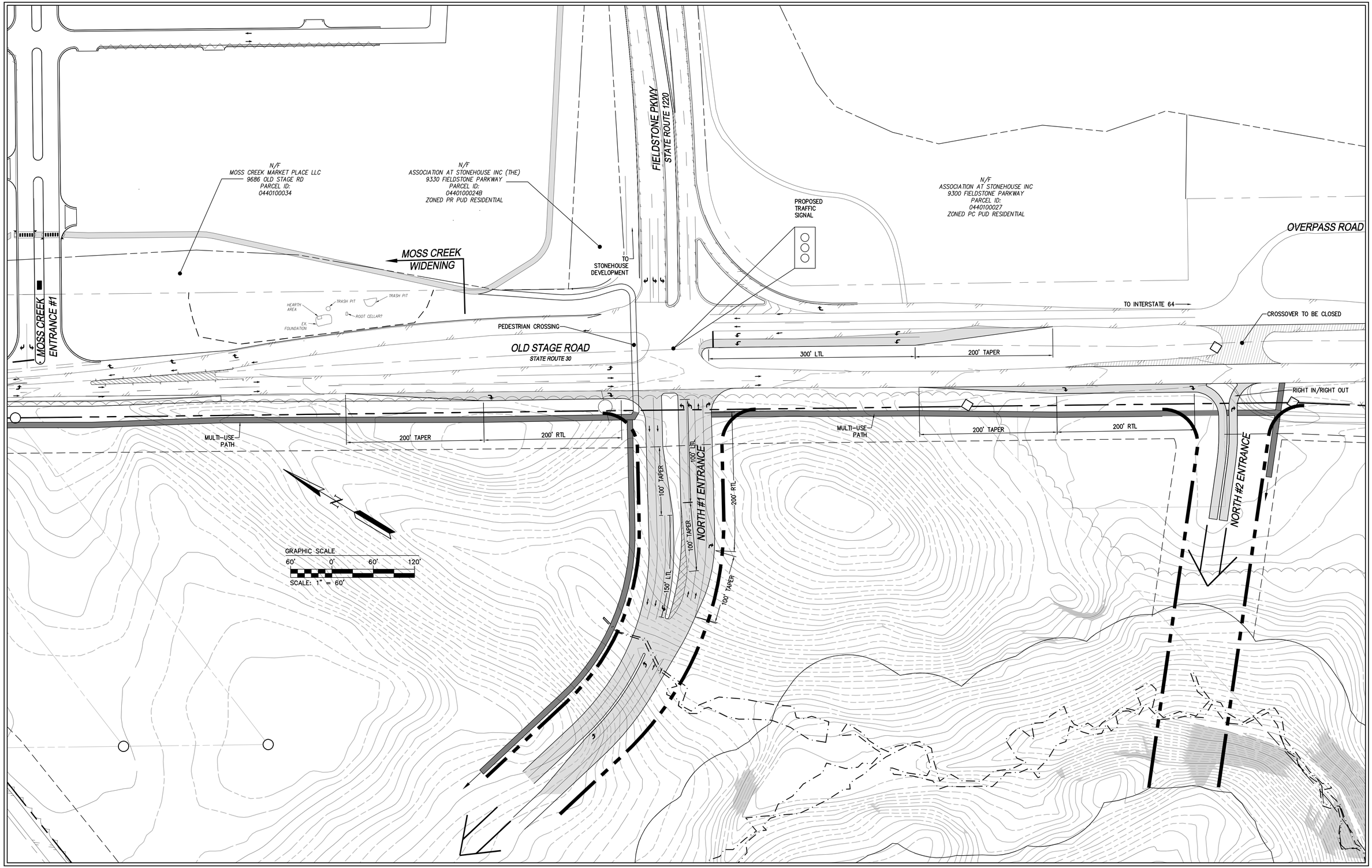
Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title:

NORTH EXHIBIT

Sheet Number
2a

S:\JOBS\W10325\01 Hazelwood Farms #10 Lewis\Planning\Master Planning\Exhibits for 1-3-19\Sheets\W10325-01 Overall Exhibit.dwg, 2/6/2019 3:30:05 PM, Jose Leiva



Rev.	Date	Description	Revised By

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NORTH HAZELWOOD FARM
ACCESS PLAN

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=60'	Date: 2/7/19
Sheet Number	NORTH EXHIBIT 2b

WEST BOUND
INTERSTATE 64
EAST BOUND
RAMP A
RAMP B
RAMP D
LOOP A
STA 345+00
STA 350+00
STA 355+00
STA 360+00
STA 365+00
STA 370+00
PROPOSED TRAFFIC SIGNAL
PROPOSED TRAFFIC SIGNAL
C-STORE ACCESS
50' LANDSCAPE BUFFER
50' BUFFER
100' LANDSCAPE BUFFER
100' RPA BUFFER
LIMITS OF WETLANDS
BARNES ROAD
STATE ROUTE 601
BARHAMSVILLE ROAD
STATE ROUTE 30
OLD STAGE ROAD
TEISURE ROAD
AREA 1
AREA 2
AREA 3
AREA 4
AREA 5
AREA 6
AREA 7
SOUTH #1 ENTRANCE
SOUTH #2 ENTRANCE
SECONDARY ACCESS
MULTI-USE PATH
MULTI-USE PATH TO BARNES ROAD
PROPOSED ACCESS ROAD
PEDESTRIAN ACCESS
JAMES CITY COUNTY UPPER COUNTY PARK

N/F LOEBS, STEPHANIE M. 101 RACEFIELD DR. PARCEL ID: 0430500010 ZONED A-1
N/F NESS, MICHAEL REID & BONNIE BREEDEN 9427 BARNES RD PARCEL ID: 0430500009 ZONED A-1
N/F GRAHAM, MARDINE 9409 BARNES RD PARCEL ID: 0430500007 ZONED A-1
N/F HILL, JAMES H. & DAPHNE P. 9403 BARNES RD PARCEL ID: 0430500005 ZONED A-1
N/F SMITH, WILLIAM E. & BETTY A PARCEL ID: 0430500004 ZONED A-1
N/F DILLARD, ROBERT S & HELEN HOPE 9337 BARNES RD PARCEL ID: 0430500002 ZONED A-1
N/F WALLS, RICHARD R & SHARON PARCEL ID: 0430500001 ZONED A-1
N/F STUPPY, DAVID W 9341 BARNES RD PARCEL ID: 0430500003 ZONED A-1
PAMAKA, LLC PARCEL ID: 0430100016 39.2± AC
N/F KELLEY, DANNY L & R CATHERINE 217 SKILLMAN DR PARCEL ID: 0430400011 ZONED A-1
N/F WHEELER, GEORGE L & S DIANE W 219 SKILLMAN DR PARCEL ID: 0430400018 ZONED A-1
N/F LEIGHTON-HERRMANN, MICHAEL R & MARSH 216 SKILLMAN DR PARCEL ID: 1110200009 ZONED A-1
N/F TYRER, DAVID D & CAROL D 475 BURNHAM RD PARCEL ID: 1110200007 ZONED A-1
N/F AMERICAN DYNC HOLDINGS TOANO LLC 9220 OLD STAGE RD PARCEL ID: 0440100016 ZONED B-1
N/F AMERICAN DYNC HOLDINGS TOANO LLC 9210 OLD STATE RD PARCEL ID: 0440100032 ZONED B-1
N/F HORNSBY OIL CO. 9200 BARHAMSVILLE RD PARCEL ID: 0440100018 ZONED B-1
N/F SMG, INCORPORATED 9201 BARHAMSVILLE RD PARCEL ID: 0440100019 ZONED B-1
N/F MCDONALDS CORPORATION C/O DOKO ENTERPRISES 9193 BARHAMSVILLE RD PARCEL ID: 0440100020 ZONED B-1
N/F HORNSBY INVESTMENT CO. DOUGLAS L HORNSBY 9131 BARHAMSVILLE RD PARCEL ID: 0530100002 ZONED B-1
N/F HORNSBY INVESTMENT CO. DOUGLAS L. HORNSBY 244 OLD STAGE RD PARCEL ID: 1120100009 ZONED B-1
N/F KIRKLAND, RAYMOND O & KING, SUNI T 210 OLD STAGE RD PARCEL ID: 11201000010A ZONED A-1
N/F MCCREA, RONDA S TRUSTEE 223 OLD STAGE RD PARCEL ID: 1120100008 ZONED A-1
N/F RUTHERFORD, ROBIN C 129 LEISURE RD PARCEL ID: 1120100005 ZONED A-1
N/F PAUL, ROBERT H 136 LEISURE RD PARCEL ID: 1120100002 ZONED A-1
N/F JAMES CITY COUNTY 180 LEISURE RD PARCEL ID: 1120100001 ZONED PUBLIC LANDS
N/F HUGHES, JACK & HELEN 137 LEISURE RD PARCEL ID: 1120100004 ZONED A-1
N/F LACKS, BENNY L. SR & RACHAEL B 101 LEISURE RD PARCEL ID: 1120100007 ZONED A-1
N/F HAMILTON, FORREST W III ESTATE C/O CLIFTON R MARTIN EXECUTOR 121 LEISURE RD PARCEL ID: 1120100006 ZONED A-1

GRAPHIC SCALE
200' 0' 200' 400'
SCALE: 1" = 200'

Rev.	Date	Description	Revised

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SOUTH HAZELWOOD FARM
LAND USE PLAN

JAMES CITY COUNTY VIRGINIA
STONEHOUSE DISTRICT

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=200'	Date: 2/7/19

Sheet Title: SOUTH EXHIBIT

Sheet Number 2c

S:\JOBS\W10325\01 Hazelwood Farms #3\Land Planning\Master Planning\Exhibits for 3-19\Masterfile110220 Overall Exhibit.dwg, 2/20/2019 3:02:08 PM, Chase Laney

RAMP D

C-STORE ACCESS

350+00 351+00 352+00 353+00 354+00 355+00 356+00 357+00 358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00 372+00 373+00 374+00 375+00

BARHAMSVILLE ROAD

LIMITED ACCESS BREAK

RAMP A

N/F
SMO, INCORPORATED
9201 BARHAMSVILLE RD
PARCEL ID:
0440100019
ZONED B-1

N/F
MCDONALDS CORPORATION C/O
DOHO ENTERPRISES
9193 BARHAMSVILLE RD
PARCEL ID:
0440100020
ZONED B-1

HAZELWOOD FARMS, LLC
PARCEL ID:
0440100014
1.5± AC
ZONED B-1

GRAPHIC SCALE
80' 0' 80' 160'
SCALE: 1" = 80'

N/F
HORNSBY INVESTMENT CO.
DOUGLAS L HORNSBY
9131 BARHAMSVILLE RD
PARCEL ID:
0530100002
ZONED B-1

SINGLE LANE ROUNDABOUT
(150' OUTSIDE DIAMETER
TO PAVEMENT EDGE)

SOUTH #2 ENTRANCE

EXISTING RIGHT OF WAY

N/F
HORNSBY INVESTMENT CO.
DOUGLAS L HORNSBY
244 OLD STAGE RD
PARCEL ID:
1120100009
ZONED B-1

EXISTING PROPERTY LINE
AND RIGHT OF WAY

MULTI-USE PATH

OLD STAGE ROAD

SOUTH #1 ENTRANCE

SINGLE LANE ROUNDABOUT
(150' OUTSIDE DIAMETER
TO PAVEMENT EDGE)

MULTI-USE PATH

N/F
KIRKLAND, RAYMOND O & KING, SUN T
210 OLD STAGE RD
PARCEL ID:
1120100010A
ZONED A-1

LEISURE ROAD

Rev.	Date	Description	Revised By

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SOUTH HAZELWOOD FARM ACCESS PLAN

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=80'	Date: 2/7/19

Sheet Title:
SOUTH EXHIBIT

Sheet Number
2d

GRAPHIC SCALE
60' 0' 60' 120'
SCALE: 1" = 60'

N/F
AMERICAN DYNC HOLDINGS
TOANO LLC
9220 OLD STAGE RD
PARCEL ID:
0440100016
ZONED B-1

N/F
AMERICAN DYNC HOLDINGS
TOANO LLC
9210 OLD STAGE RD
PARCEL ID:
0440100032
ZONED B-1

N/F
HORNSBY OIL CO.
DOUGLAS L HORNSBY
9200 BARHAMSVILLE RD
PARCEL ID:
0440100018
ZONED B-1

SIGNALIZED
INTERSECTION
STA 359+58

C-STORE
ACCESS

BEGIN LANE
STA 370+06

1000' ADD ON LANE

660' TAPER

BEGIN TAPER
STA 376+67

358+00 359+00 360+00 361+00 362+00 363+00 364+00 365+00 366+00 367+00 368+00 369+00 370+00 371+00 372+00 373+00 374+00 375+00 376+00 377+00

BARHAMSVILLE ROAD STATE ROUTE 30

EXISTING SIGNAL

N/F
SMO, INCORPORATED
9201 BARHAMSVILLE RD
PARCEL ID:
0440100019
ZONED B-1

N/F
MCDONALDS CORPORATION C/O
DOHO ENTERPRISES
9193 BARHAMSVILLE RD
PARCEL ID:
0440100020
ZONED B-1

HAZELWOOD FARMS, LLC
PARCEL ID:
0440100014
1.5± AC
ZONED B-1

MULTI-USE PATH

N/F
HORNSBY INVESTMENT CO.
DOUGLAS L HORNSBY
9131 BARHAMSVILLE RD
PARCEL ID:
0530100002
ZONED B-1

OLD STAGE ROAD

Rev.	Date	Description	Revised By

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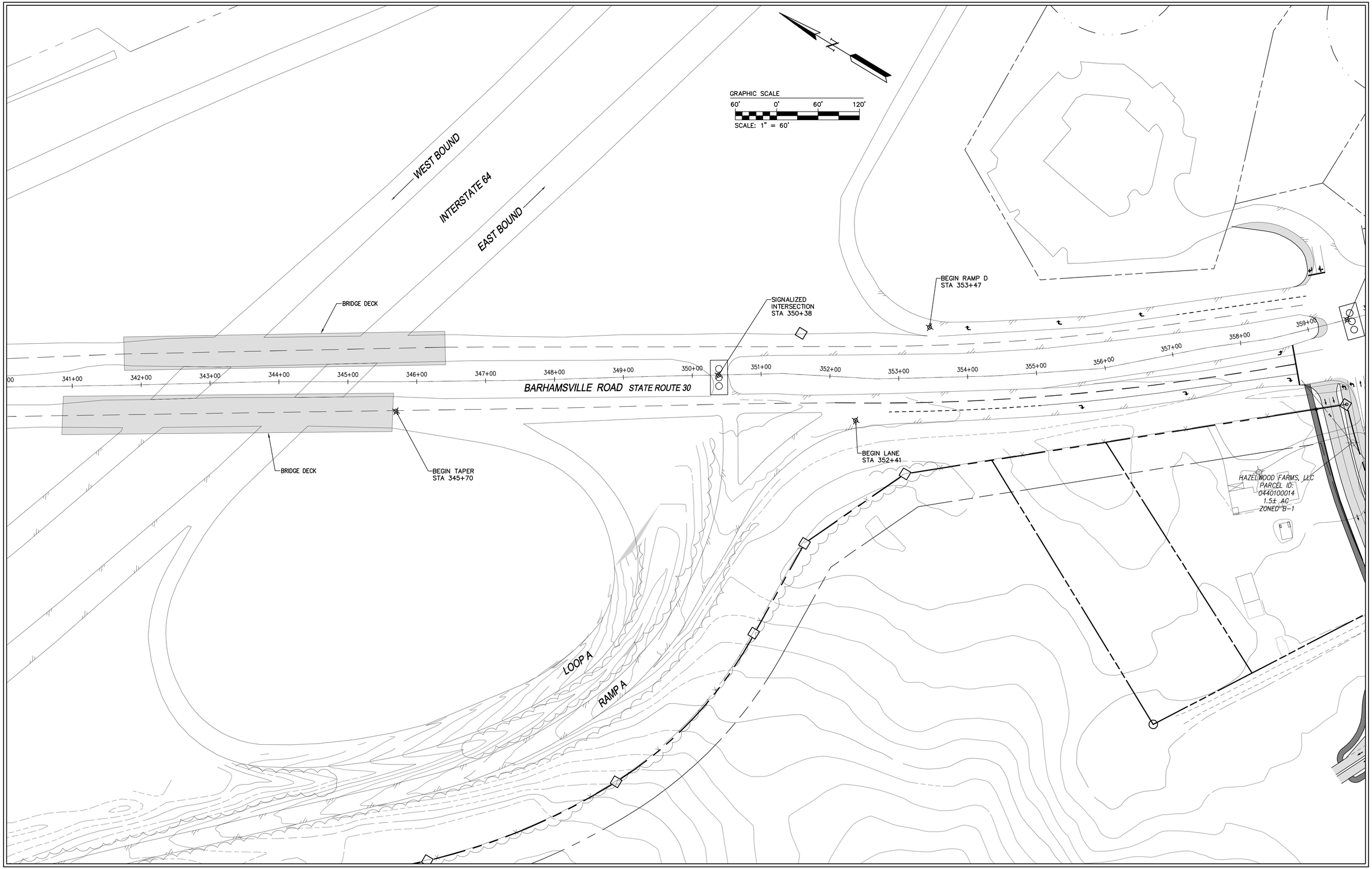
SOUTH HAZELWOOD FARM
ACCESS PLAN

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=60'	Date: 2/7/19
Sheet Number	SOUTH EXHIBIT 2e



Rev.	Date	Description	Revised By

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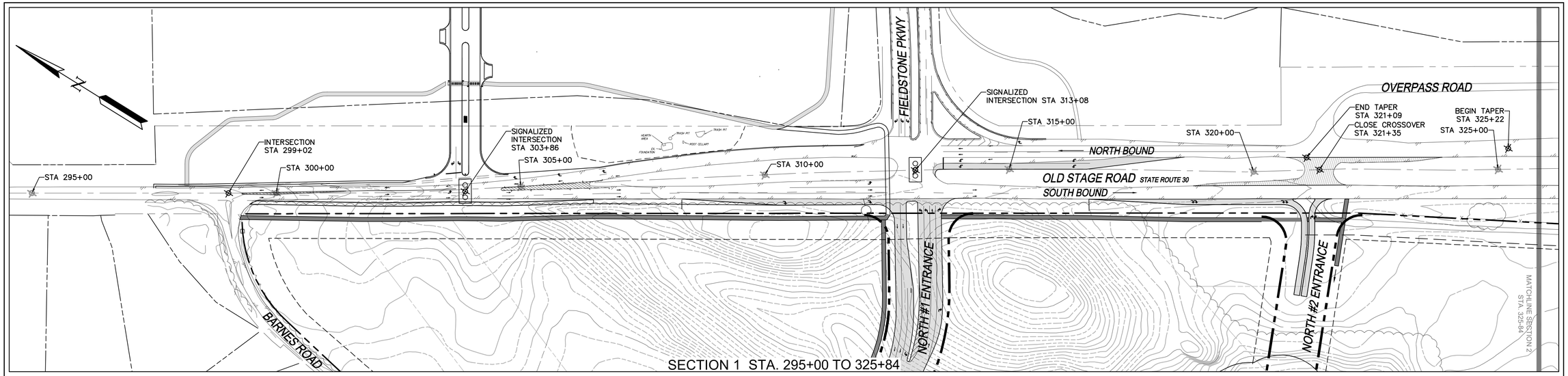
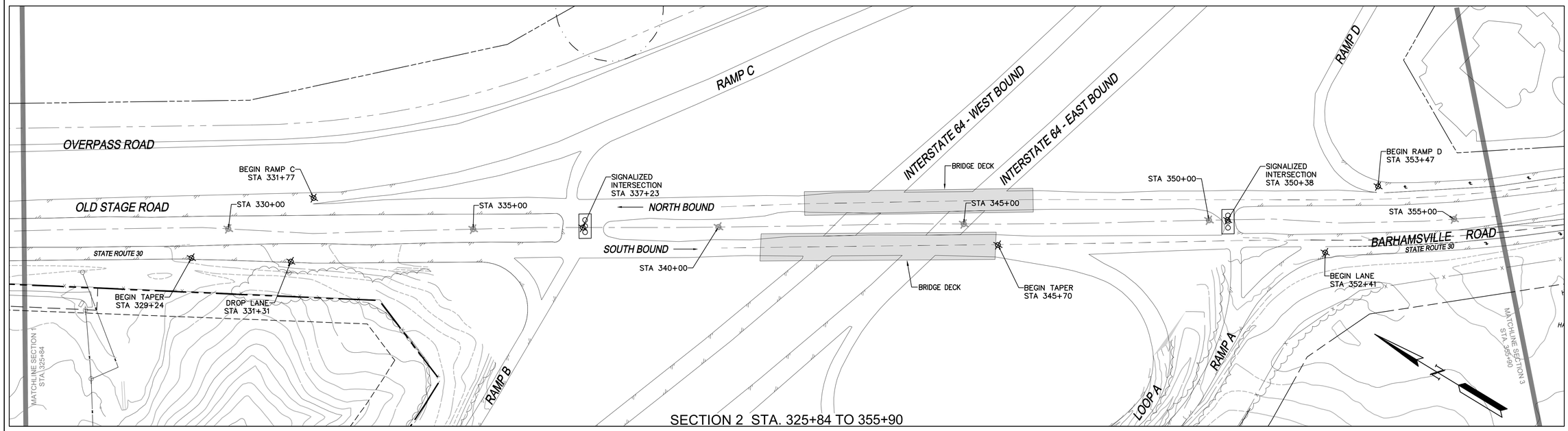
SOUTH HAZELWOOD FARM
ACCESS PLAN

STONEHOUSE DISTRICT JAMES CITY COUNTY VIRGINIA

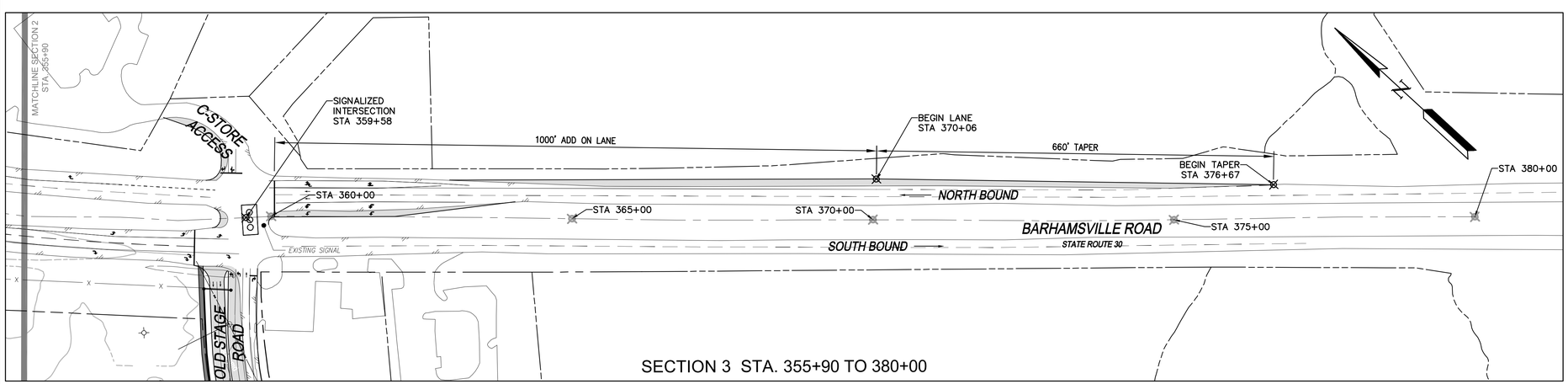
Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=60'	Date: 2/7/19
Sheet Number	SOUTH EXHIBIT 2f



SECTION 1 STA. 295+00 TO 325+84



SECTION 2 STA. 325+84 TO 355+90



SECTION 3 STA. 355+90 TO 380+00

GRAPHIC SCALE
100' 0' 100' 200'
SCALE: 1" = 100'

Revised By	Description	Date	Rev.

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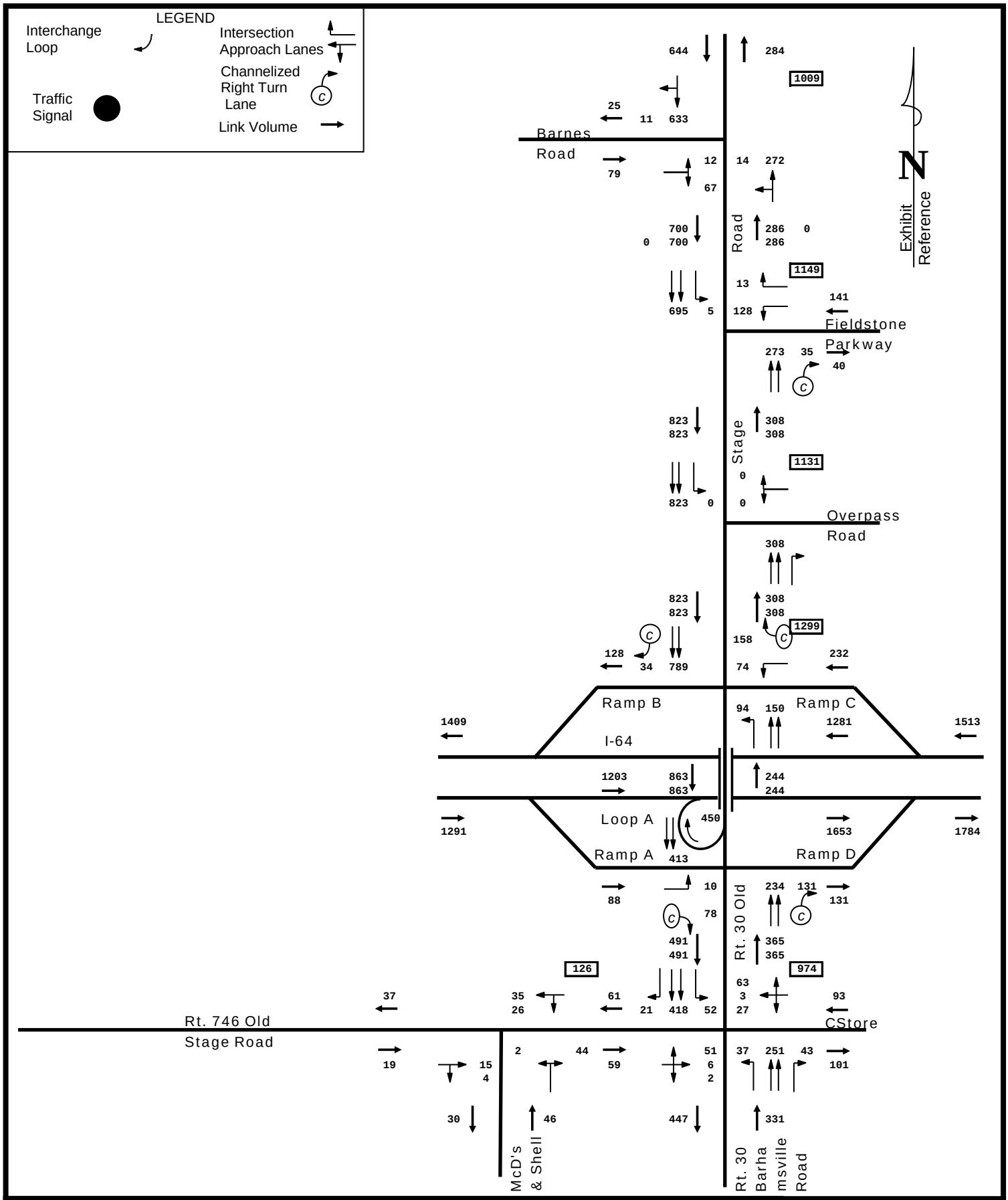
HAZELWOOD FARM
RT. 30 STATIONING
JAMES CITY COUNTY VIRGINIA
STONEHOUSE DISTRICT

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=100'	Date: 2/7/19

Sheet Title:

ROUTE 30 EXHIBIT

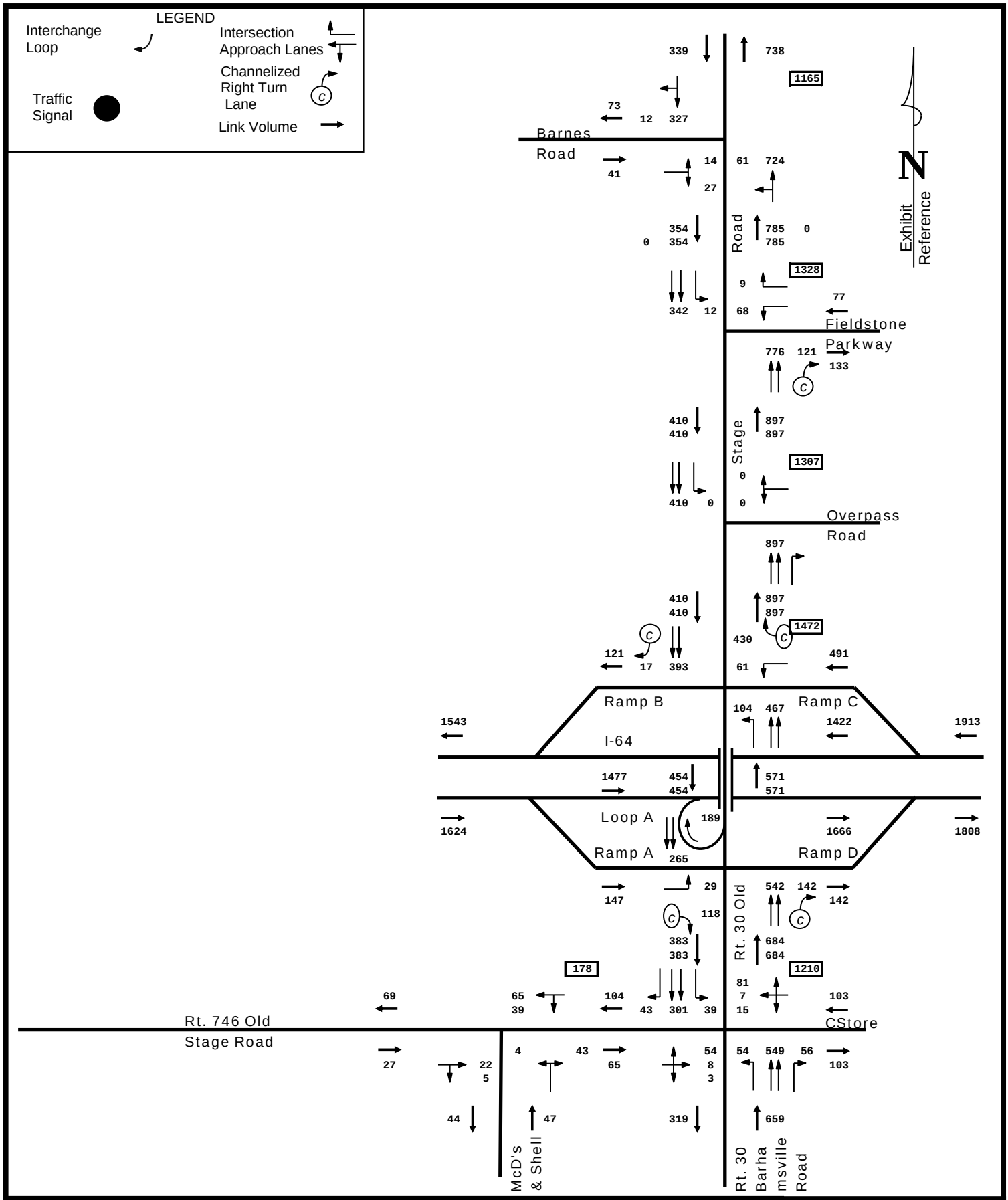
Sheet Number
2g



2017 AM PEAK HOUR COUNTS WITH BALANCE

DRW Consultants, LLC
804-794-7312

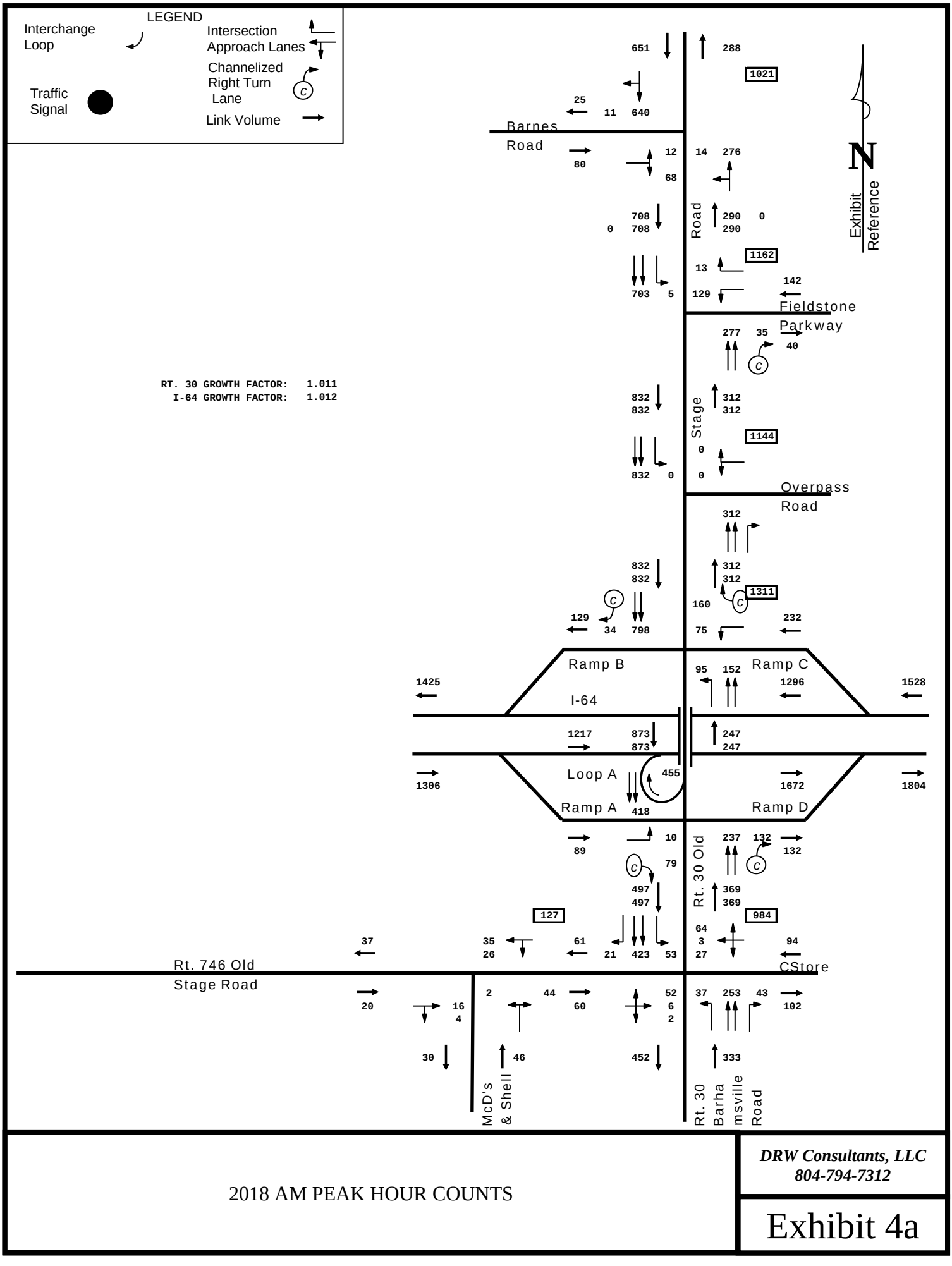
Exhibit 3a



2017 PM PEAK HOUR COUNTS WITH BALANCE

DRW Consultants, LLC
804-794-7312

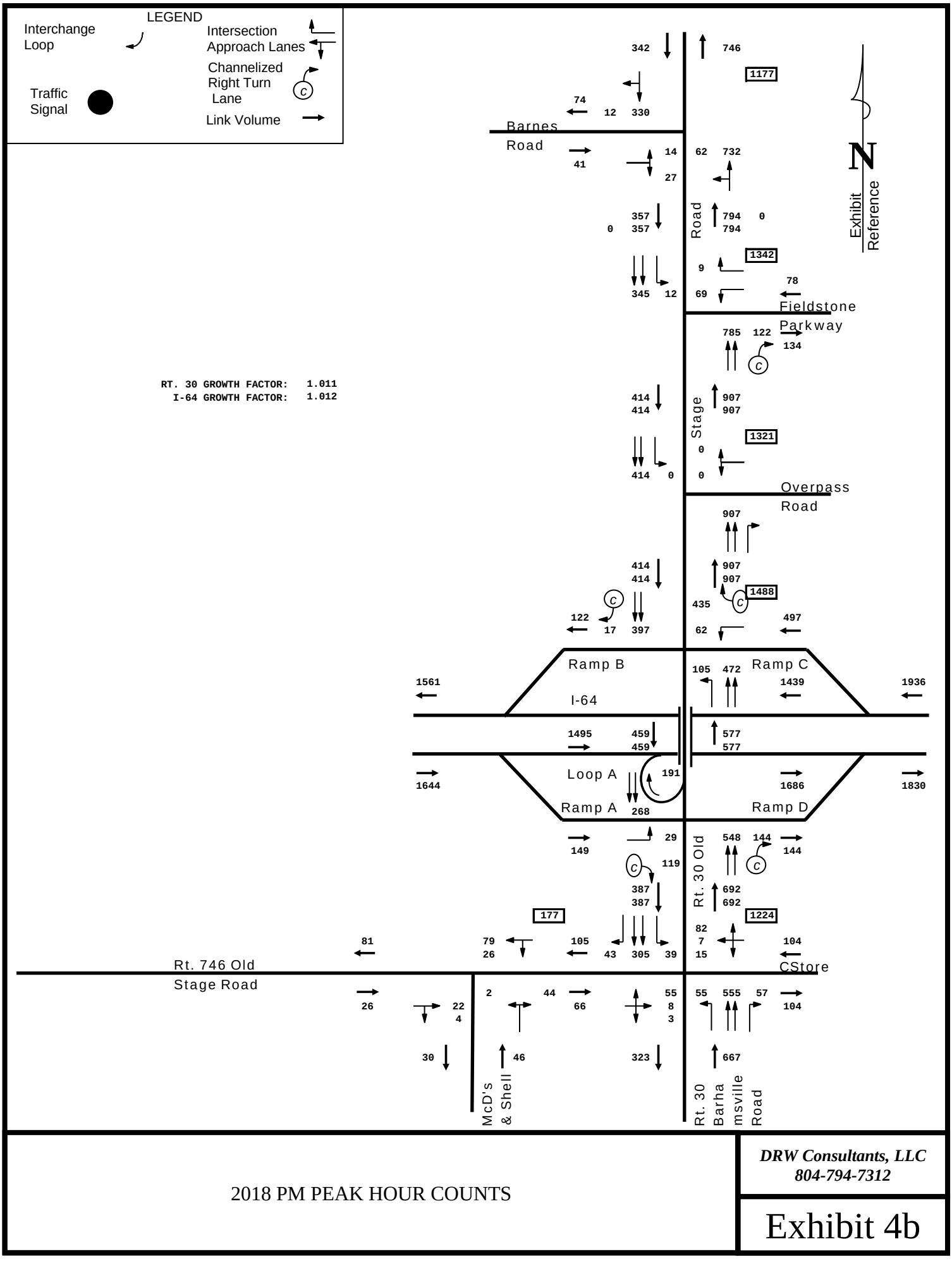
Exhibit 3b



2018 AM PEAK HOUR COUNTS

DRW Consultants, LLC
804-794-7312

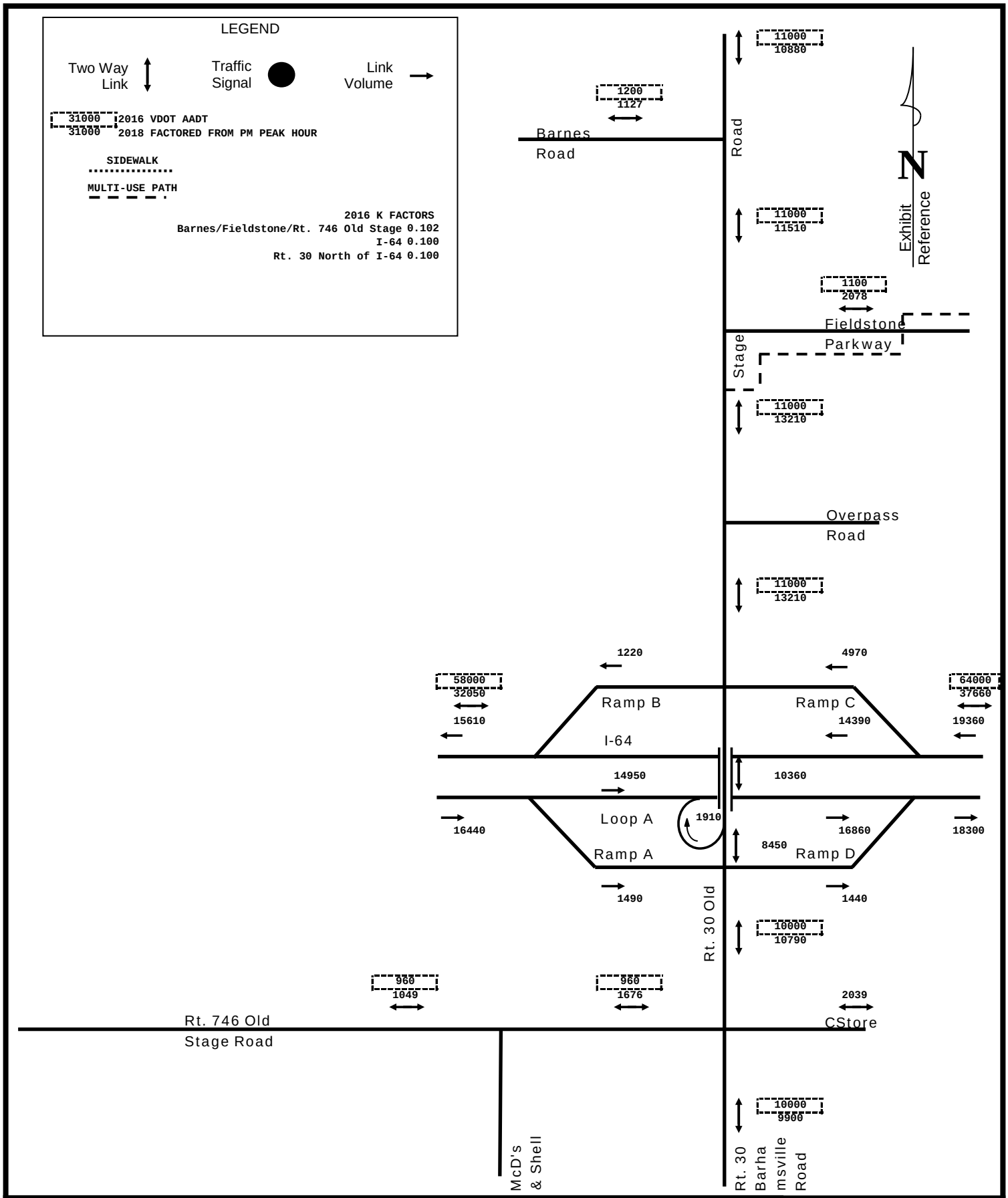
Exhibit 4a



2018 PM PEAK HOUR COUNTS

DRW Consultants, LLC
804-794-7312

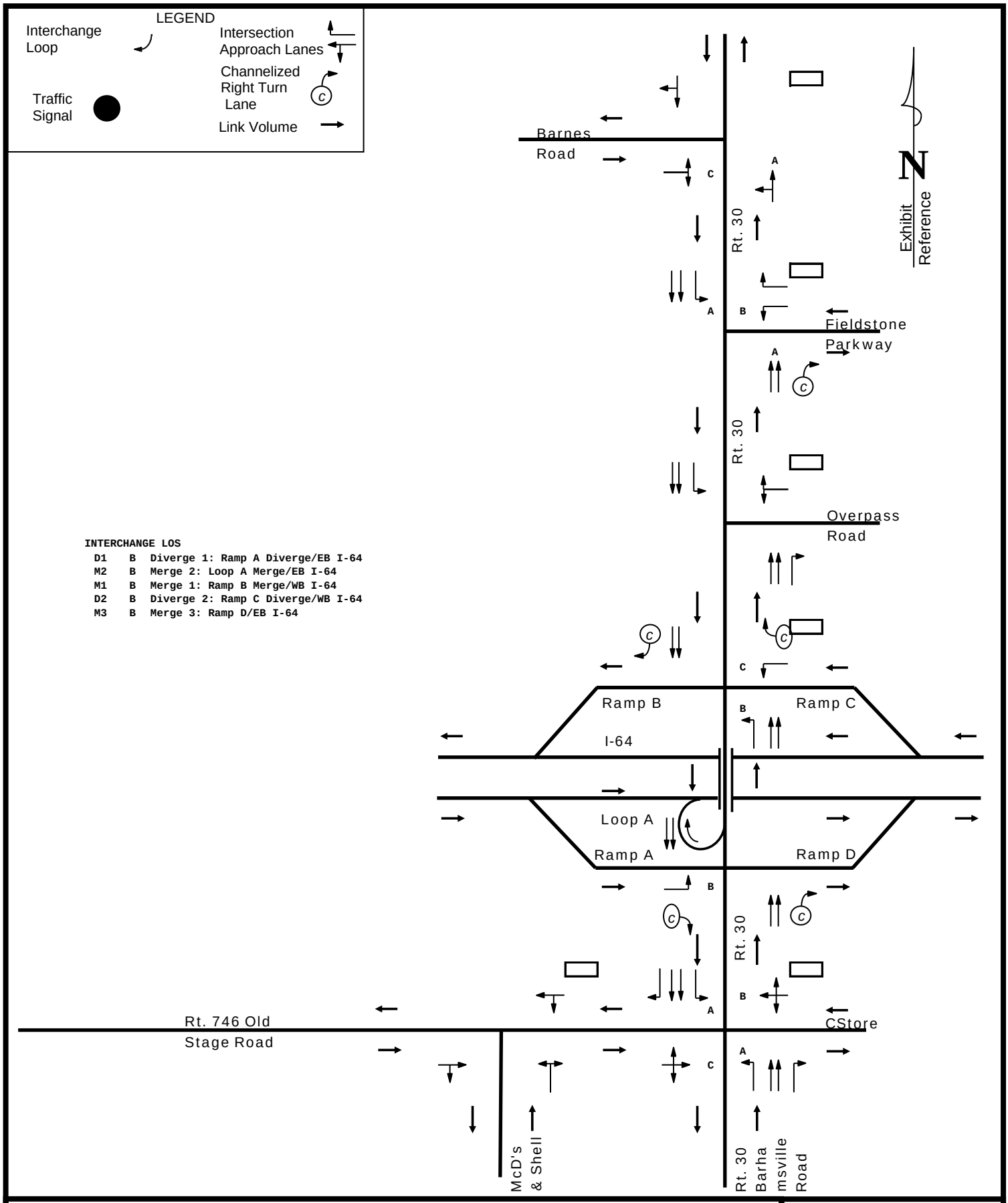
Exhibit 4b



2018 DAILY TRAFFIC
EXISTING SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

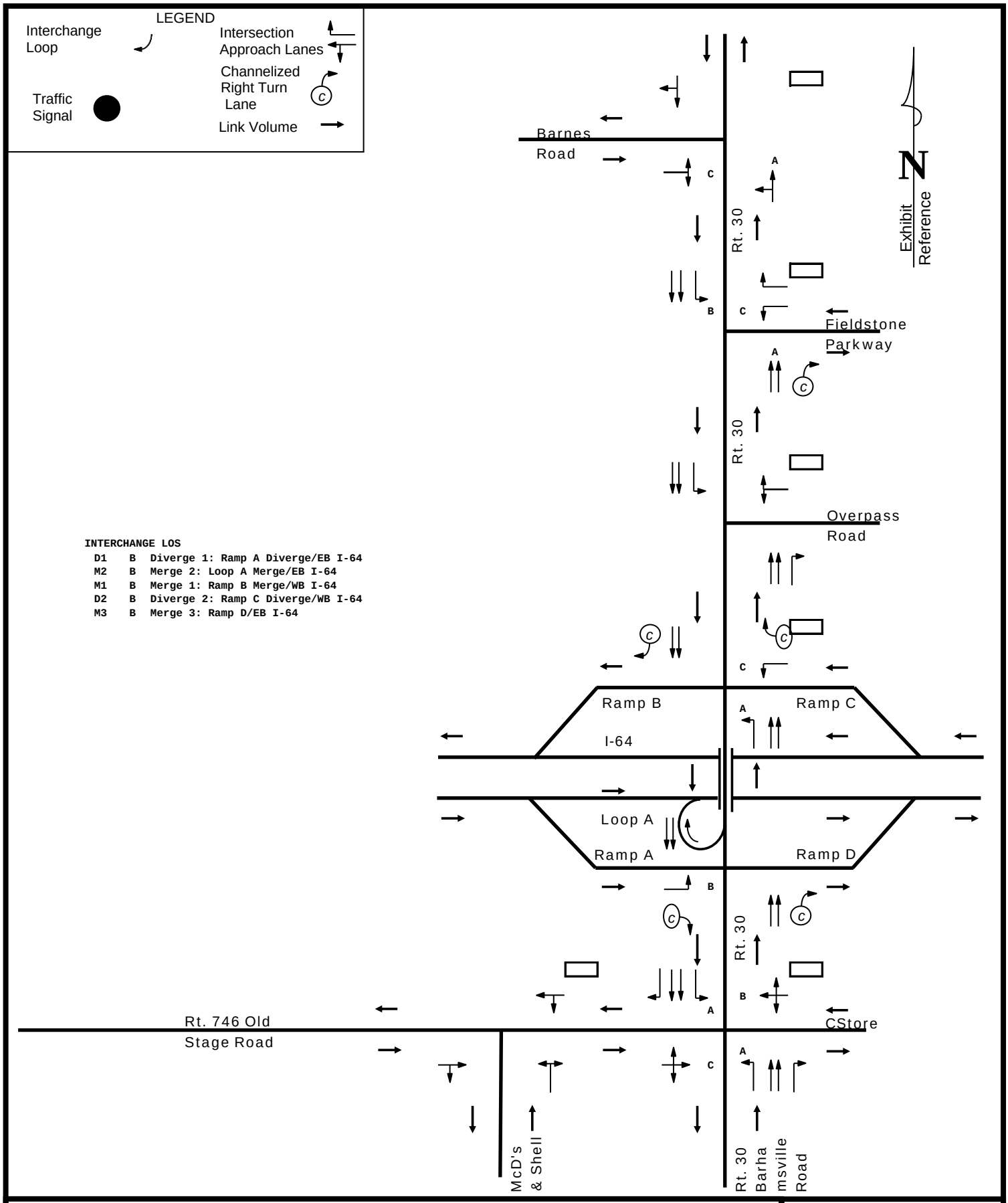
Exhibit 4c



2018 AM PEAK HOUR LEVEL OF SERVICE

DRW Consultants, LLC
804-794-7312

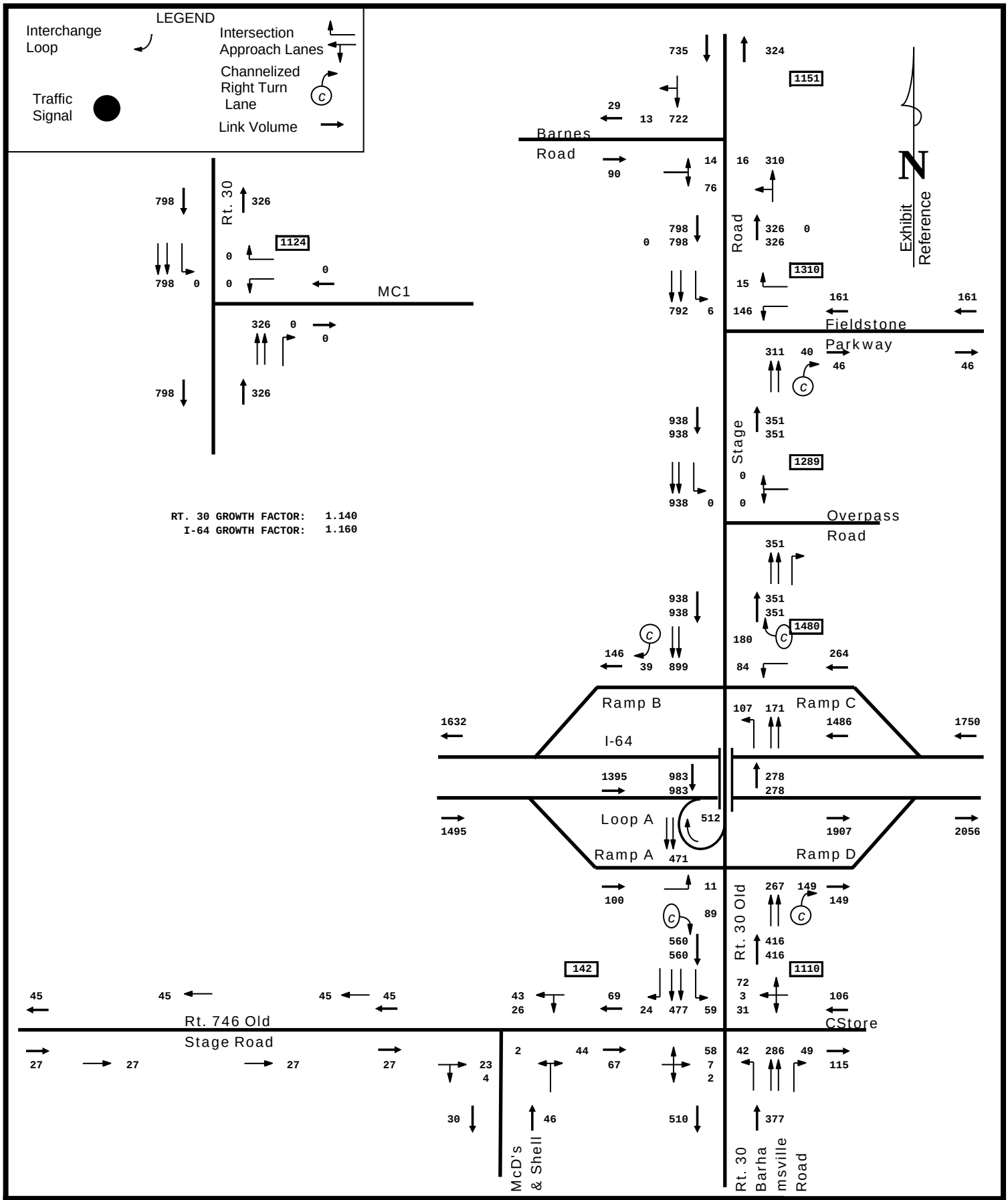
Exhibit 4d



2018 PM PEAK HOUR LEVEL OF SERVICE

DRW Consultants, LLC
804-794-7312

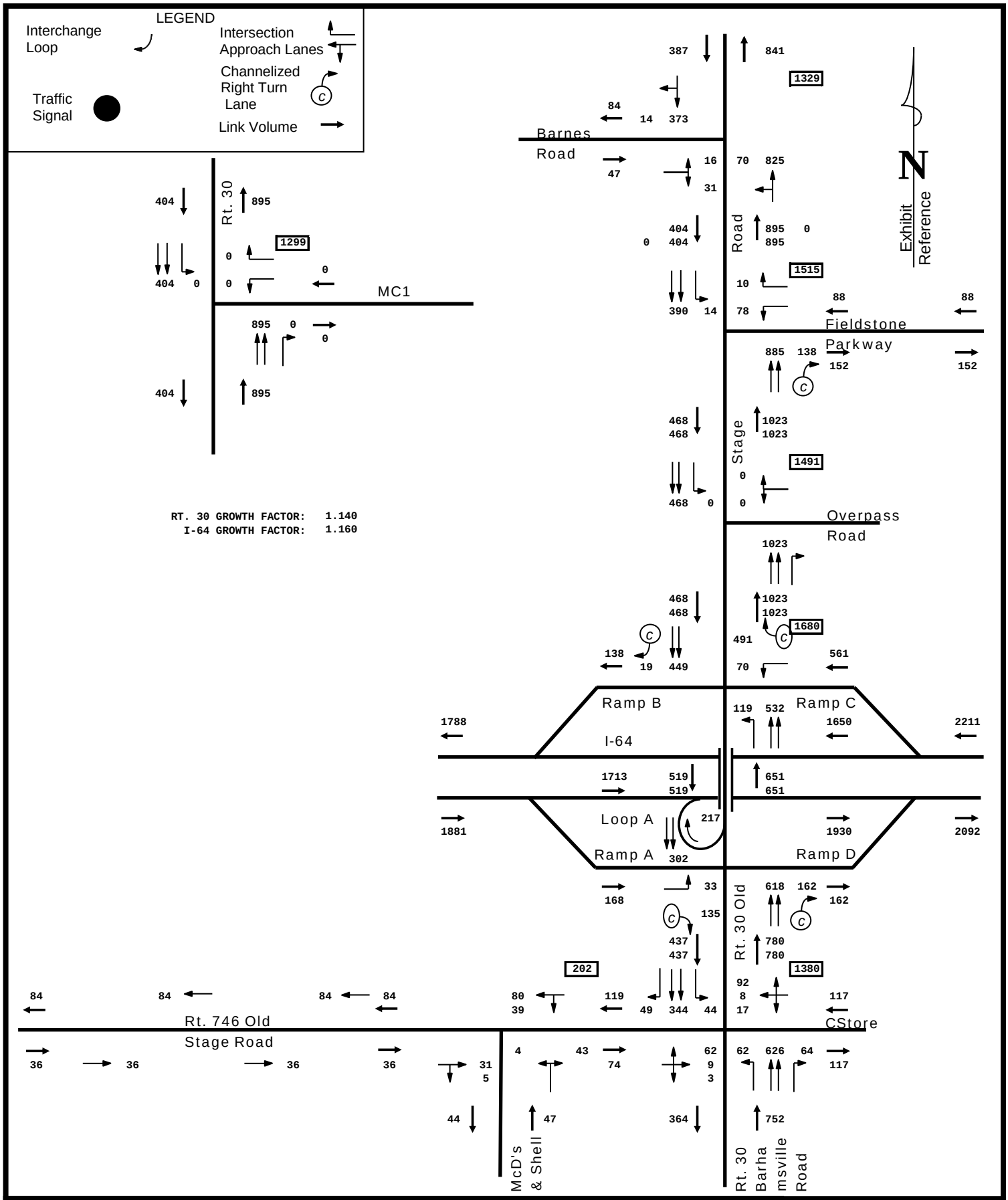
Exhibit 4e



2030 AM PEAK HOUR BACKGROUND TRAFFIC
GROWTH FACTOR ONLY

DRW Consultants, LLC
804-794-7312

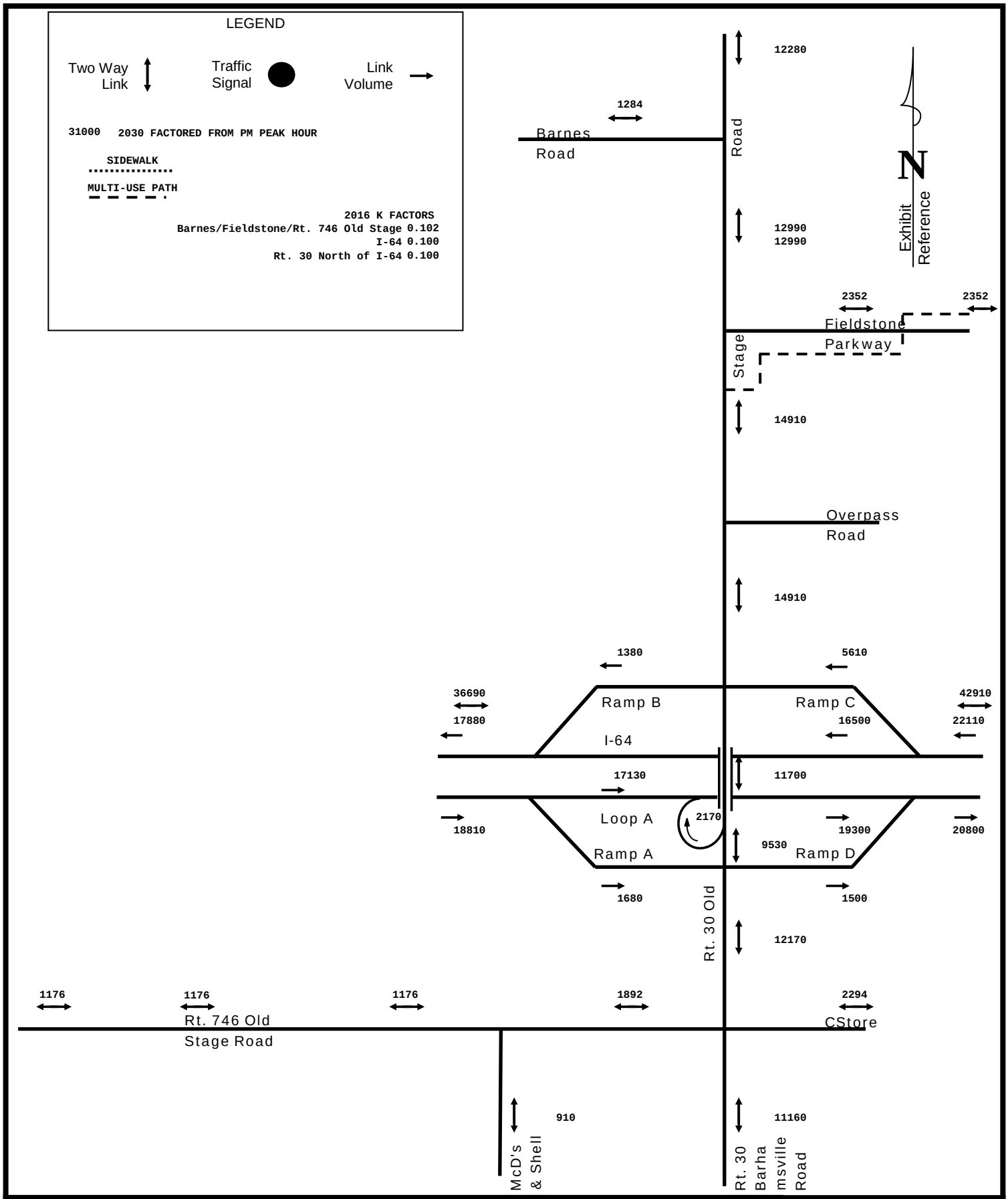
Exhibit 5a



2030 PM PEAK HOUR BACKGROUND TRAFFIC
GROWTH FACTOR ONLY

DRW Consultants, LLC
804-794-7312

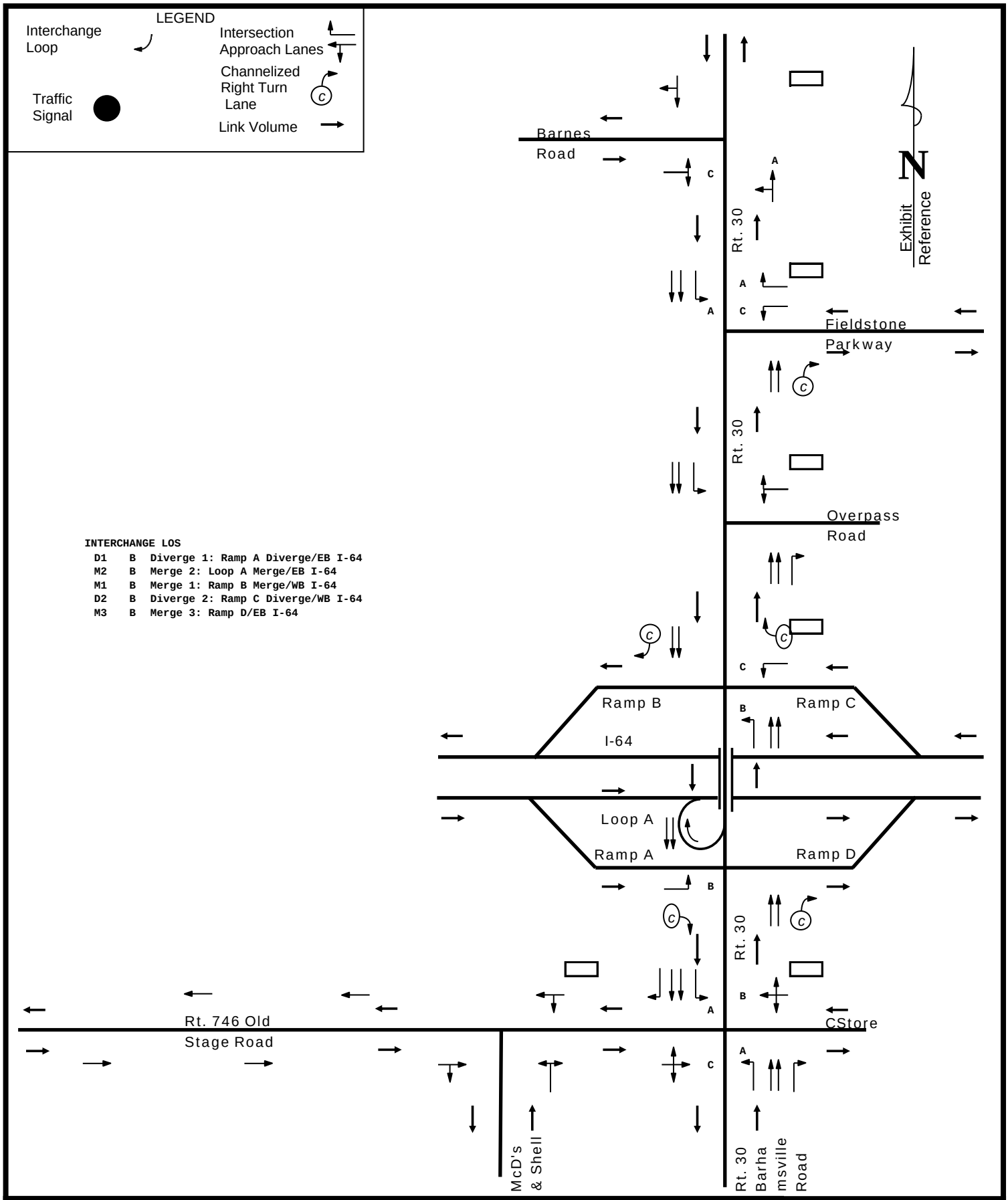
Exhibit 5b



2030 DAILY TRAFFIC GROWTH FACTOR ONLY
EXISTING SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

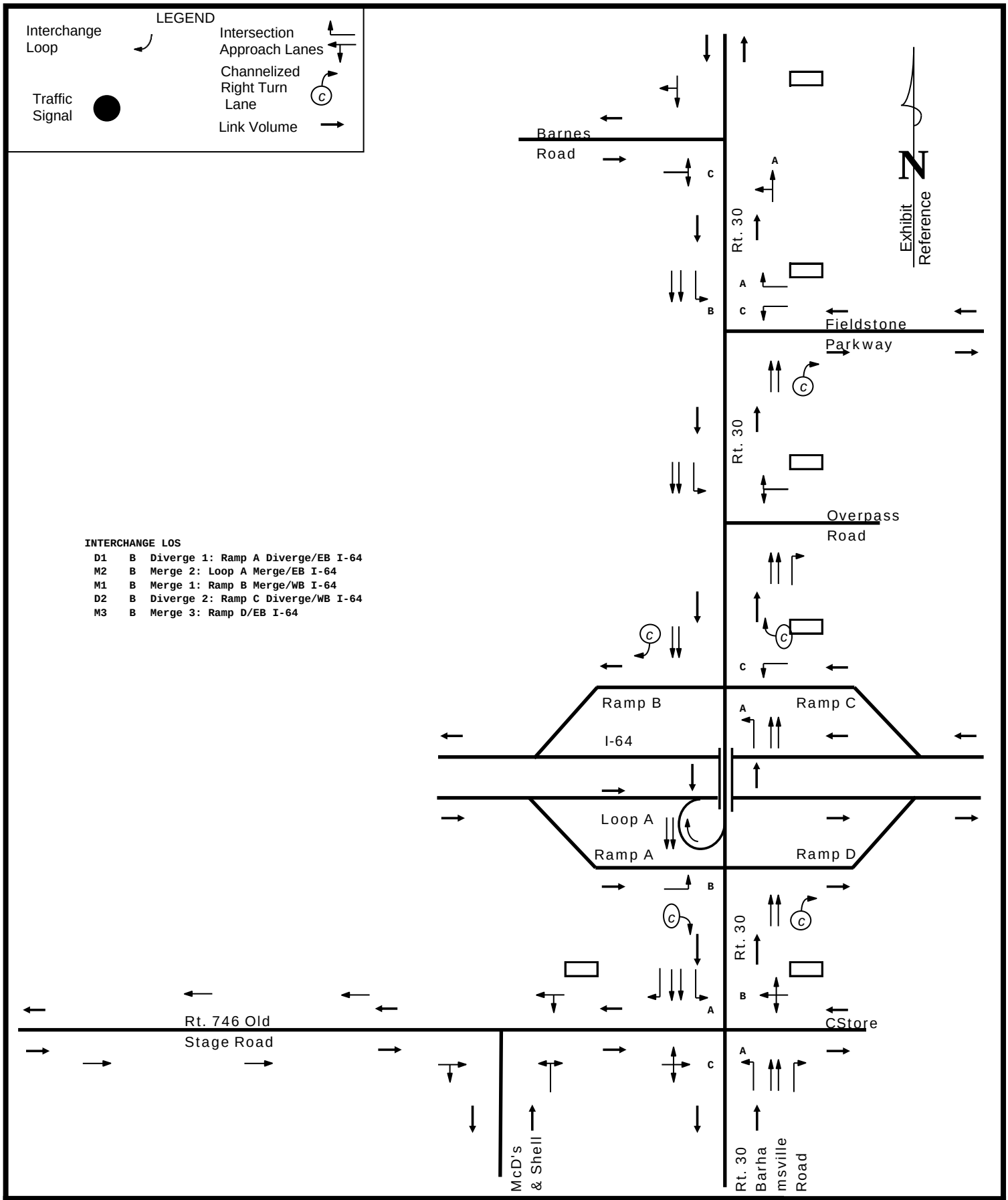
Exhibit 5c



2030 AM PEAK HOUR LEVEL OF SERVICE
BACKGROUND GROWTH FACTOR ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 5d



2030 PM PEAK HOUR LEVEL OF SERVICE
BACKGROUND GROWTH FACTOR ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 5e

VALUE	LAND USE	LAND USE CODE	SQ.FT., OTHER UNITS	WEEKDAY TRIP GENERATION AM PEAK HOUR Enter	Exit	Total	PM PEAK HOUR Enter	Exit	Total	DAILY
Table 1: North Hazelwood Farms Trip Generation										
eq.-adj. st.	Shopping Center	820	375,000 sq. ft.	210	129	339	694	751	1445	14769
eq.-adj. st.	Gen. Office Building	710	135,000 sq. ft.	132	21	153	24	127	151	1420
TOTAL TRIPS				342	150	492	718	878	1596	16189
Internal Capture Trips (PM on Exhibit 8-4)			2.63%	7	7	14	21	21	42	426
% Shopping Center Pass By Trips:			27 %	34	34	68	187	187	374	3987
All Primary Trips				301	109	410	510	670	1180	11776

Table 2: North Hazelwood Farms Primary Trip Distribution K Factor: 0.09859

	AM Peak Hour				PM Peak Hour			
	Entering Traffic		Exiting Traffic		Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips
North Rt. 30	15%	46	15%	16	15%	77	15%	101
East I-64	30%	90	30%	33	30%	153	30%	201
South Rt. 30	25%	75	25%	27	25%	128	25%	168
West I-64	30%	90	30%	33	30%	152	30%	200
	100%	301	100%	109	100%	510	100%	670

Table 3: North Hazelwood Farms Pass By Trip Distribution

	AM Peak Hour				PM Peak Hour			
	Entering Traffic		Exiting Traffic		Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips
North Rt. 30	798	21	326	8	404	50	895	110
East Fieldstone	161	4	46	1	88	11	152	19
South Rt. 30	351	9	938	25	1023	126	468	58
	1310	34	1310	34	1515	187	1515	187

Table 4: South Hazelwood Farms Trip Generation										
eq.-adj. st.	Warehousing	150	2,920,000 sq. ft.	290	86	376	102	276	378	4659
eq.-adj. st.	Shopping Center	820	75,000 sq. ft.	117	72	189	211	228	439	4944
eq.-adj. st.	Multifamily Mid Rise	221	300 units	26	74	100	77	50	127	1633
TOTAL TRIPS				433	232	665	390	554	944	11236
Internal Capture Trips (PM on Exhibit 8-5)			11.86%	40	40	80	56	56	112	1333
% Shopping Center Pass By Trips:			42 %	30	30	60	88	88	176	2076
All Primary Trips				363	162	525	246	410	656	7827

Table 5: South Hazelwood Farms Primary Trip Distribution K Factor: 0.08402

	AM Peak Hour				PM Peak Hour			
	Entering Traffic		Exiting Traffic		Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips
North Rt. 30	10%	36	10%	16	10%	25	10%	41
East I-64	25%	91	25%	41	25%	62	25%	103
South Rt. 30	37%	134	37%	60	37%	91	37%	152
West Rt. 746	3%	11	3%	5	3%	7	3%	12
West I-64	25%	91	25%	40	25%	61	25%	102
	100%	363	100%	162	100%	246	100%	410

Table 6: South Hazelwood Farms Pass By Trip Distribution

	AM Peak Hour				PM Peak Hour			
	Entering Traffic		Exiting Traffic		Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips	% Dist.	Trips
North Rt. 30	477	19		11	344	31		57
South Rt. 30	286	11		19	626	57		31
	763	30		30	970	88		88

HAZELWOOD FARMS
TRIP GENERATION AND DISTRIBUTION

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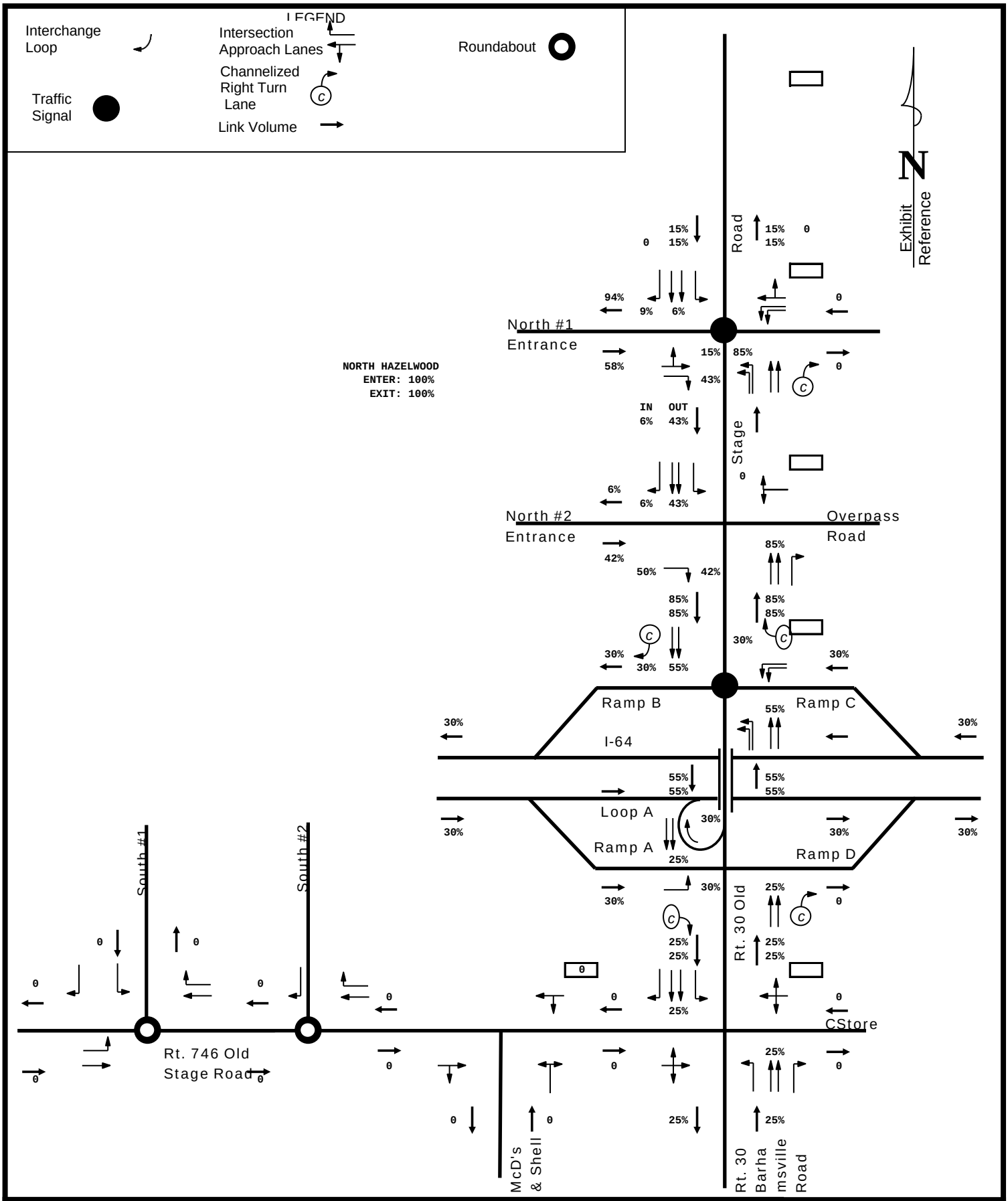
804-794-7312

Trip generation rates from Trip Generation Manual, 10th Edition (TGM10) by the Institute of Transportation Engineers (ITE)

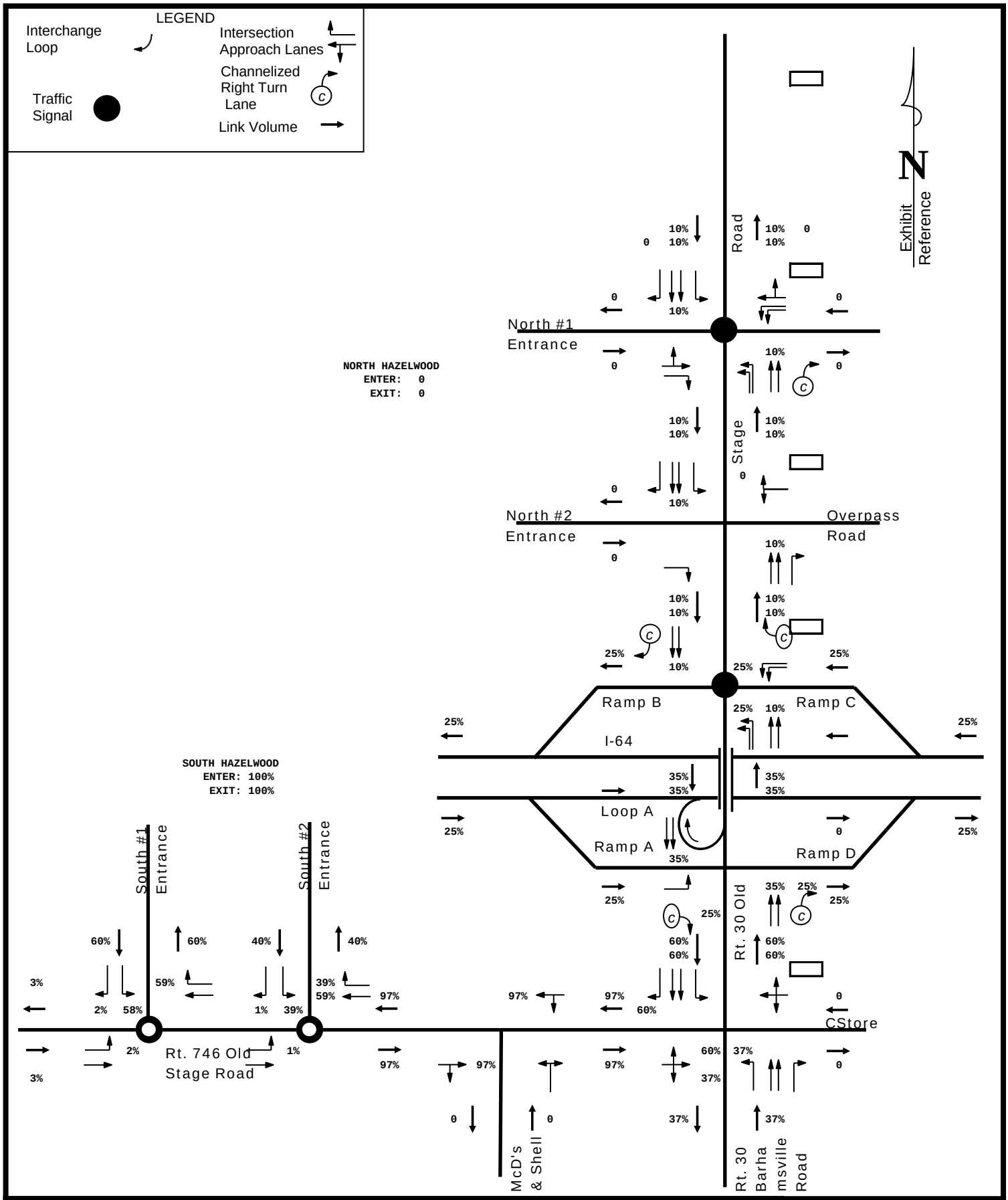
Exhibit 6-1



NORTH HAZELWOOD FARMS
PRIMARY TRIP DISTRIBUTION PERCENTAGES

DRW Consultants, LLC
804-794-7312

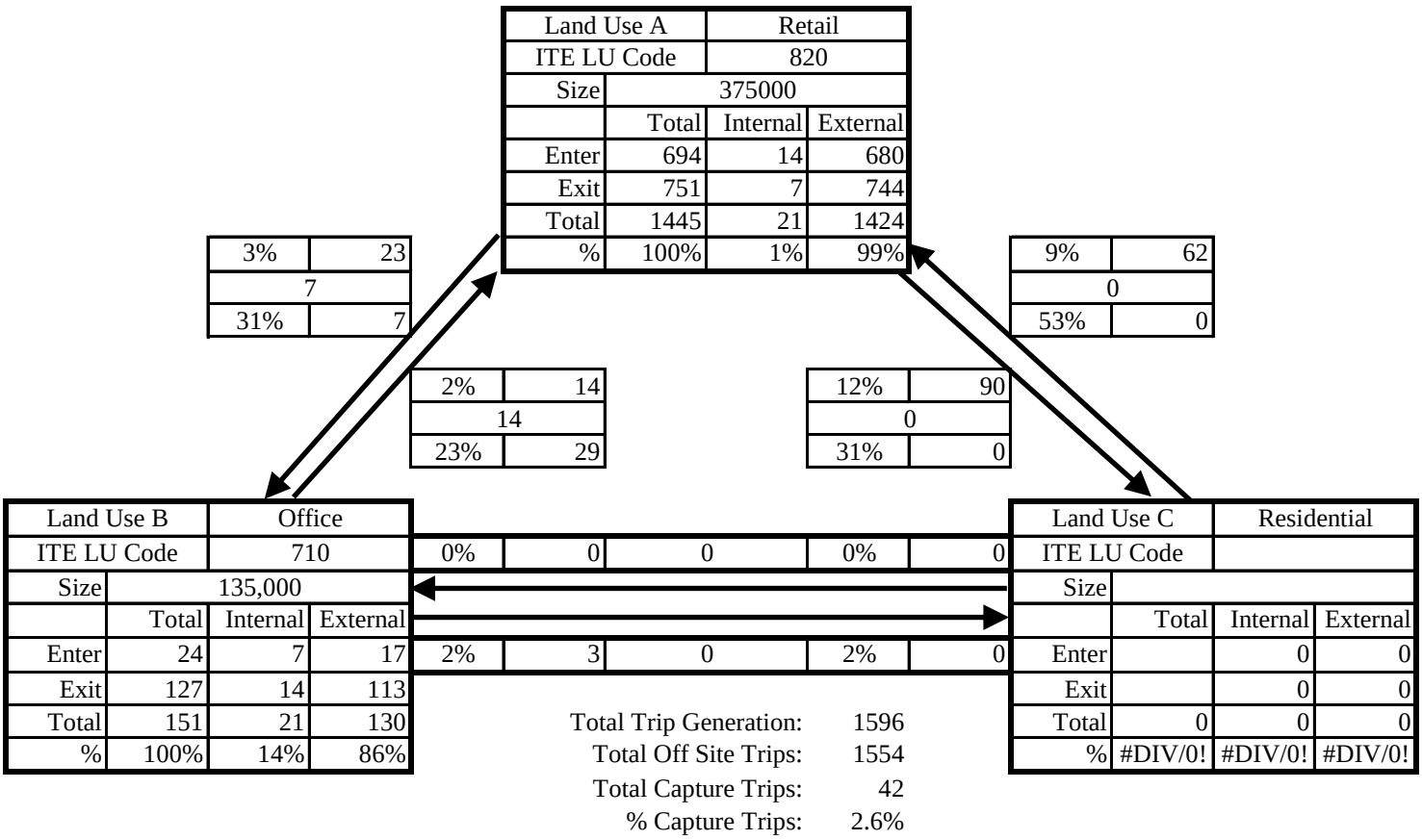
Exhibit 6-2



SOUTH HAZELWOOD FARMS
PRIMARY TRIP DISTRIBUTION PERCENTAGES

DRW Consultants, LLC
804-794-7312

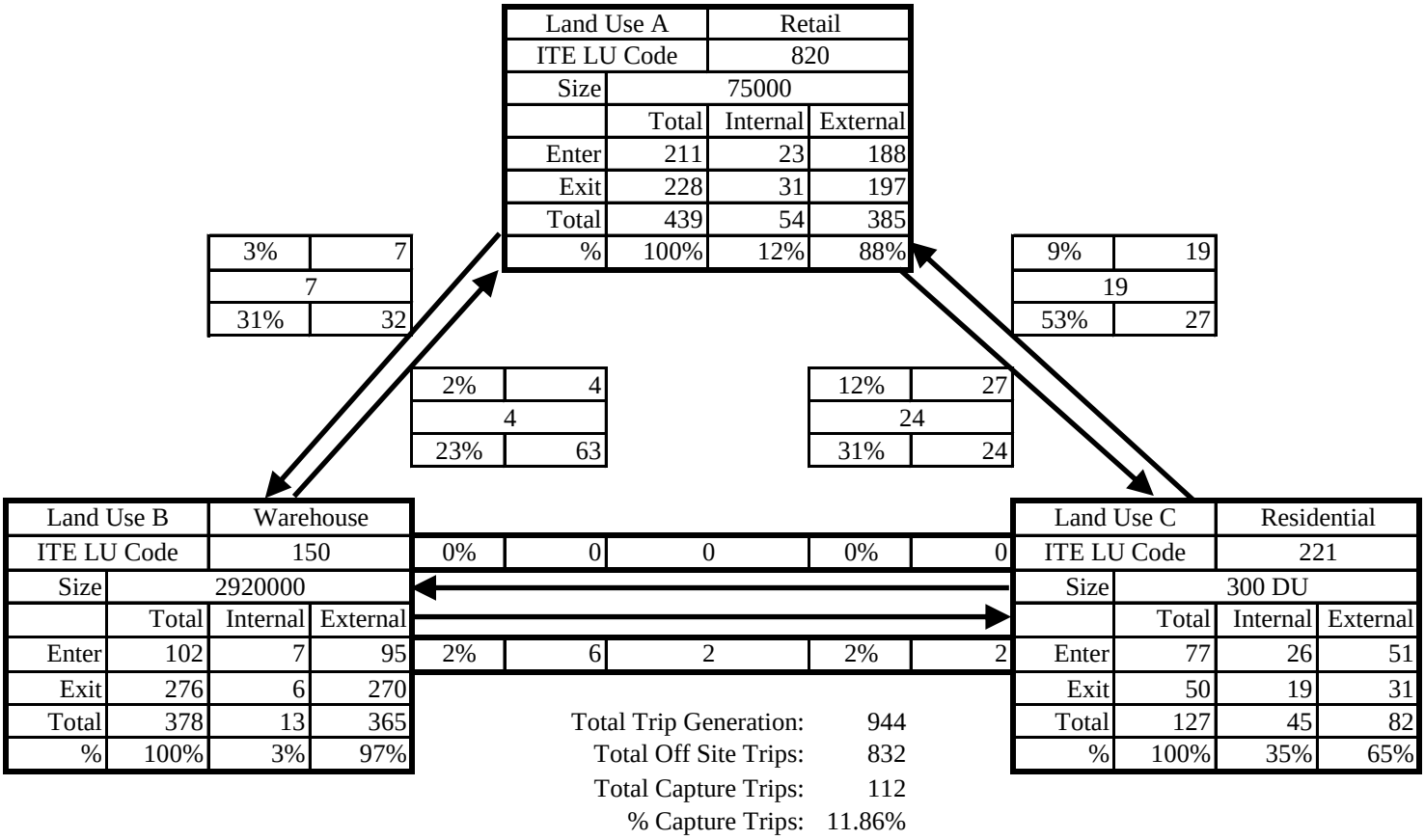
Exhibit 6-3



TRIP GENERATION HANDBOOK, SECOND EDITION
PM PEAK HOUR INTERNAL CAPTURE CALCULATION
NORTH HAZELWOOD FARMS

DRW Consultants, LLC
804-794-7312

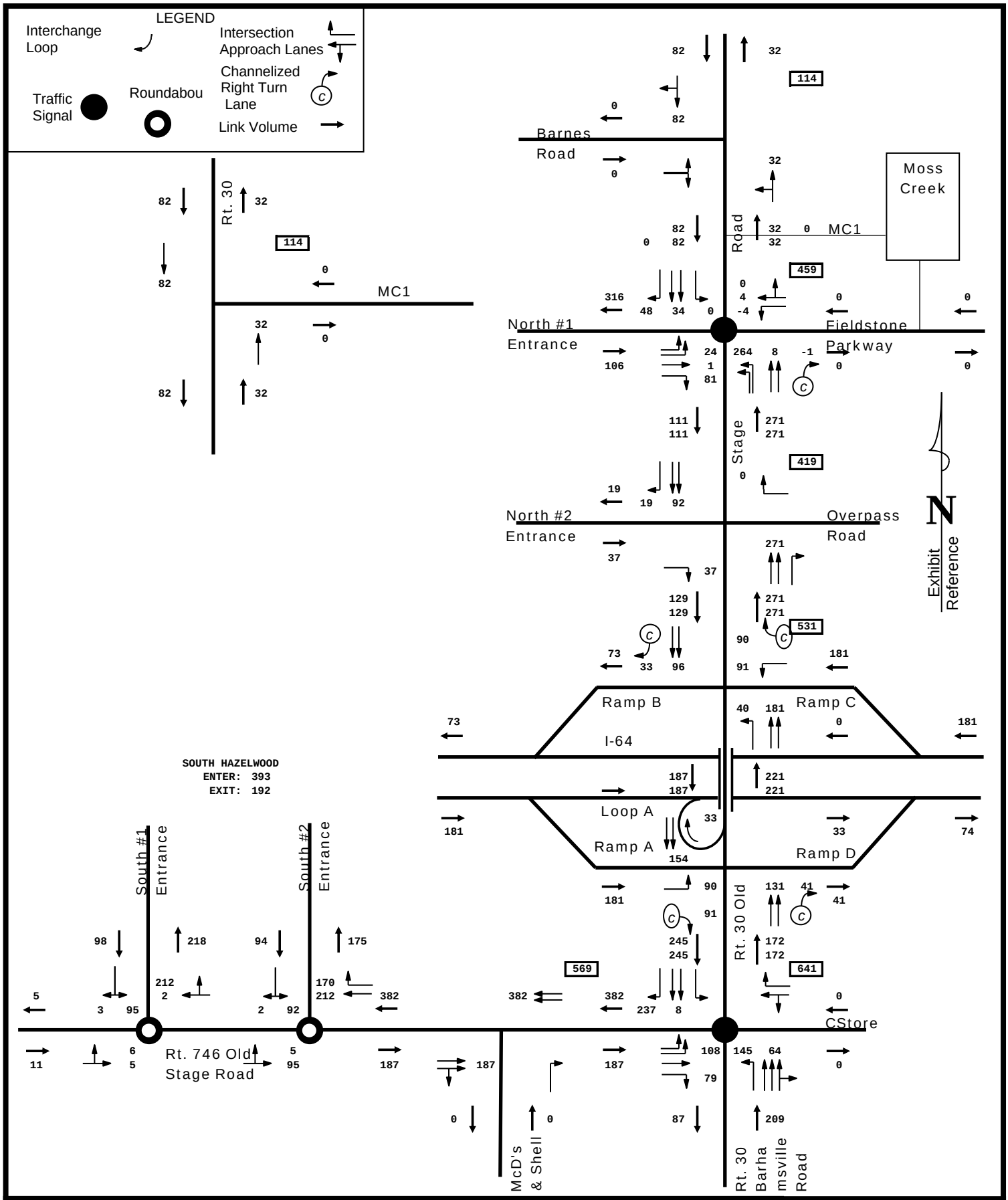
Exhibit 6-4



TRIP GENERATION HANDBOOK, SECOND EDITION
PM PEAK HOUR INTERNAL CAPTURE CALCULATION
SOUTH HAZELWOOD FARMS

DRW Consultants, LLC
804-794-7312

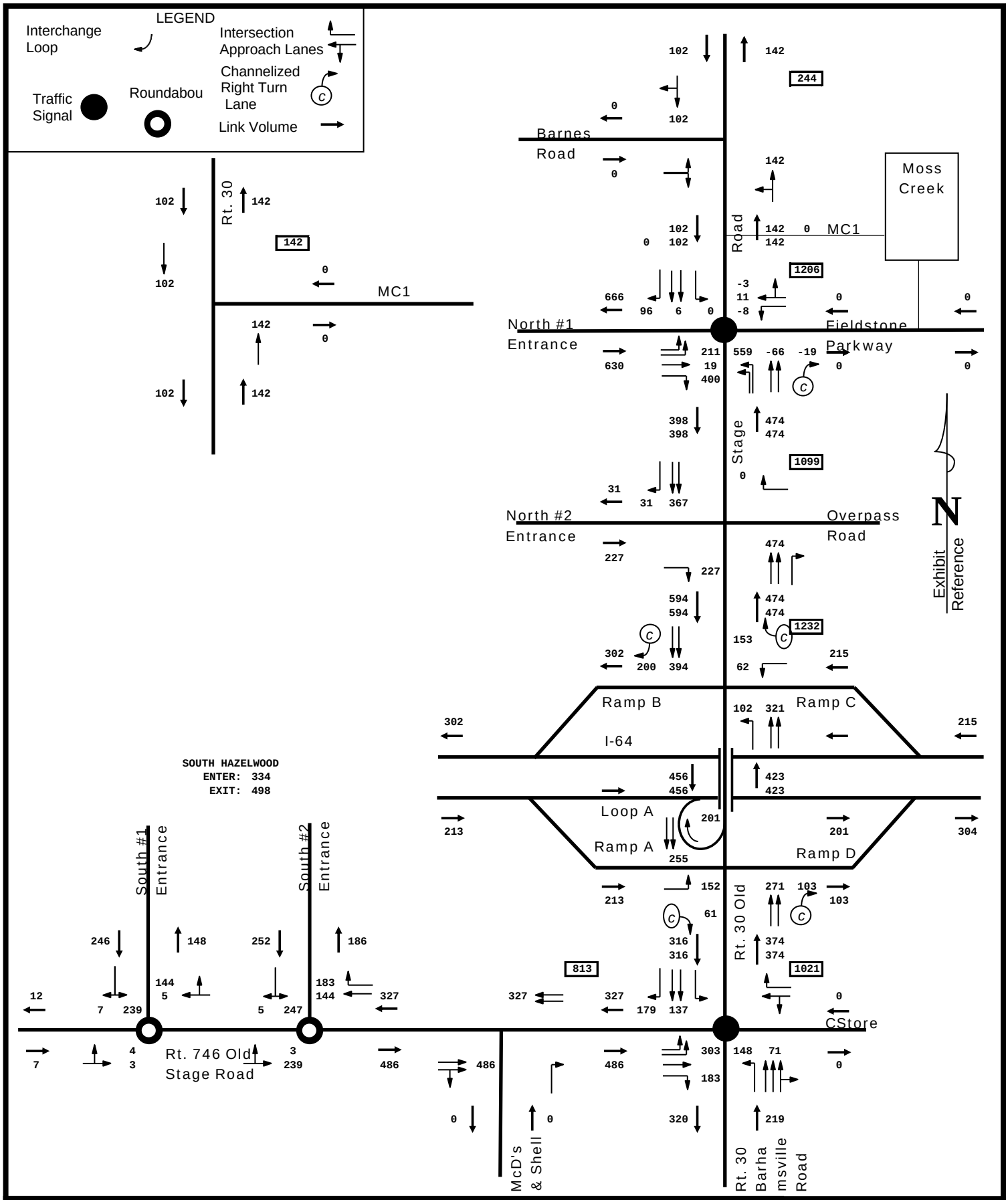
Exhibit 6-5



NORTH AND SOUTH HAZELWOOD FARMS
AM PEAK HOUR TRIPS

DRW Consultants, LLC
804-794-7312

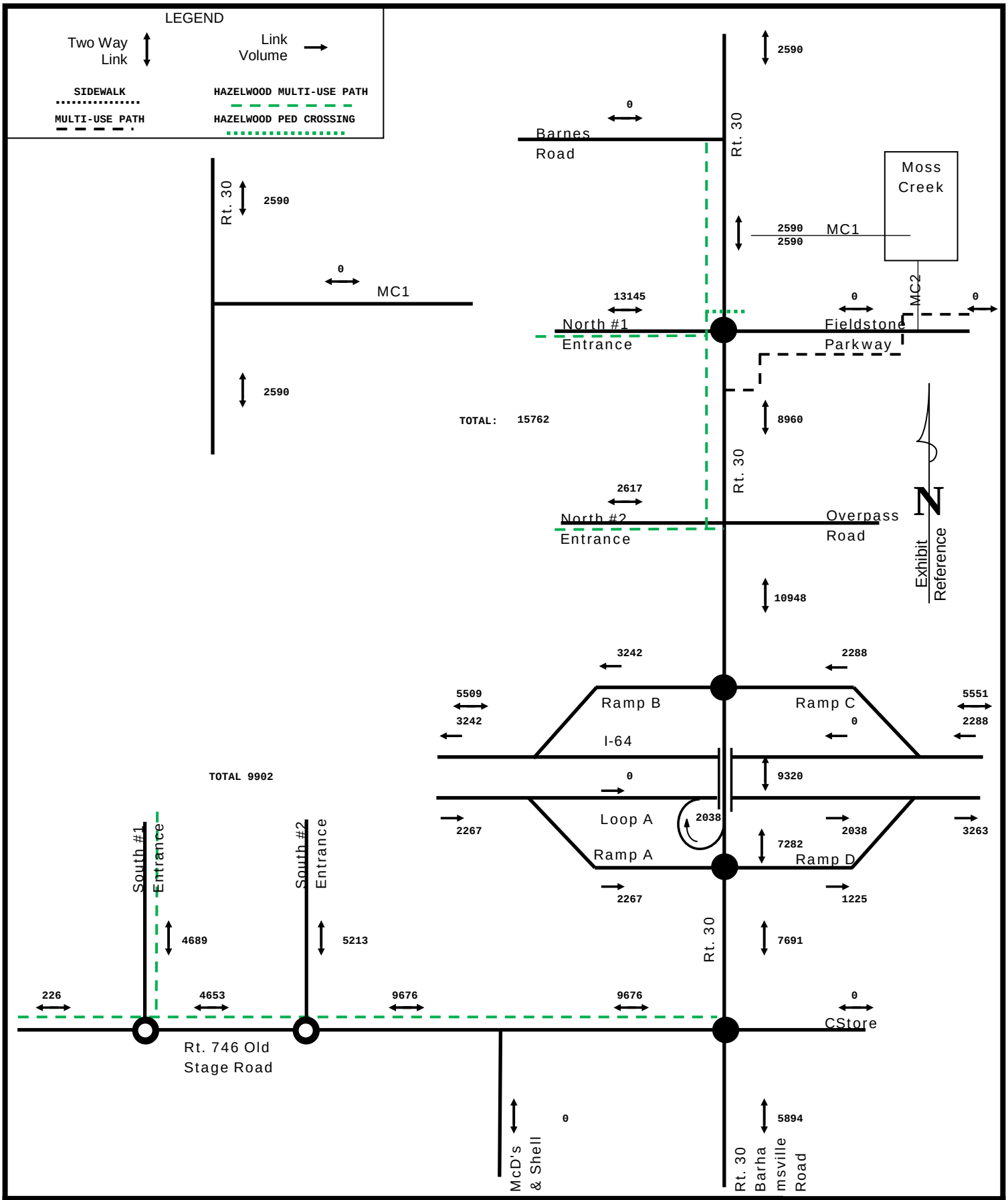
Exhibit 7a



NORTH AND SOUTH HAZELWOOD FARMS
PM PEAK HOUR TRIPS

DRW Consultants, LLC
804-794-7312

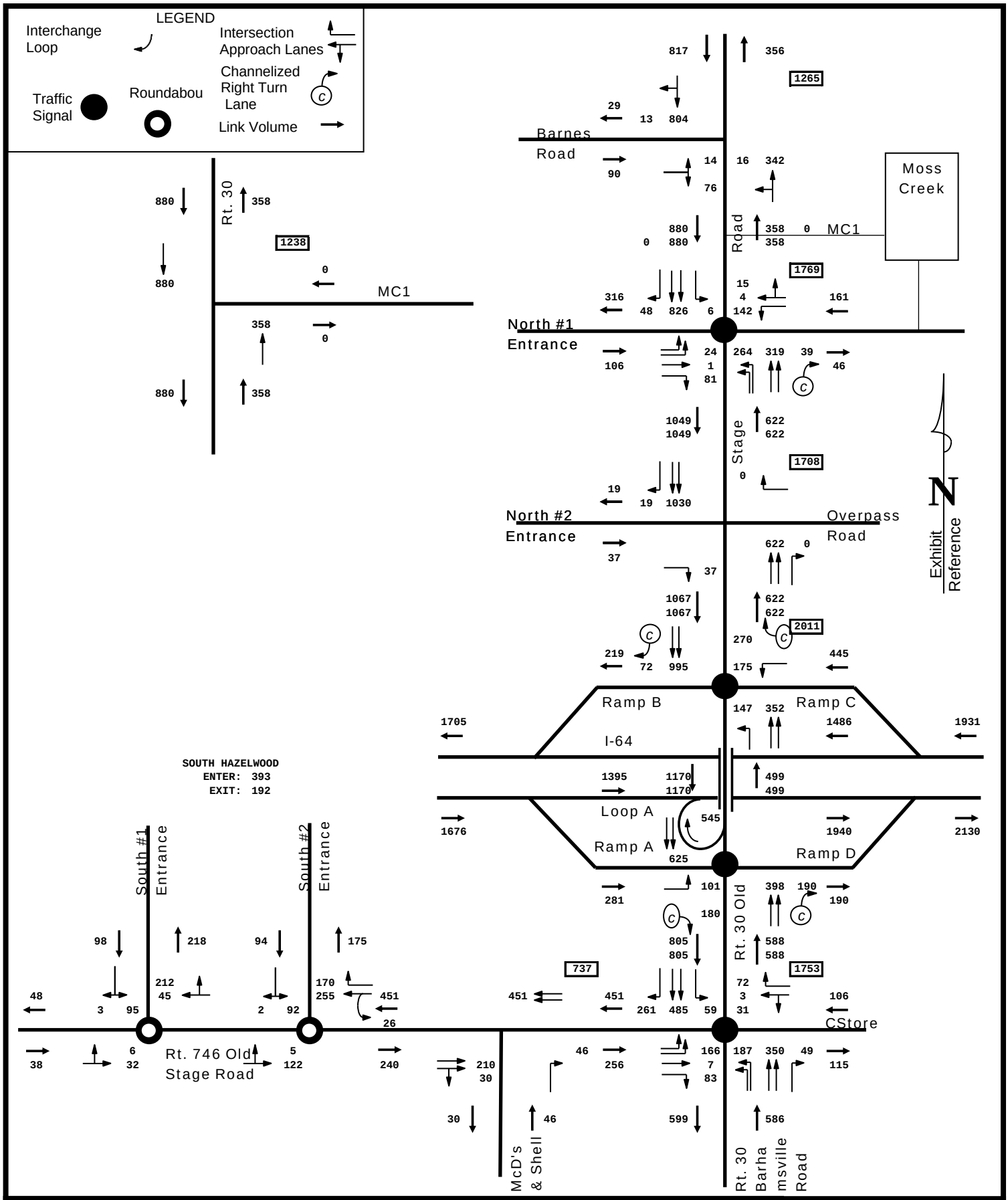
Exhibit 7b



NORTH AND SOUTH HAZELWOOD FARMS DAILY TRAFFIC
SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

Exhibit 7c



2030 AM PEAK HOUR TOTAL TRAFFIC WITH HAZELWOOD FARMS

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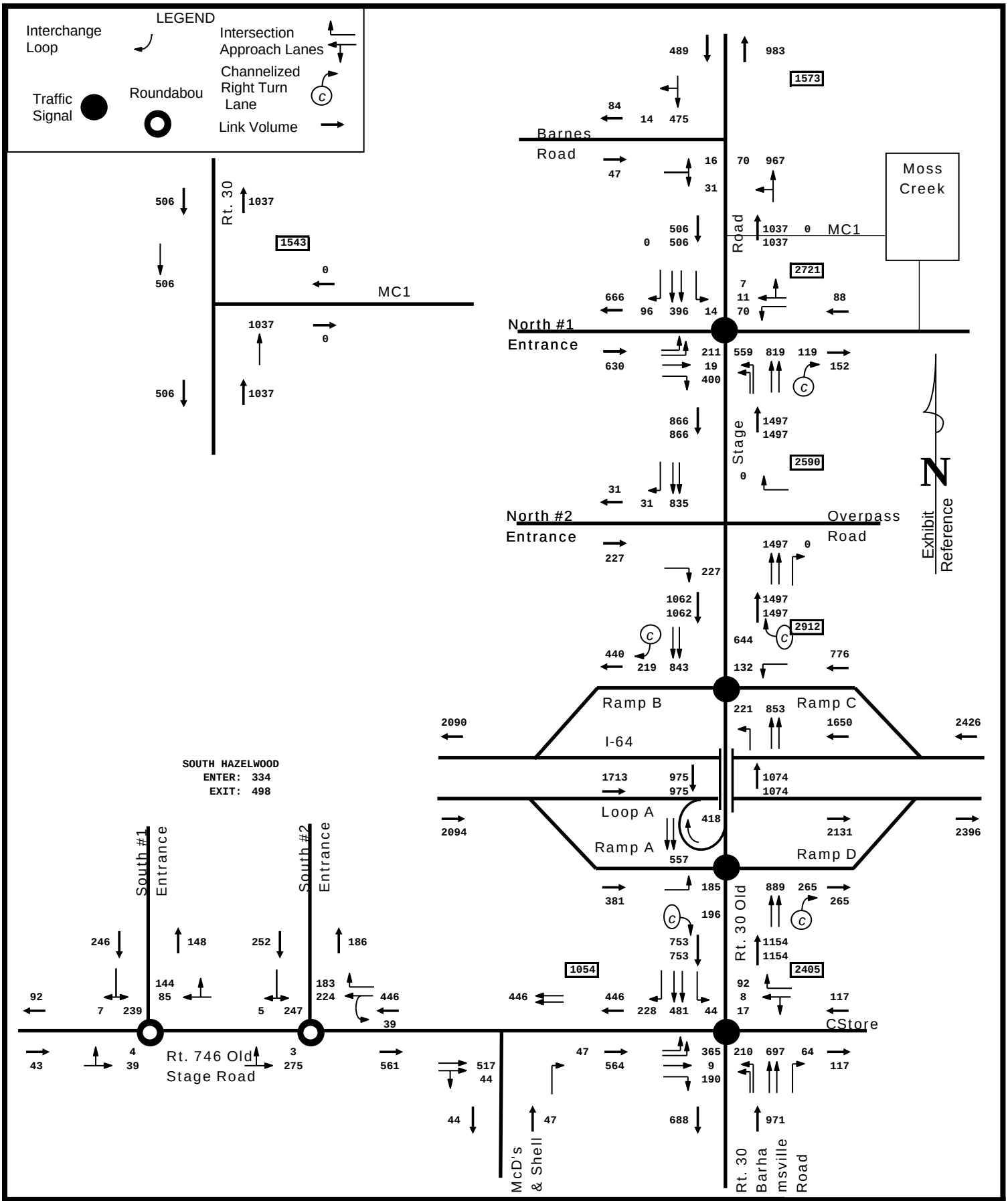
804-794-7312

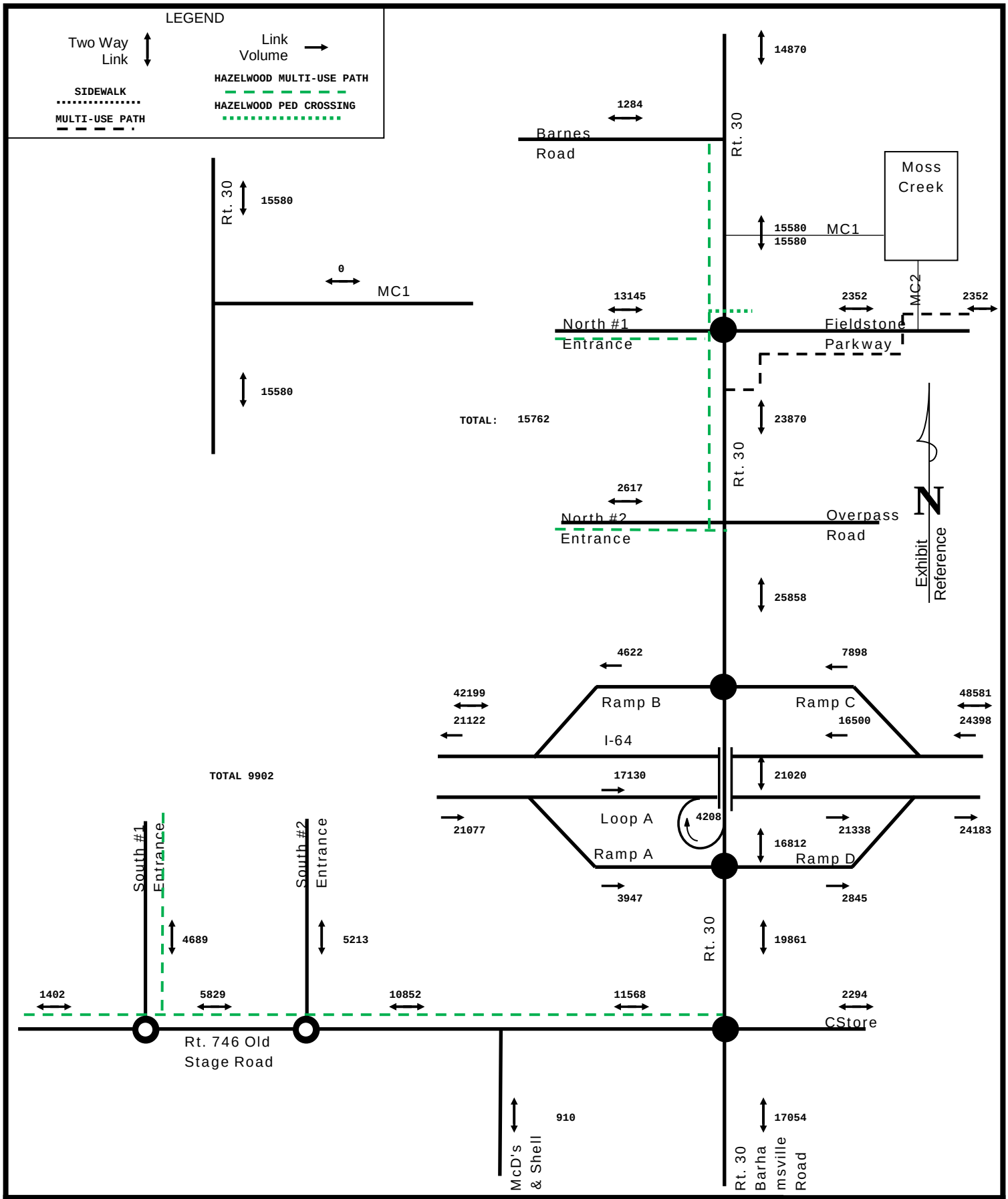
Exhibit 8a



2030 PM PEAK HOUR TOTAL TRAFFIC WITH HAZELWOOD FARMS

DRW Consultants, LLC
804-794-7312

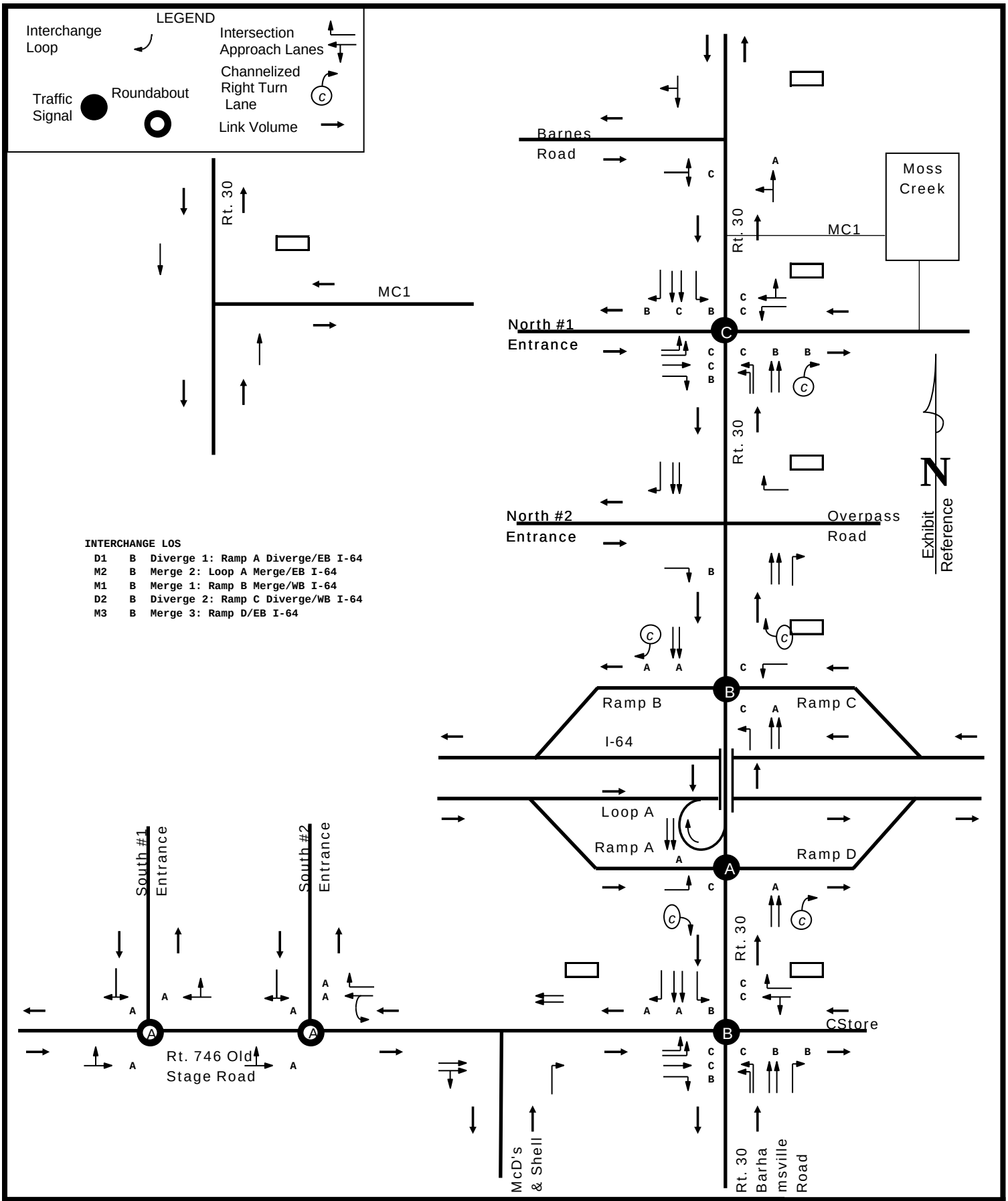
Exhibit 8b



2030 TOTAL DAILY TRAFFIC WITH HAZELWOOD FARMS SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

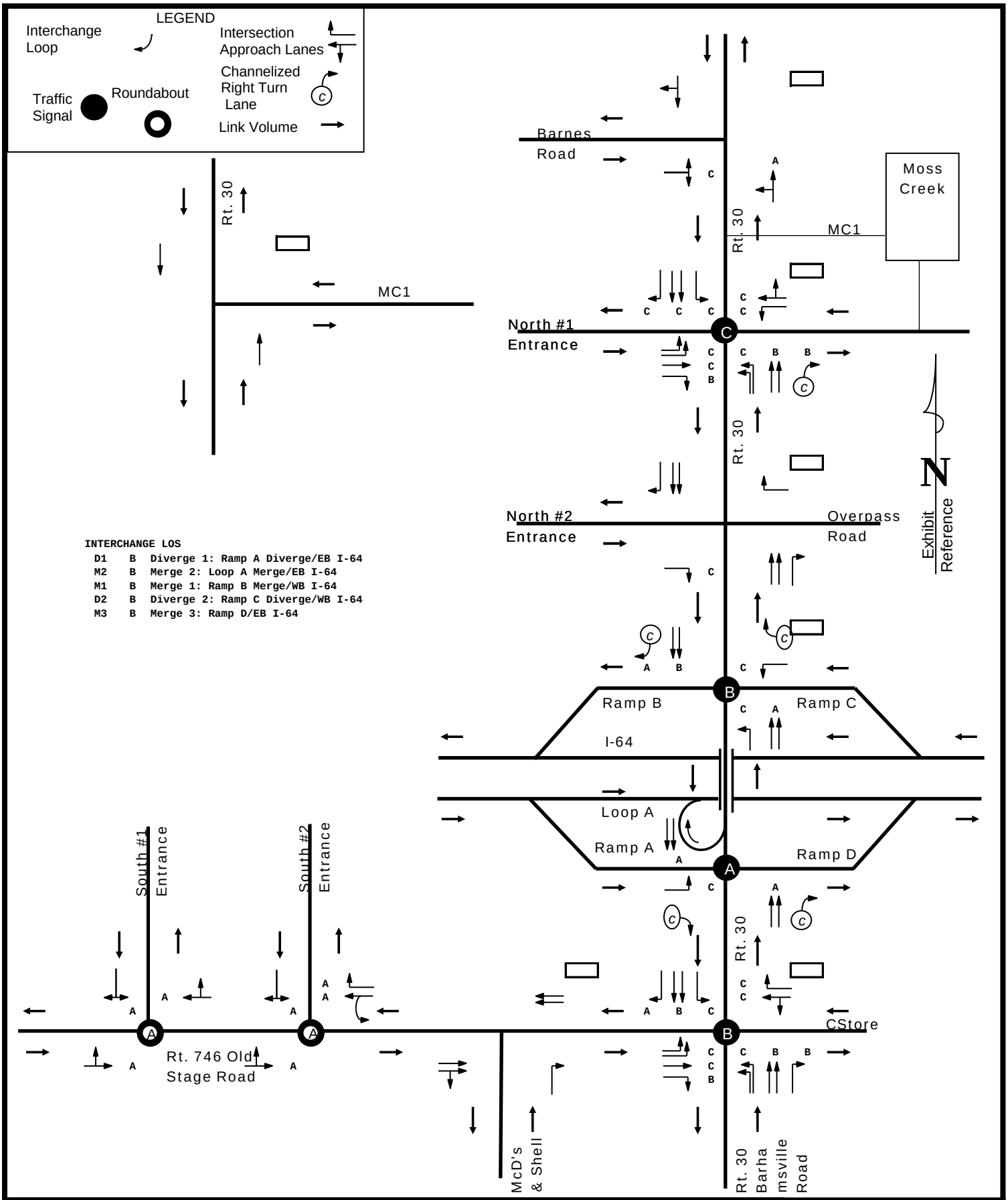
Exhibit 8c



2030 AM PEAK HOUR LEVEL OF SERVICE: 70 SECOND CYCLE
HAZELWOOD FARMS ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 8d



2030 PM PEAK HOUR LEVEL OF SERVICE: 70 SECOND CYCLE
HAZELWOOD FARMS ONLY

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Exhibit 8e

VALUE	LAND USE	LAND USE CODE	SQ.FT., OTHER UNITS	WEEKDAY TRIP GENERATION						
				AM PEAK HOUR			PM PEAK HOUR			
				Enter	Exit	Total	Enter	Exit	Total	DAILY
Table 1: Moss Creek Trip Generation - LandMark Traffic Study March 2006										
			TOTAL TRIPS	204	142	346	317	341	658	7167
			PASS BY TRIPS	28	28	56	52	52	104	1278
			PRIMARY TRIPS	176	114	290	265	289	554	5889

Table 2: Moss Creek Primary Trip Distribution k factor: 0.09181

	AM Peak Hour					PM Peak Hour			
	Entering Traffic		Exiting Traffic			Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips		% Dist.	Trips	% Dist.	Trips
North Rt. 30	20%	35	20%	23		20%	53	20%	58
East Fieldstone	10%	18	10%	11		10%	27	10%	29
East I-64	25%	44	25%	29		25%	66	25%	72
South Rt. 30	20%	35	20%	23		20%	53	20%	58
West I-64	25%	44	25%	28		25%	66	25%	72
	100%	176	100%	114		100%	265	100%	289

Table 3: Moss Creek Pass By Trip Distribution

	AM Peak Hour					PM Peak Hour			
	Entering Traffic		Exiting Traffic			Entering Traffic		Exiting Traffic	
Direction	% Dist.	Trips	% Dist.	Trips		% Dist.	Trips	% Dist.	Trips
North Rt. 30	798	20	326	8		404	16	895	36
South Rt. 30	326	8	798	20		895	36	404	16
	1124	28	1124	28		1299	52	1299	52

MOSS CREEK TRIP GENERATION AND DISTRIBUTION

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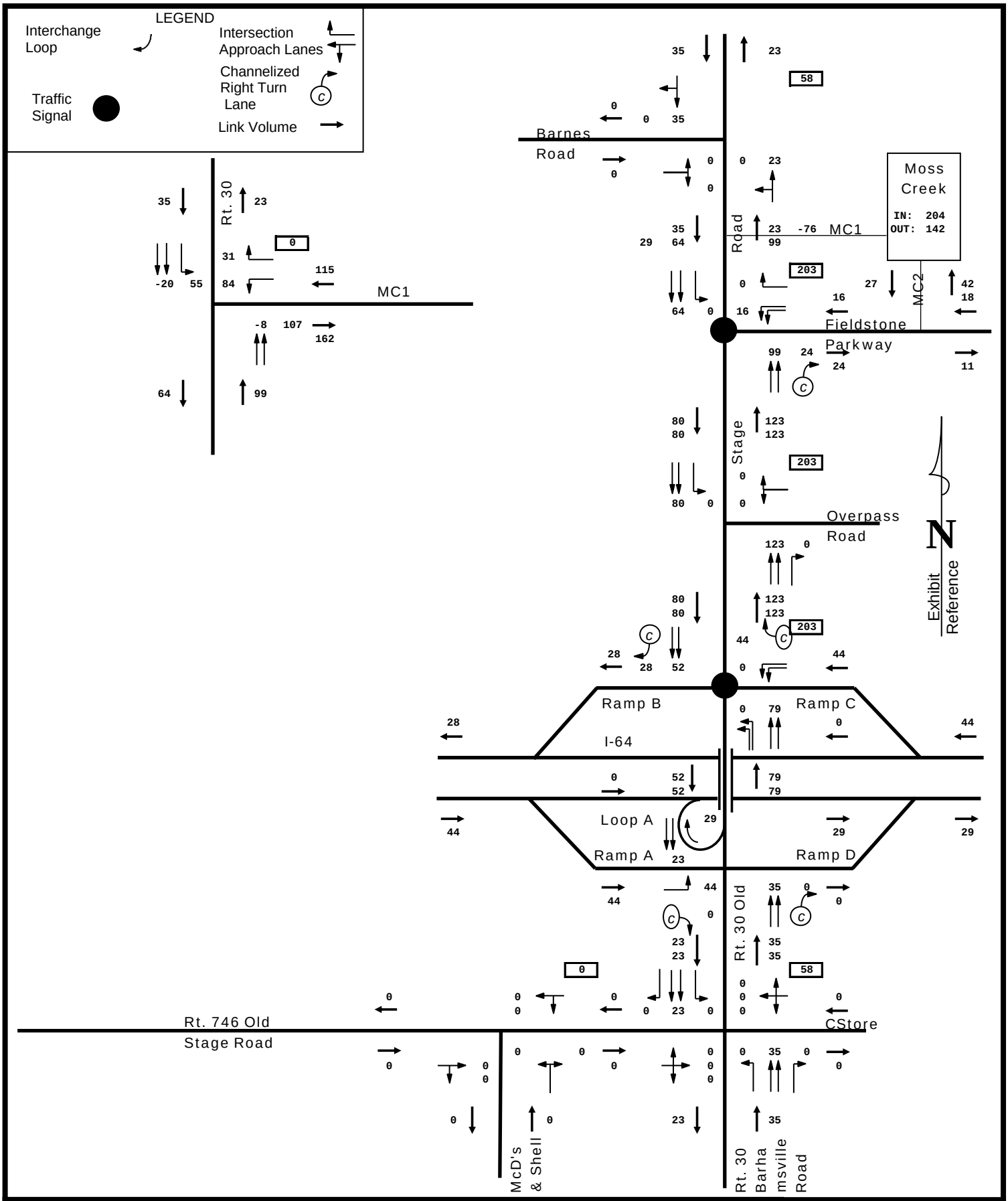
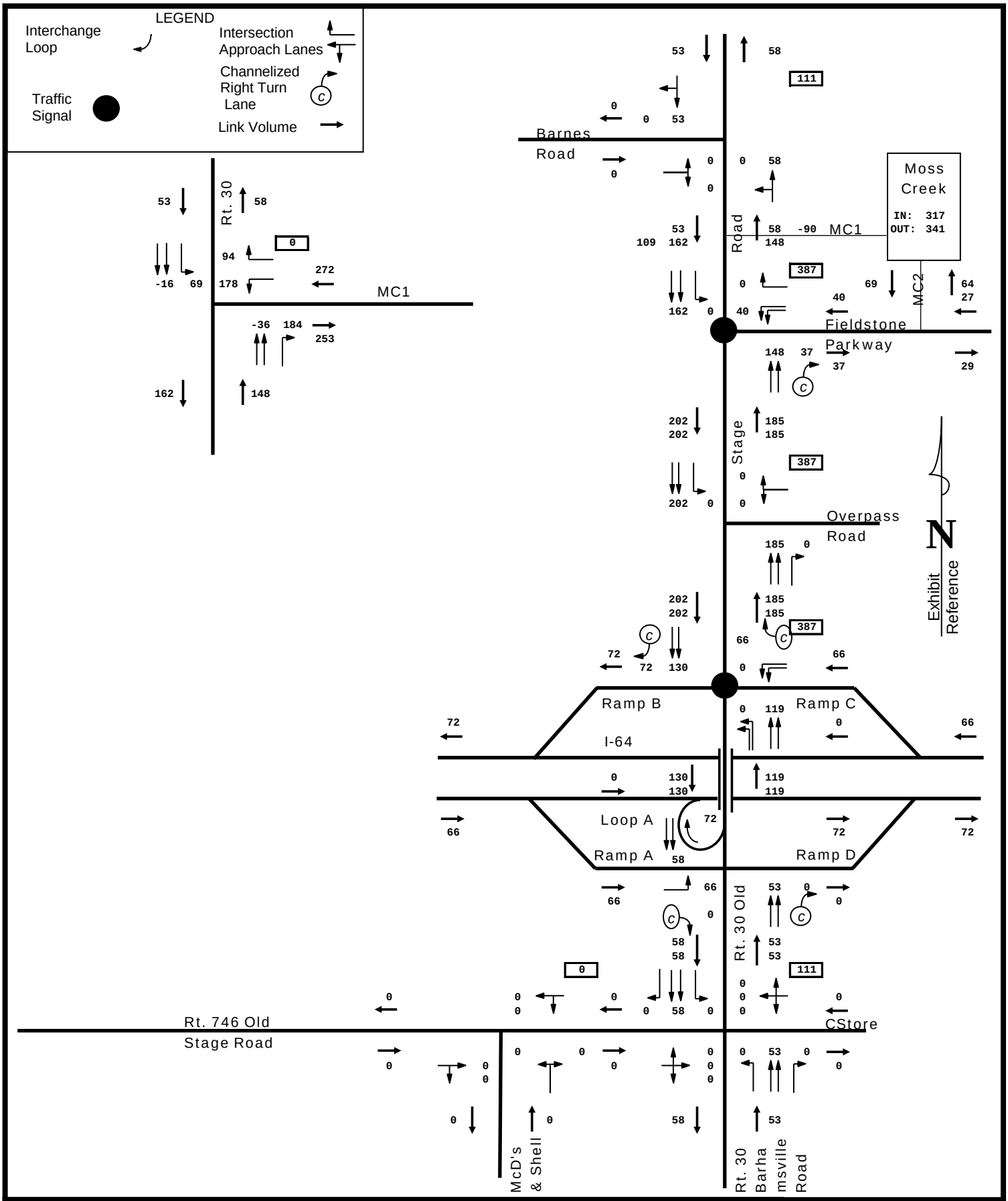
Exhibit 9



MOSS CREEK AM PEAK HOUR TRAFFIC

DRW Consultants, LLC
804-794-7312

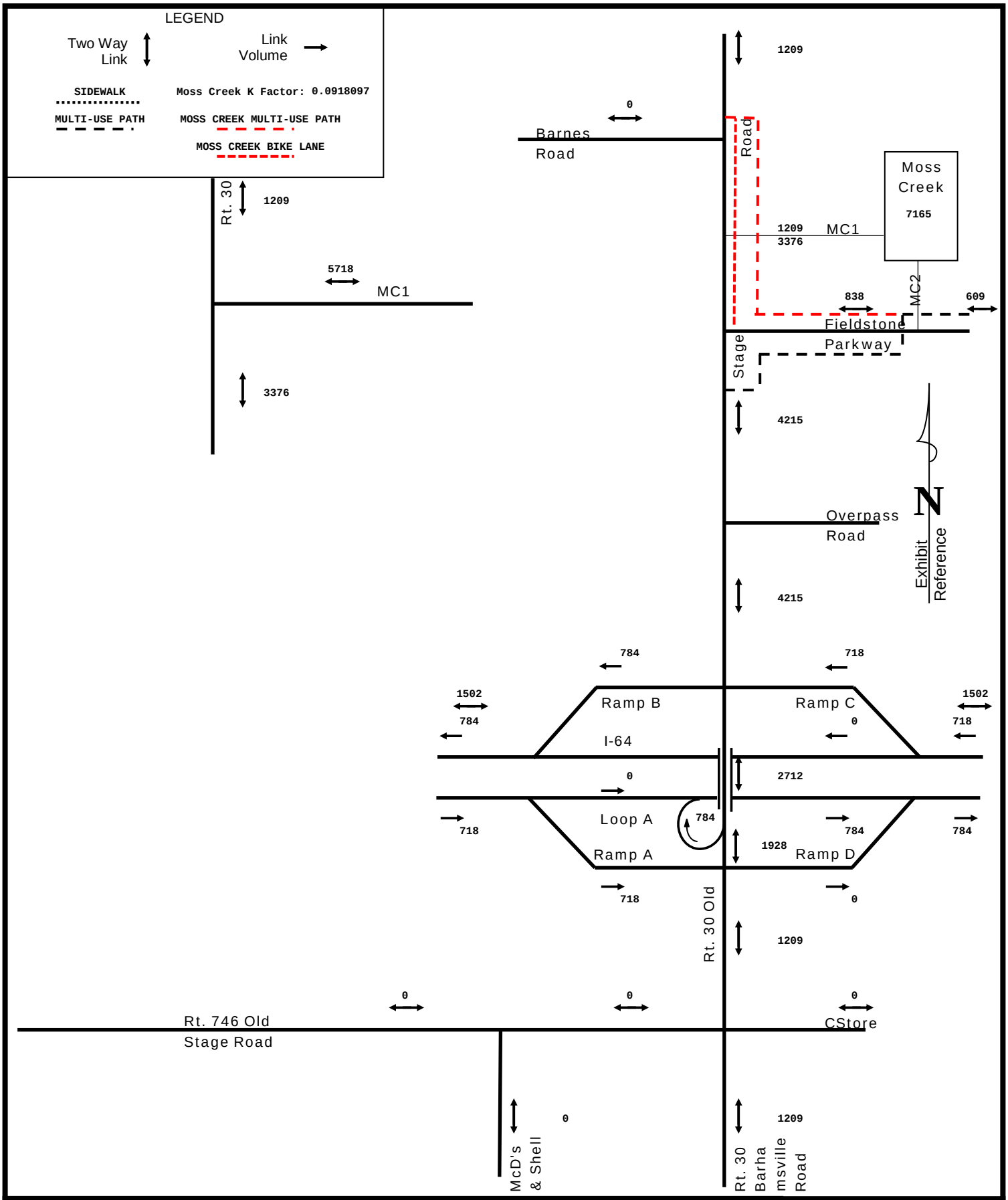
Exhibit 9a



MOSS CREEK PM PEAK HOUR TRAFFIC

DRW Consultants, LLC
804-794-7312

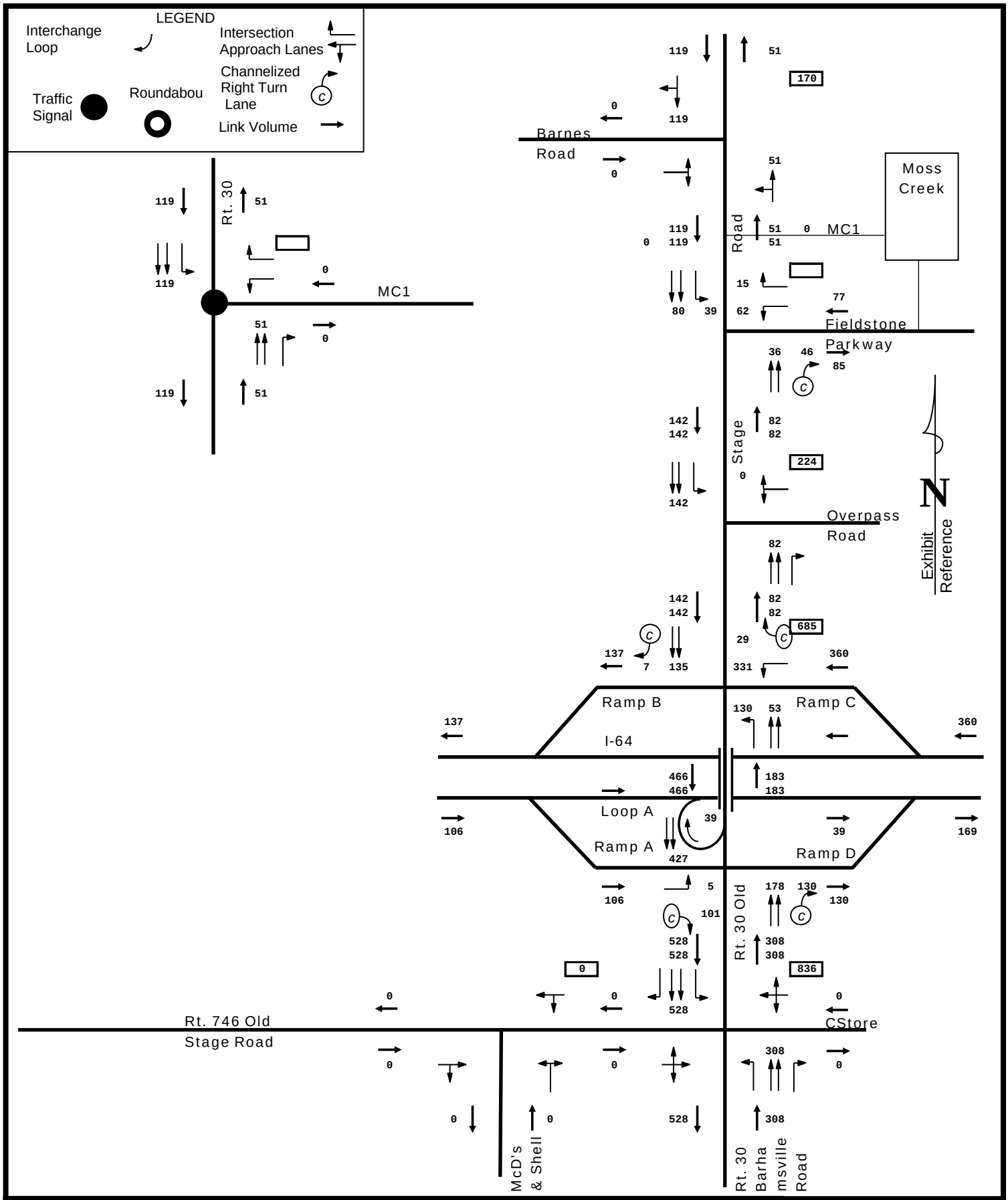
Exhibit 9b



MOSS CREEK DAILY TRAFFIC
SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

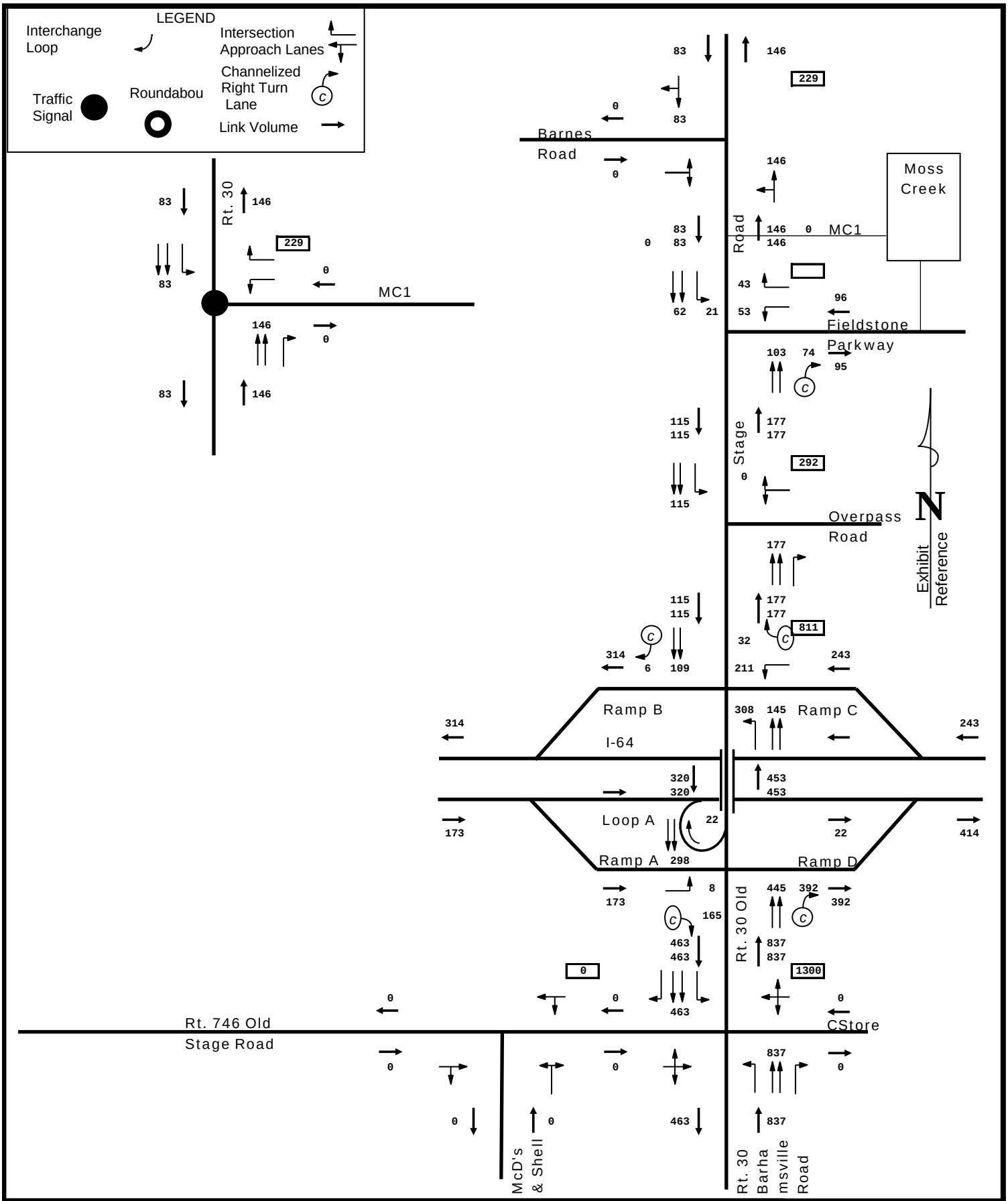
Exhibit 9c



STONEHOUSE PHASE 1 & 100% PHASE 2
AM PEAK HOUR

DRW Consultants, LLC
804-794-7312

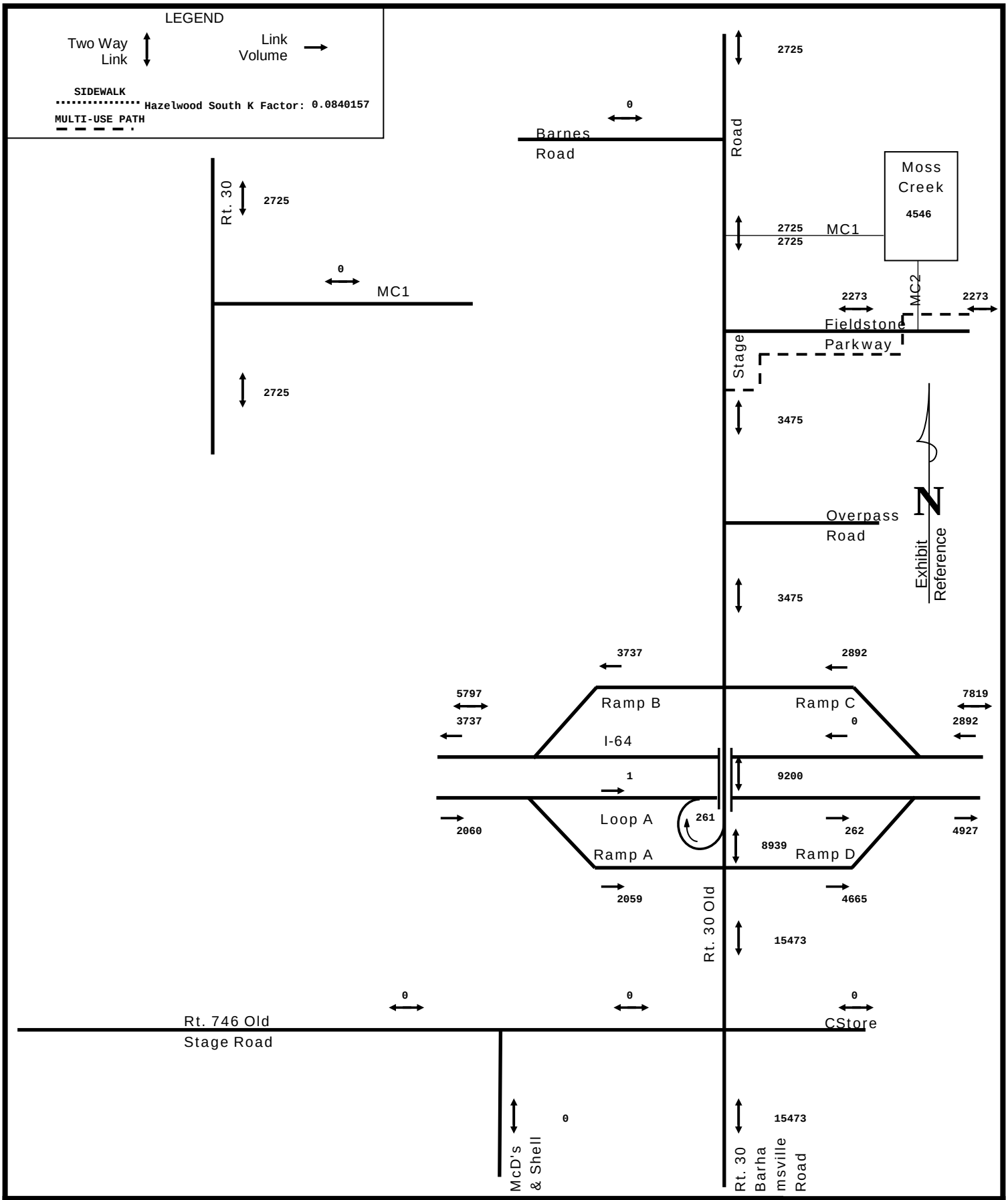
Exhibit 10a



STONEHOUSE PHASE 1 & 100% PHASE 2
PM PEAK HOUR

DRW Consultants, LLC
804-794-7312

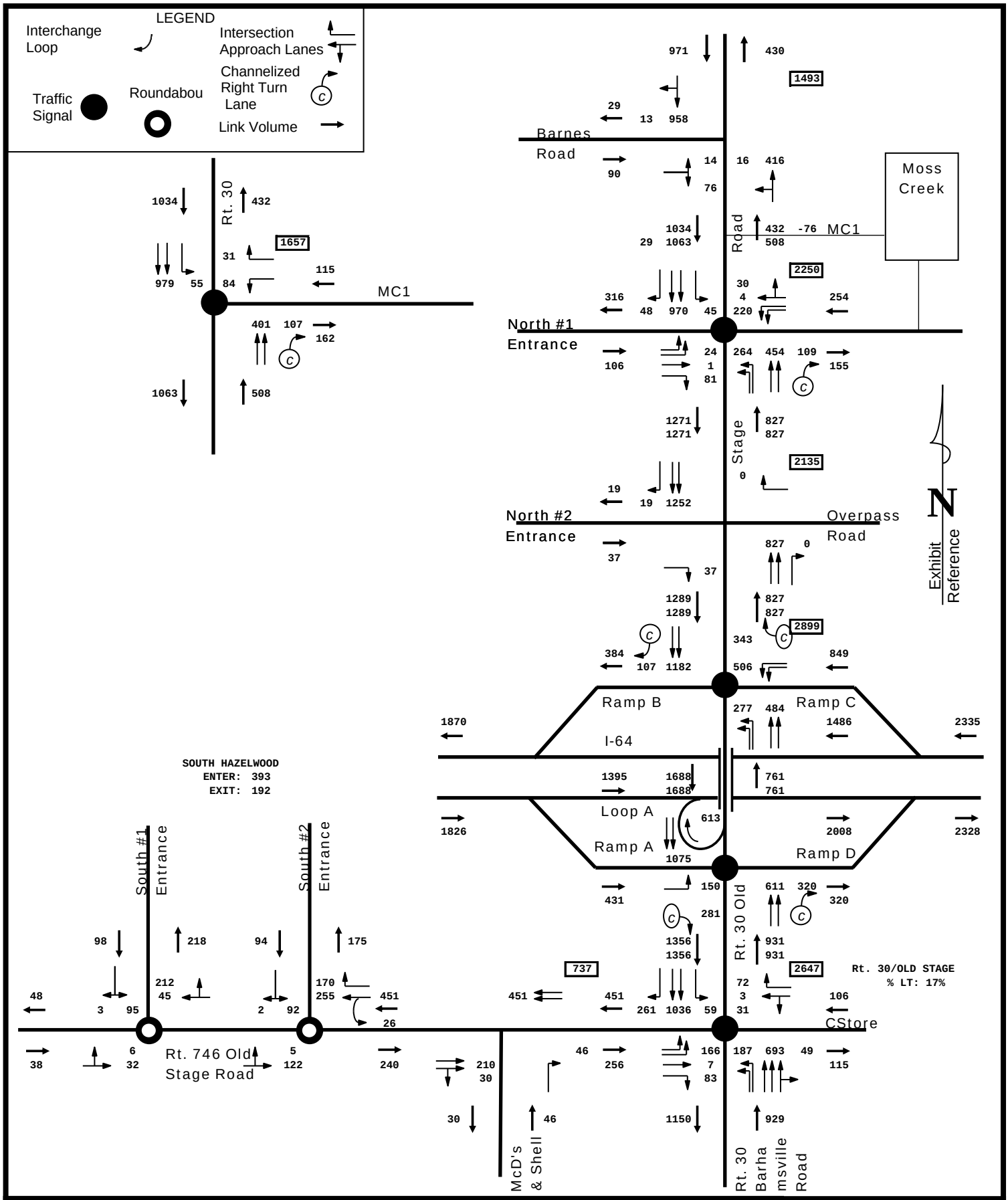
Exhibit 10b



STONEHOUSE PHASE 1 AND 100% PHASE 2 DAILY TRAFFIC
SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

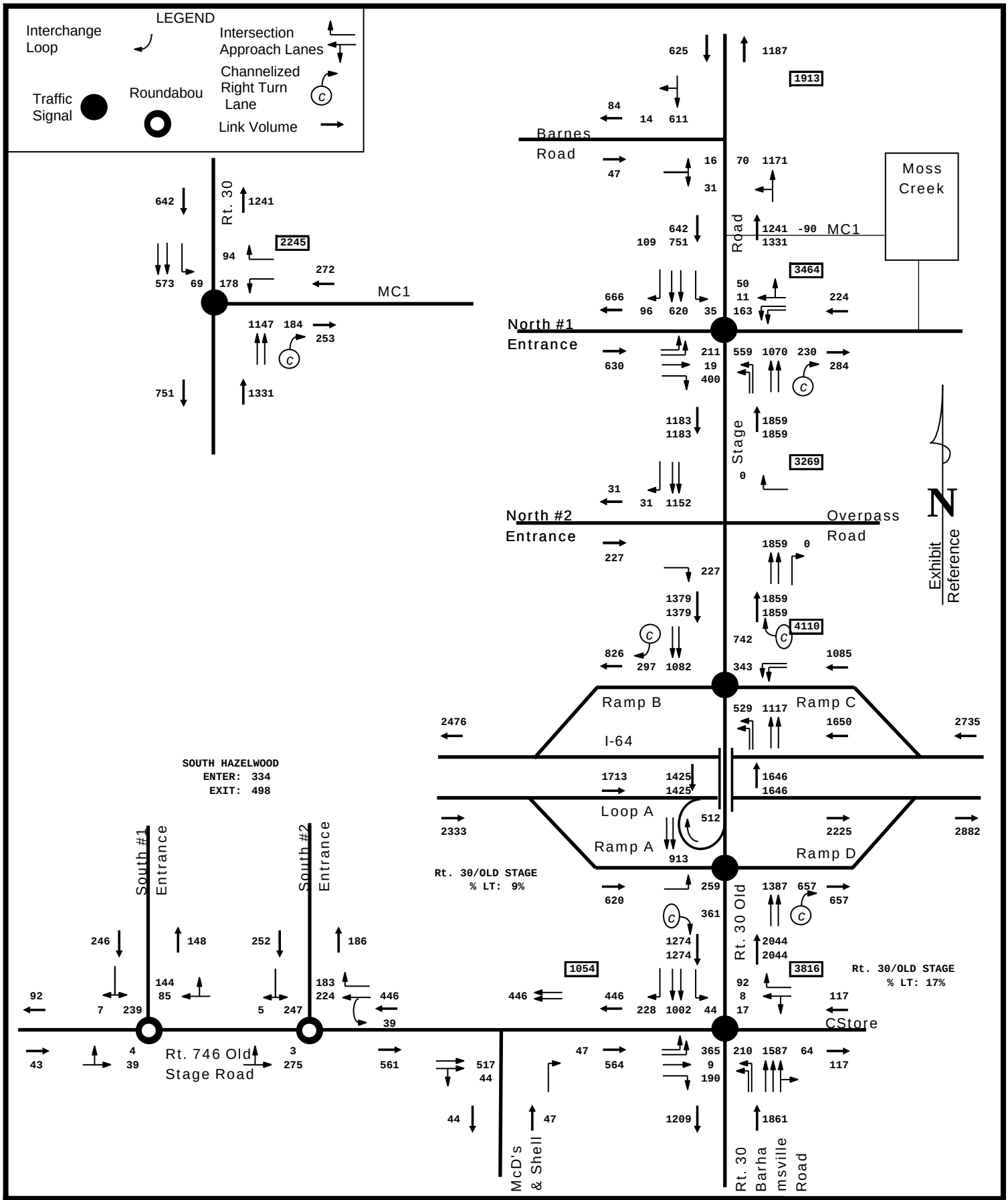
Exhibit 10c



2030 AM PEAK HOUR FORECAST
HAZELWOOD FARMS, STONEHOUSE & MOSS CREEK

DRW Consultants, LLC
804-794-7312

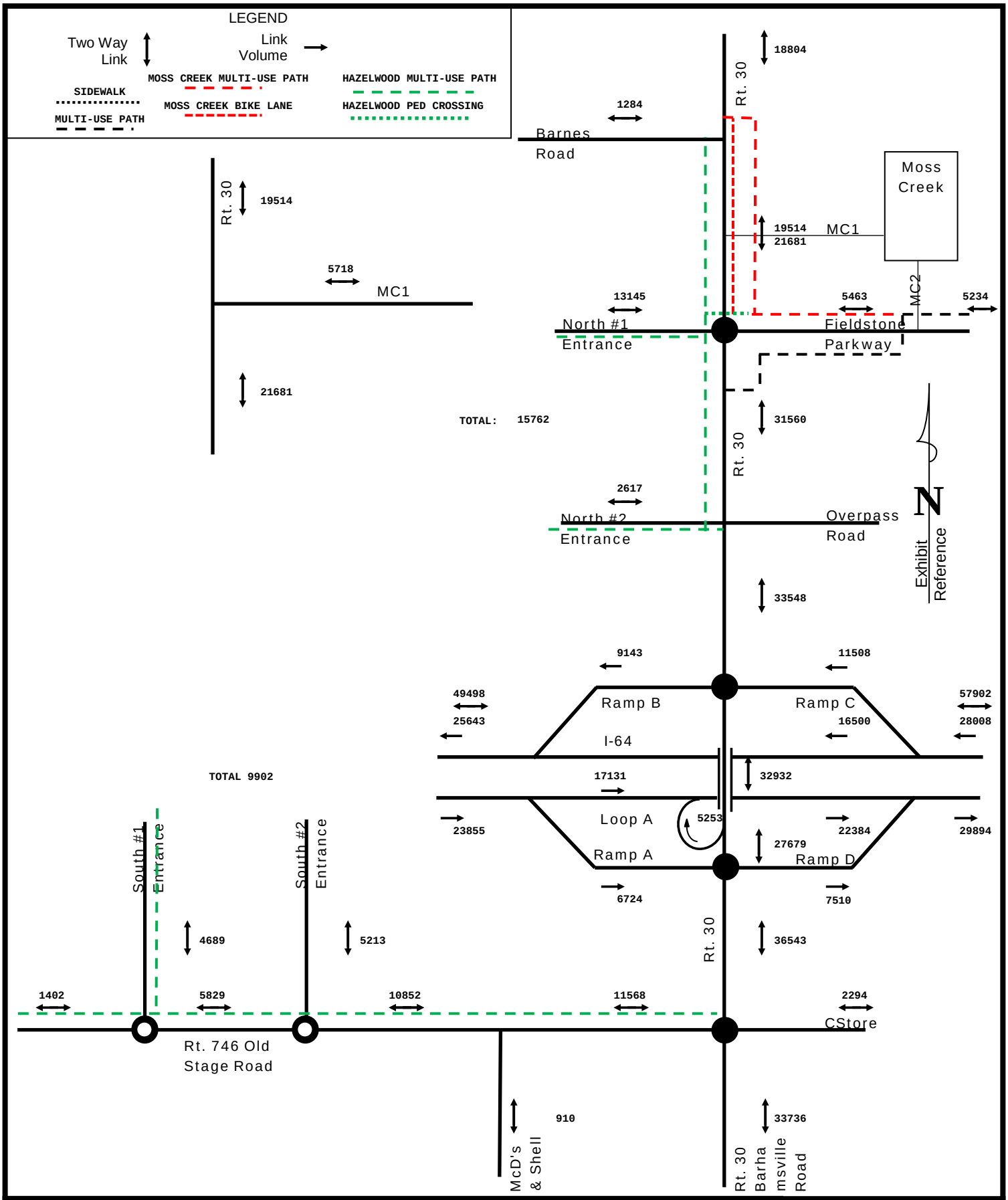
Exhibit 11a



2030 PM PEAK HOUR FORECAST
HAZELWOOD, STONE HOUSE AND MOSS CREEK

DRW Consultants, LLC
804-794-7312

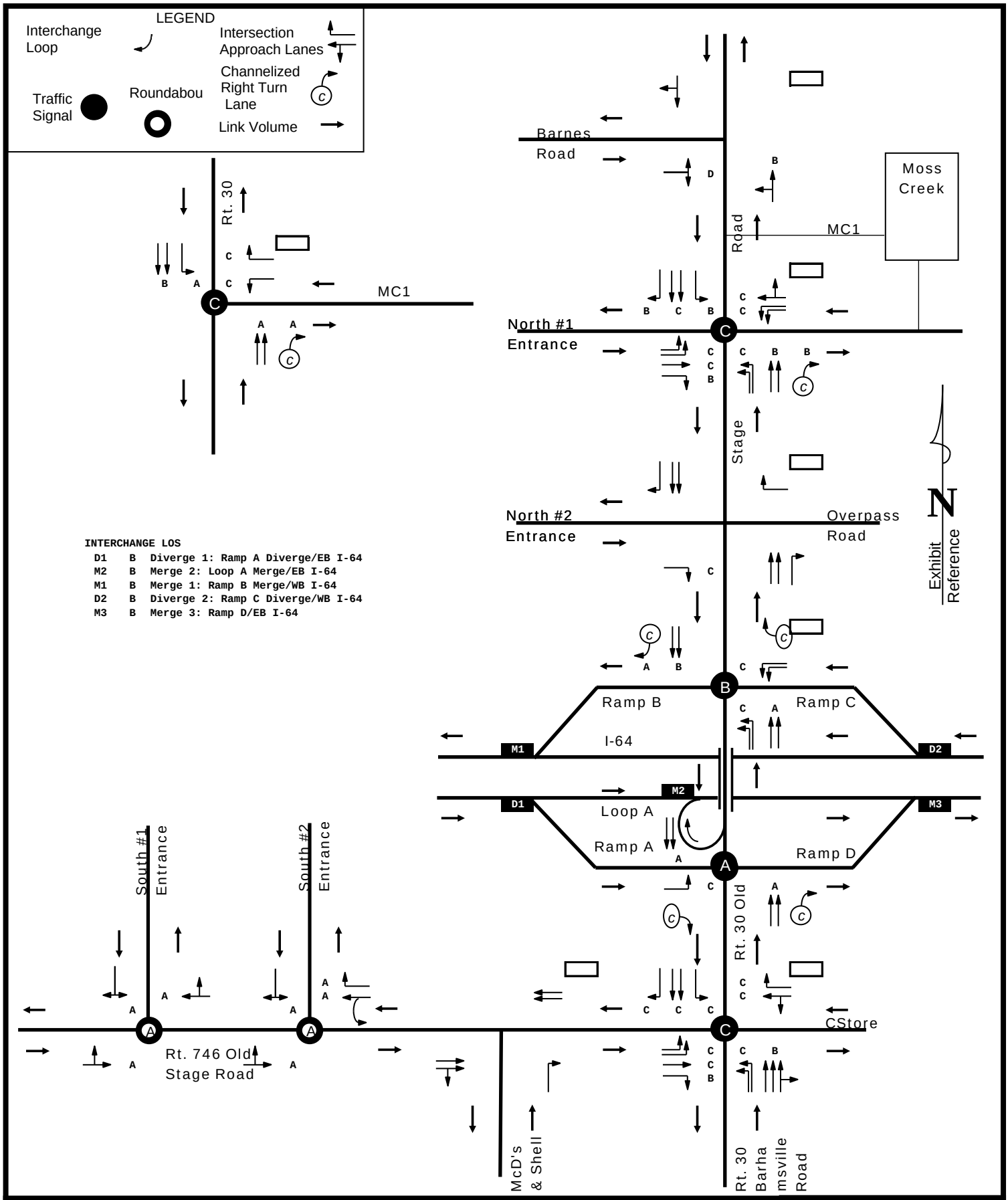
Exhibit 11b



2030 TOTAL DAILY TRAFFIC WITH HAZELWOOD FARMS AND STONEHOUSE
SIDEWALKS, MULTI-USE (VDOT SHARED USE PATH), TRANSIT

DRW Consultants, LLC
804-794-7312

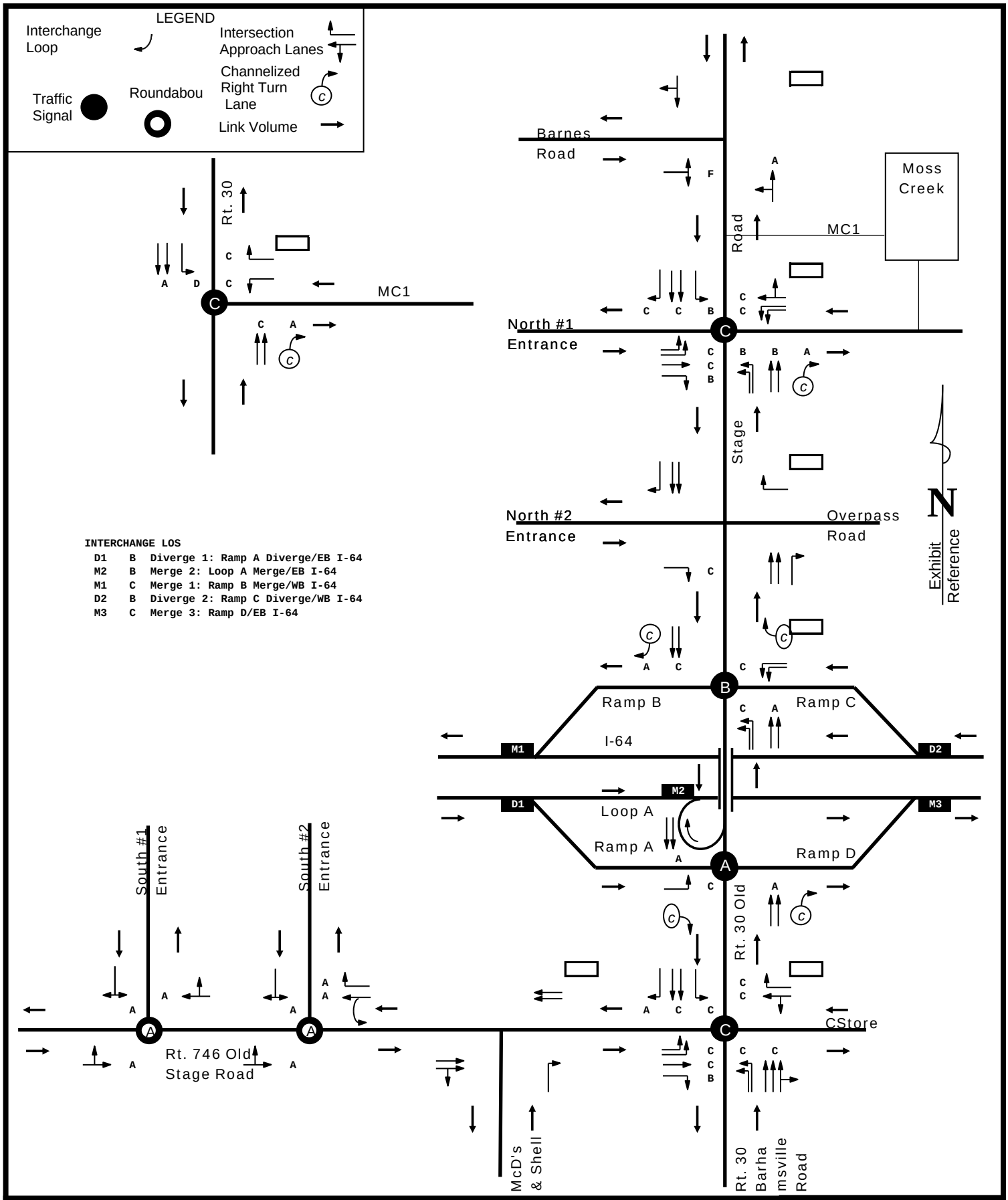
Exhibit 11c



2030 AM PEAK HOUR LEVEL OF SERVICE: 70 SECOND CYCLE
HAZELWOOD, STONEHOUSE AND MOSS CREEK

DRW Consultants, LLC
804-794-7312

Exhibit 11d



2030 PM PEAK HOUR LEVEL OF SERVICE: 70 SECOND CYCLE
HAZELWOOD, STONEHOUSE AND MOSS CREEK

DRW Consultants, LLC
804-794-7312

Exhibit 11e

DRW Consultants, LLC
Traffic Impact Studies
Development Access
Condemnation Damages

TO: Tim Trant, Esq.
FROM: Dexter R. Williams, P. E.
SUBJECT: Barnes Road Access Alternatives At Rt. 30
Response To Kimley-Horn & Assc. Inc. Letter Dated June 7, 2019, Comment 12
DATE: January 14, 2020

The existing Rt. 30/Barnes Road intersection is on a two-lane section of Rt. 30 with stop sign control for the single lane approach on Barnes Road. As traffic increases on Rt. 30, the level of service experience for the stop sign control on Barnes Road will decline.

The LOS F for Barnes Road at Rt. 30 shown in the January 2019 traffic study occurs in the PM peak hour with all development (Stonehouse, Moss Creek, Hazelwood Farms North and South) in place. Given the pace of development in Stonehouse to date, this extent of development will likely require decades for full development (e.g., Stonehouse was originally zoned in 1991 [29 years ago], has been rezoned three times, and to date there still is not enough traffic at the Fieldstone Drive and LaGrange Parkway intersections with Rt. 30 to warrant the envisioned traffic signals). At some point with all this development in place and if Barnes Road approach traffic at Rt. 30 is unchanged, then the result will be LOS F (73.7 seconds delay) primarily due to the 16 vehicles per hour (VPH), ~one vehicle every four minutes, continuing to make a left turn from Barnes Road to northbound Rt. 30.

With increasing traffic and improvements to the road network, the 16 VPH from Barnes Road to northbound Rt. 30 have an alternative route. The 16 VPH can avoid the forecast 1.2-minute delay at the Barnes Road stop sign by:

1. Turning right onto southbound Rt. 30.
2. Traveling approximately ¼ mile to U-turn at Fieldstone Parkway.
3. Continuing northbound on Rt. 30

With full development, there will be a signal at Rt. 30/Fieldstone Parkway to provide a safe and convenient, southbound to northbound U-turn on Rt. 30. With the 16 VPH utilizing this U-turn, the Barnes Road approach to Rt. 30 has a LOS B. Overall level of service at Rt. 30/Fieldstone Parkway/Hazelwood North Entrance #1 is unchanged by the Barnes Road diversion U-turn.

The Moss Creek development and its current access plan may change. The Moss Creek plan was zoned in 2006, with no development is the fourteen years since. The current Moss Creek plan signalized entrance on Rt. 30 is 920 feet from Fieldstone Parkway. This is less than the 1320 feet

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required by VDOT Minimum Spacing Standards for signalized intersections. Any new Moss Creek plan with a Rt. 30 signal will invariably prompt VDOT to require minimum spacing, which in turn puts any revised plan signal aligned at Barnes Road, which automatically relieves the inherent unsignalized intersection LOS problem.

DRW Consultants, LLC
Traffic Impact Studies
Development Access
Condemnation Damages

TO: Tim Trant, Esq.
FROM: Dexter R. Williams, P. E.
SUBJECT: Hazelwood Farms Rt. 30 Shared Use Path
Response To Kimley-Horn & Assc. Inc. Letter Dated June 7, 2019, Comment 13
DATE: January 29, 2020

COMMENT 13 AND PRESUMED IMPROVEMENTS TO RT. 30 BRIDGE OVER I-64

Regarding the Rt. 30 bridge over I-64, Comment 13 included the following: "accommodation of dedicated bike lanes and a shared-use path across the overpass" in accordance with Exhibit 1g-3 in the 2019 Ch. 527 study for Hazelwood Farms. Exhibit 1g-3 is a section of the Regional Bikeway Plan for the I-64/Rt. 30 area. Exhibit 1g-4 in the 2019 Ch. 527 study is a section of the JCC Draft 2011 Pedestrian Accommodation Master Plan.

Following are the designations on the Regional Bikeway Plan and the JCC Draft 2011 Pedestrian Accommodation Master Plan plans for Rt. 30 from Barnes Road to Old Stage Road:

- Regional Bikeway Plan
  - Proposed Multi-Purpose Path
  - Proposed Bike Lane
- JCC Draft 2011 Pedestrian Accommodation Master Plan
  - Multi-Use on the west (Hazelwood) side of Rt. 30.

It is one thing for government to adopt a ped/bike facility showing facilities on one side of a road. It is something else entirely for Comment 13 to go beyond government master planning and imply some unconceivable presumptions of cost responsibility for property owners:

1. That property owners located the one side of road designated by a government plan for a shared use path should have to pay the cost for all of the shared use path.
2. That Hazelwood Farms should have to pay for both the multi-use path designated on its side of Rt. 30 in the Draft 2011 Plan and also pay for a bike lane on the Regional Bikeway Plan which doesn't have a designated side.
3. That any property owners, and one property owner in particular, should have to pay for Interstate bridge deck modifications for all users to correct a perceived lack of connectivity that was created by State condemnation of Hazelwood Farms for construction of I-64.

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For the record, KHA provided a preliminary plan for the VDOT Longhill Road Shared Use Path project. The "Shared Use Path" plan on the Longhill Road bridge over Rt. 199 has 7 feet 10 inches clearance from bridge parapet wall to wall divider from vehicle traffic. The VDOT specification for a shared use path lateral wall clearance on a bridge is 14 feet. On the preliminary drawing, the "Shared Use Path" is designated as a sidewalk.

The multi-use path and bike lane referenced above for the Rt. 30 bridge over I-64 would require ~20 feet clearance. The construction estimate to the Longhill project is $3.6 million, and I estimate the bridge deck at $2.5 million. Even if the inferior 7 feet 10-inch clearance is applied to the Rt. 30 bridge, the resulting cost is approximately $5 million.

PROPOSED SHARE USED PATH SYSTEM – HAZELWOOD FARMS

The Hazelwood Farms plans have been revised to include shared use paths along the west side Rt. 30 as follows:

- Village Center At Hazelwood Farms (North)
    - Barnes Road (Sta. 299+30) south to end of limited access fence (Sta 321+95): 2,300 feet
    - End of limited access fence (Sta 321+95) to south of Ramp B (Sta 337+25) located inside of limited access fence: 1,500 feet
    - Shared use path at Sta 337+25 connects to 10-foot shoulder along Rt. 30 north of I-64 bridge
    - Total: 3,800 feet
- Enterprise Center At Hazelwood Farms (South)
    - Old Stage Road (Sta 358+70) to north of Ramp A (Sta 348+10) located inside limited access fence: 1,000 feet
    - Shared use path at Sta 348+10 connects to 10-foot shoulder along Rt. 30 south of I-64 bridge

The total length of shared use path by Hazelwood Farms along the west side of Rt. 30 is 4,800 feet. Of the total, 2,500 feet is located within the limited access fence on Rt. 30. The Rt. 30 shared use paths on both sides of I-64 were deliberately designed to tie into the existing 10 foot paved shoulder lane that extends from the Village Center shared use path tie in (Sta 337+25) across the bridge to the Enterprise Center shared use path tie in (348+10). The Hazelwood Farms shared use path are located mostly in areas where there is little or no paved shoulder lane. With the Hazelwood Farms shared use paths, there is 10 feet of continuous pavement width outside of vehicular travel lanes to accommodate non-vehicular traffic from Barnes Road to Old Stage Road.

It should also be noted that shared use paths are provided along the Old Stage Road frontage for

Enterprise Center from Rt. 30 to Leisure Road (~1600 feet) and on Leisure Road from Old Stage Road to the Enterprise Center property limits near Upper County Park (~1400 feet). This is a total of approximately 7,800 feet of shared use path to be built along existing roads.

The shared use path system also includes a connection across Rt. 30 at Fieldstone Parkway to Moss Creek and by connection to Stonehouse. Given the total lack of pedestrian/bike accommodations along the Stonehouse frontage on Rt. 30 and south to the I-64 interchange, the shared use path system proposed by Hazelwood Farms provides a means to compensate for this oversight on the east side of Rt. 30.

HAZELWOOD FARMS MEASURES OF SEPARATION

KHA Comment 13 references a lack of "account for no connection between Hazelwood North and South". The two projects (Village Center and Enterprise Center) are just that: two separate projects with I-64 creating a vast chasm between the two separate projects. Following are dimensional measures of separation between the two developments:

- The distance from the end of limited access line at Village Center (North) to the end of limited access lane at Enterprise Center (South) is 3,675 feet, 0.7 miles.
- The walking/biking distance from the center of Village Center to the main access to Enterprise Center (South Entrance #2) on Old State Road is 6400 feet, 1.2 miles.
- Enterprise Center is approximately 1 mile deep, so the center to center distance between Village Center and Enterprise Center is 1.7 miles.

In summary, the two separate projects are well over 0.5 miles apart by the closest measure, and well over 1.5 miles apart measured by center of development.

EFFECTIVE CONNECTIVITY BETWEEN VILLAGE CENTER AND ENTERPRISE CENTER AND TRANSIT

These measures of separation between Village Center and Enterprise Center are far in excess of common planning standards for walking limits:

- "The transit industry widely applies the 400-meter (0.25-mile) and 800-meter (0.5-mile) rules of thumb when estimating service areas around bus and rail stations." — El-Geneidy et al. (2014)
- A 10-minute walk (0.5 mile) is also considered a reasonable distance for accessing public parks. This is the distance that The Trust for Public Land applies in their rating system developed to measure how well the 100 largest U.S. cities are meeting the need for parks.

Even the shortest measure of separation (0.7 mile) is in excess of the longer range of walking limits (0.5 mile). For non-automobile connectivity between these two separate developments and in fact the rest of James City County and the Williamsburg area, transit is the effective strategy.

The existing WATA 9 Purple 2 line currently terminates at Stonehouse Industrial Park. An extension of this line to Hazelwood Farms provides connectivity between the two separate developments and the balance of Williamsburg. Transit can provide effective connectivity for all income and health ranges. To this end, Hazelwood Farms proffers include a commitment to provide at least two bus stops within the development or on public road frontages and may be determined as feasible by WATA.

DRW Consultants, LLC
Traffic Impact Studies
Development Access
Condemnation Damages

TO: Tim Trant, Esq.
FROM: Dexter R. Williams, P. E.
SUBJECT: Analysis Of 2030 traffic with Hazelwood Farms – 90/100 Second cycles
DATE: January 9, 2020

This memo and enclosed exhibits are provided as a supplement to the January 2019 Ch. 527 Traffic Impact Statement For Village Center And Enterprise Center At Hazelwood Farms (2019 study). This memo presents another scenario for the 2030 forecast year: background growth with Hazelwood Farms only using 90 cycle lengths for AM peak hour and 100 second cycle lengths for PM peak hour.

Total 2030 AM peak hour traffic with Hazelwood Farms is shown on enclosed Exhibit 1a. Total 2030 PM peak hour traffic with Hazelwood Farms is shown on enclosed Exhibit 1b. Also shown on Exhibits 1a and 1b are intersection lane configurations used in this analysis. Traffic analysis reports are enclosed as follows:

- HCM Signalized Intersection Capacity Analysis: ExJ7 for AM, Ex J8 for PM
- HCM 6th Two Way Stop: ExK7 for AM, Ex K8 for PM
- Synchro Queues: ExL7 for AM, ExL8 for PM
- SimTraffic Queuing and Blocking Report: ExM7 for AM, ExM8 for PM

Following are analysis results for each intersection:

RT. 30/FIELDSTONE PARKWAY- 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/Fieldstone Parkway:

TABLE 6-1 Rt. 30/FIELDSTONE PARKWAY
2030 HAZELWOOD ONLY 90/100 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	C	23.4	C	21.9	Length	AM	PM	AM	PM
EBL2	C	28.5	C	32.4	150	31	172	46	193
EBT	D	39.6	D	35.6		5	30	6	94
EBR	C	22.8	C	20.8	200	0	86	90	236
WBL	D	36.5	D	46.8	250	122	65	156	100
WBT/R	D	43.0	D	50.1		24	31	38	42
NBL2	C	34.3	C	30.4	300	109	210	145	286
NBT2	A	9.9	B	10.1		107	148	106	427
NBR	A	8.6	A	1.4	350	1	2		
SBL	B	16.0	C	25.9	150	11	25	20	40
SBT2	C	23.5	C	28.6		276	183	182	169
SBR	B	16.1	C	24.4	200	0	0	41	64

SimTraffic queue shown is maximum report value for multi-lane groups

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Overall intersection LOS C and all lane groups are LOS C or better for Rt. 30 major streets and LOS D or better for minor street movements. Note: a single left turn lane is used on eastbound North #1 Entrance vs. two lane left turns used in previous analysis. All auxiliary lane queues are within storage length.

RT. 30/I-64 WESTBOUND RAMPS - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/I-64 westbound ramps:

TABLE 6-2 Rt. 30/I-64 WESTBOUND RAMPS
2030 HAZELWOOD ONLY 90/100 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	11.0	A	9.7	Length	AM	PM	AM	PM
WBL	D	42.3	D	46.1		166	144	112	111
NBL	C	32.3	A	9.9	200	141	93	169	165
NBT2	B	11.1	A	7.5		37	227	119	1536
SBT2	A	6.2	A	8.8		101	168	221	210
SBR	A	0.1	A	0.2	300	0	0		

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS A and B and all lane groups are LOS C or better for Rt. 30 major streets and LOS D or better for minor street movements. All auxiliary lane queues are within storage length.

RT. 30/I-64 EASTBOUND RAMP A - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/I-64 eastbound ramp A:

TABLE 6-3 Rt. 30/I-64 EASTBOUND RAMP
2030 HAZELWOOD ONLY 90/100 SECOND CYCLE

SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	A	4.3	A	8.9	Length	AM	PM	AM	PM
EBL	D	42.9	D	45.5		106	183	101	168
NBT2	A	0.4	A	1.5		5	14	48	84
SBT2	A	0.5	A	8.4		0	157	68	95

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS A and B and all lane groups are LOS C or better for Rt. 30 major streets and LOS D or better for minor street movements.

RT. 30/OLD STAGE ROAD - 2030 WITH HAZELWOOD FARMS

The following table shows signalized intersection LOS results at Rt. 30/Old Stage Road:

TABLE 6-4 Rt. 30/OLD STAGE ROAD 2030 HAZELWOOD ONLY 90/100 SECOND CYCLE									
SIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	Synchro		SimTraffic Q&B	
Overall	B	19.0	C	23.0	Length	AM	PM	AM	PM
EBL2	D	38.0	D	40.1	200	80	162	119	192
EBT	D	35.2	C	33.2		17	19	26	29
EBR	C	22.8	C	23.4	200	0	29	99	167
WBL/T	D	40.9	D	45.9		49	43	63	51
WBR	D	39.2	D	44.4		0	22	61	69
NBL2	D	38.3	D	39.8	200	87	105	123	109
NBT2	B	17.0	B	17.5		129	257	101	166
NBR	B	15.2	B	13.5		0	3	19	14
SBL	C	20.4	D	46.7	200	51	68	83	61
SBT2	A	7.5	B	13.8		87	127	95	106
SBR	A	7.5	A	2.7		3	6	96	91

SimTraffic queue shown is maximum report value for multi-lane groups

Overall intersection LOS is LOS B and C and all lane groups are LOS D or better. All auxiliary lane queues are within storage length.

RT. 30/BARNES ROAD – 2030 WITH HAZELWOOD FARMS

The following table shows unsignalized intersection LOS results at Rt. 30/Barnes Road:

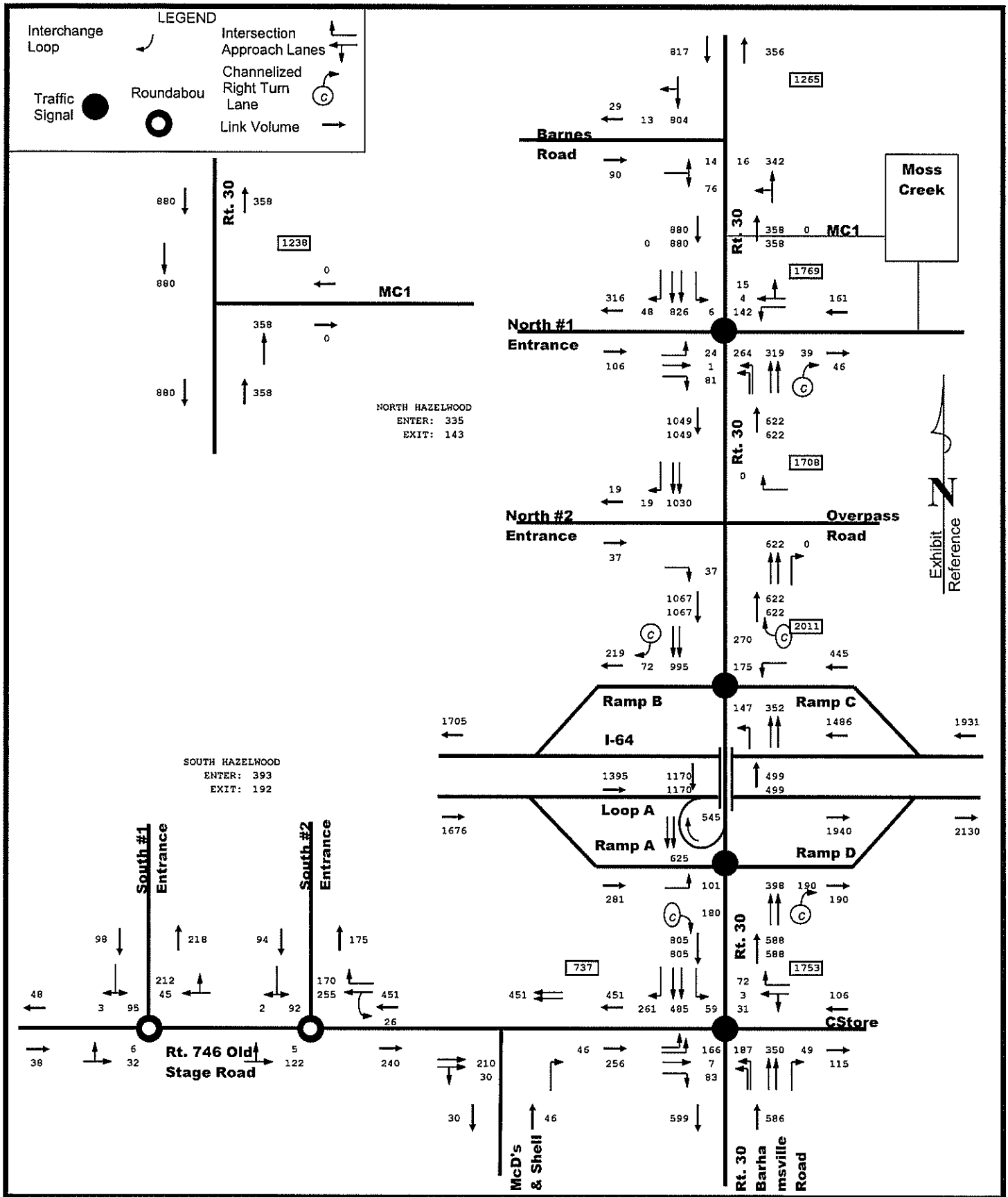
TABLE 6-5 RT. 30/BARNES ROAD 2030 HAZELWOOD ONLY UNSIGNALIZED									
UNSIGNALIZED LOS And Seconds Delay					95th Percentile Queues By Lane Group				
	AM		PM		Storage	HCM 6th		SimTraffic Q&B	
					Length	AM	PM	AM	PM
EBL/R	C	23.1	D	32.7		35	30	89	82
NBL/T	A	9.9	A	8.8		3	10		169

All lanes have LOS D or better.

SUMMARY COMMENTS - 2030 WITH HAZELWOOD FARMS

All signalized intersections have LOS C or better overall and LOS D or better for each turning movement. For unsignalized Barnes Road, eastbound AM was LOS C and PM is LOS D. All auxiliary lane queues are within storage length.

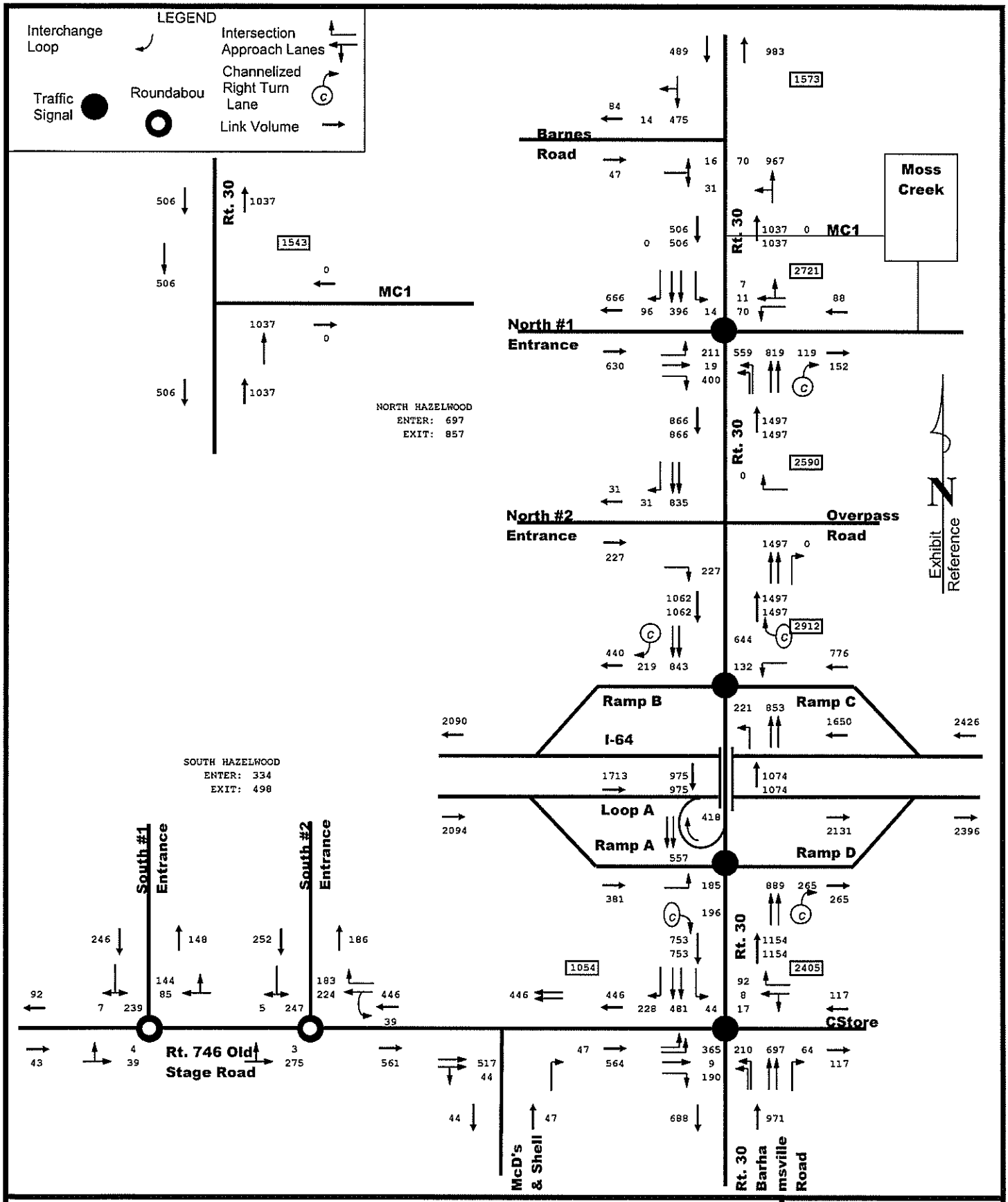
Exhibits 1c and 1d show LOS results on the network diagram.



2030 AM PEAK HOUR TOTAL TRAFFIC WITH HAZELWOOD FARMS
90 SECOND CYCLE ANALYSIS

DRW Consultants, LLC
804-794-7312

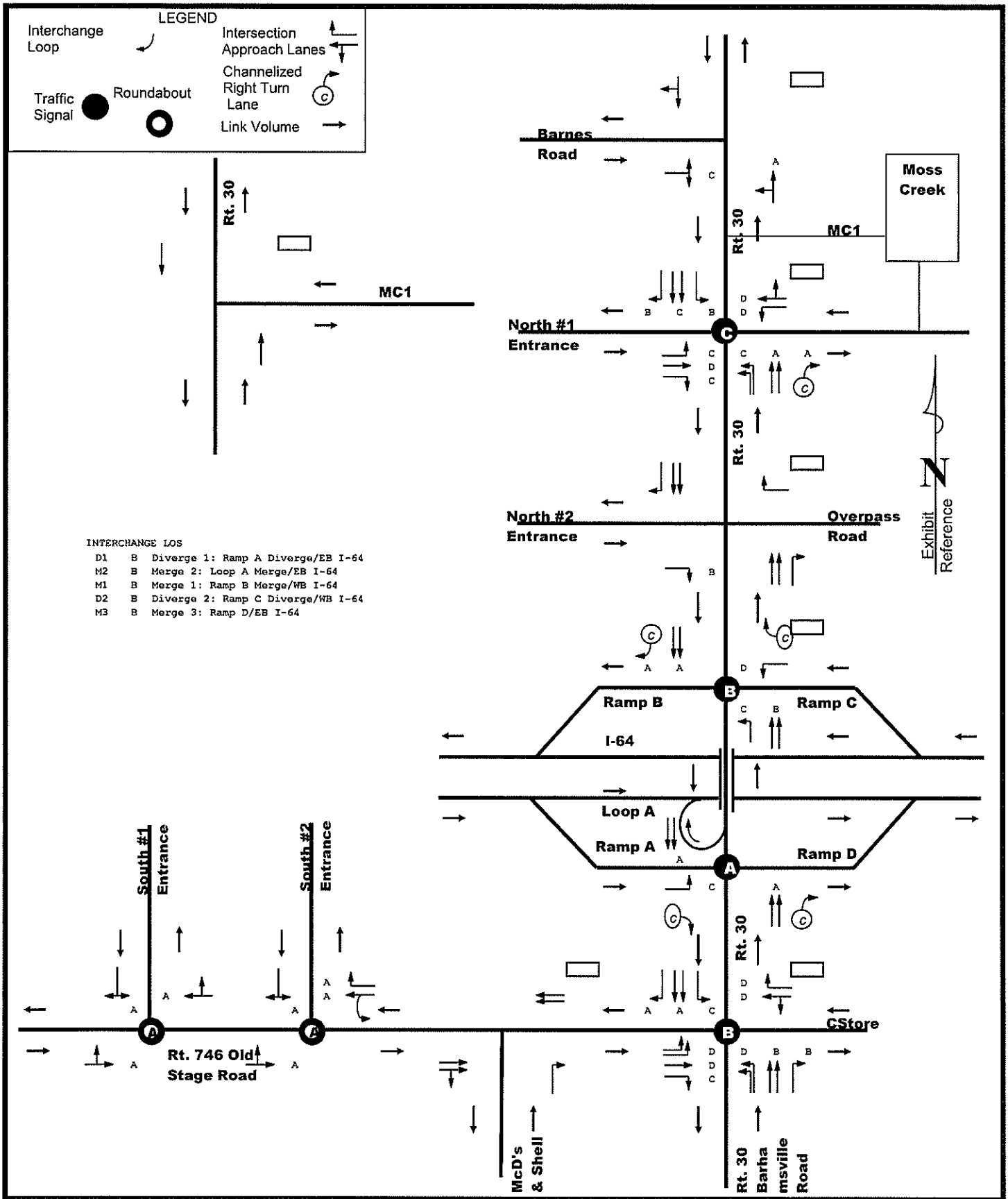
Exhibit 1a



2030 PM PEAK HOUR TOTAL TRAFFIC WITH HAZELWOOD FARMS
100 SECOND CYCLE ANALYSIS

DRW Consultants, LLC
804-794-7312

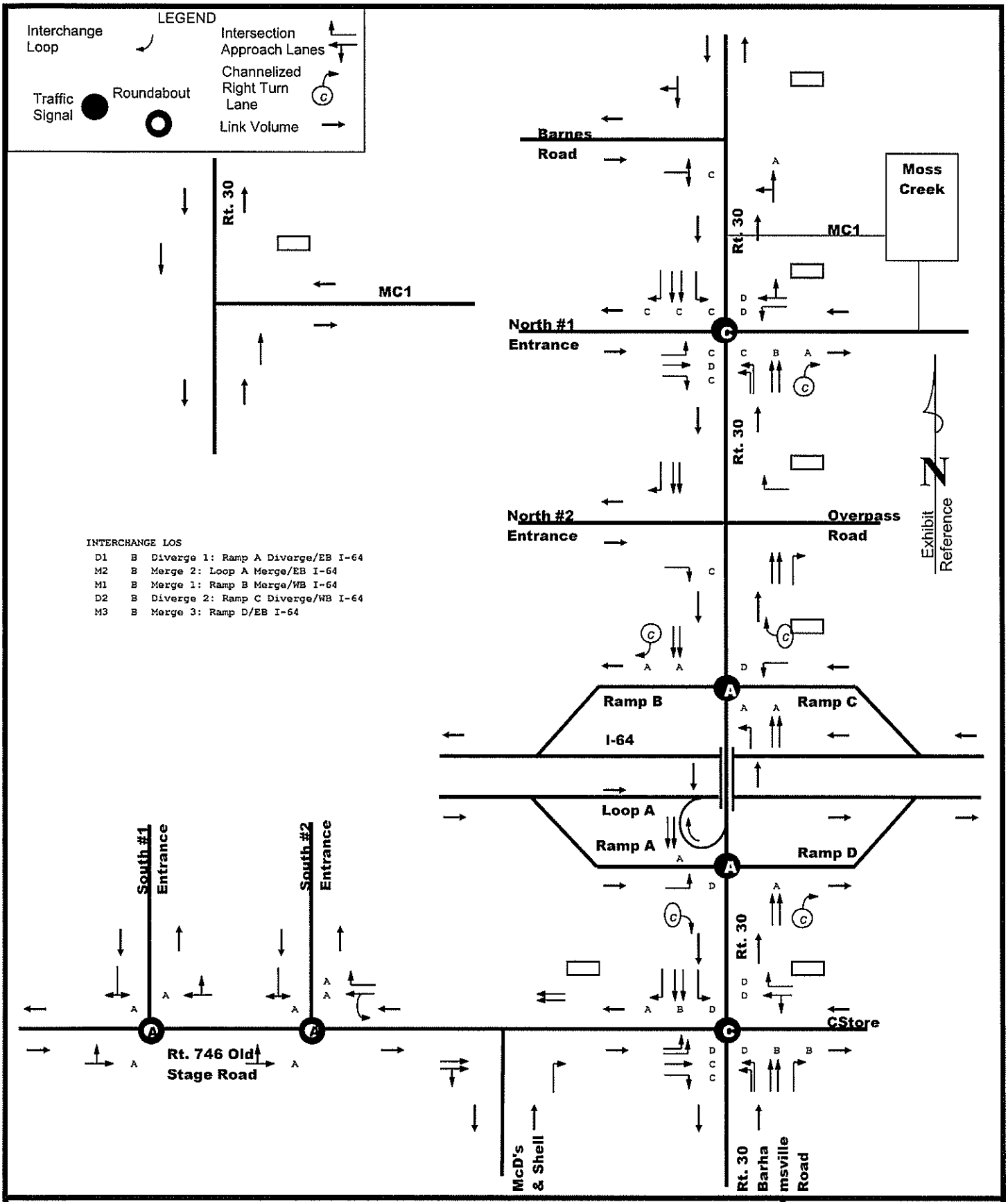
Exhibit 1b



2030 AM PEAK HOUR LEVEL OF SERVICE: 90 SECOND CYCLE
HAZELWOOD FARMS ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 1c



2030 PM PEAK HOUR LEVEL OF SERVICE: 100 SECOND CYCLE
HAZELWOOD FARMS ONLY

DRW Consultants, LLC
804-794-7312

Exhibit 1d

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	1	81	142	4	15	264	319	39	6	826	48
Future Volume (vph)	24	1	81	142	4	15	264	319	39	6	826	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1805	1900	1568	1805	1672		3433	3406	1538	1543	3471	1583
Flt Permitted	0.74	1.00	1.00	1.00	1.00		0.95	1.00	1.00	0.47	1.00	1.00
Satd. Flow (perm)	1414	1900	1568	1900	1672		3433	3406	1538	758	3471	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	1	88	154	4	16	287	347	42	7	898	52
RTOR Reduction (vph)	0	0	62	0	15	0	0	0	18	0	0	31
Lane Group Flow (vph)	26	1	26	154	5	0	287	347	24	7	898	21
Heavy Vehicles (%)	0%	0%	3%	0%	0%	0%	2%	6%	5%	17%	4%	2%
Turn Type	pm+pt	NA	pt+ov	pm+pt	NA		Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases	4			8					2	6		6
Actuated Green, G (s)	19.1	5.6	26.5	13.7	2.9		15.9	51.2	51.2	36.7	36.7	36.7
Effective Green, g (s)	19.1	5.6	26.5	13.7	2.9		15.9	51.2	51.2	36.7	36.7	36.7
Actuated g/C Ratio	0.21	0.06	0.29	0.15	0.03		0.18	0.57	0.57	0.41	0.41	0.41
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	358	118	461	277	53		606	1937	874	321	1415	645
v/s Ratio Prot	c0.01	0.00	0.02	c0.07	0.00		c0.08	0.10		0.00	c0.26	
v/s Ratio Perm	0.00			c0.02					0.02	0.01		0.01
v/c Ratio	0.07	0.01	0.06	0.56	0.09		0.47	0.18	0.03	0.02	0.63	0.03
Uniform Delay, d1	28.4	39.6	22.8	34.1	42.3		33.3	9.3	8.5	16.0	21.3	16.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.04	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.0	0.1	2.4	0.7		0.6	0.2	0.1	0.0	2.2	0.1
Delay (s)	28.5	39.6	22.8	36.5	43.0		34.3	9.9	8.6	16.0	23.5	16.1
Level of Service	C	D	C	D	D		C	A	A	B	C	B
Approach Delay (s)		24.3			37.2			20.2			23.0	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	175	0	0	147	352	0	0	995	72
Future Volume (vph)	0	0	0	175	0	0	147	352	0	0	995	72
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0			5.0	6.0			6.0	4.0
Lane Util. Factor				1.00			1.00	0.95			0.95	1.00
Frt				1.00			1.00	1.00			1.00	0.85
Flt Protected				0.95			0.95	1.00			1.00	1.00
Satd. Flow (prot)				1656			1719	3505			3471	1599
Flt Permitted				0.95			0.95	1.00			1.00	1.00
Satd. Flow (perm)				1656			1719	3505			3471	1599
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)	0	0	0	190	0	0	160	383	0	0	1082	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	190	0	0	160	383	0	0	1082	78
Heavy Vehicles (%)	2%	2%	2%	9%	0%	0%	5%	3%	2%	2%	4%	1%
Turn Type				Perm			Prot	NA			NA	Free
Protected Phases							5	2			6	
Permitted Phases				8								Free
Actuated Green, G (s)				15.0			13.0	64.0			46.0	90.0
Effective Green, g (s)				15.0			13.0	64.0			46.0	90.0
Actuated g/C Ratio				0.17			0.14	0.71			0.51	1.00
Clearance Time (s)				5.0			5.0	6.0			6.0	
Vehicle Extension (s)				3.0			3.0	3.0			3.0	
Lane Grp Cap (vph)				276			248	2492			1774	1599
v/s Ratio Prot							c0.09	0.11			c0.31	
v/s Ratio Perm				c0.11								0.05
v/c Ratio				0.69			0.65	0.15			0.61	0.05
Uniform Delay, d1				35.3			36.3	4.2			15.6	0.0
Progression Factor				1.00			0.73	0.52			0.31	1.00
Incremental Delay, d2				7.0			5.6	0.1			1.4	0.1
Delay (s)				42.3			32.3	2.3			6.2	0.1
Level of Service				D			C	A			A	A
Approach Delay (s)		0.0			42.3			11.1			5.8	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	11.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	101	0	0	398	625	0
Future Volume (vph)	101	0	0	398	625	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			6.0	6.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1770			3438	3438	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1770			3438	3438	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	0	0	433	679	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	110	0	0	433	679	0
Heavy Vehicles (%)	2%	2%	2%	5%	5%	0%
Turn Type	Prot			NA	NA	
Protected Phases	7			2	6	
Permitted Phases						
Actuated Green, G (s)	9.6			69.4	69.4	
Effective Green, g (s)	9.6			69.4	69.4	
Actuated g/C Ratio	0.11			0.77	0.77	
Clearance Time (s)	5.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	188			2651	2651	
v/s Ratio Prot	c0.06			0.13	c0.20	
v/s Ratio Perm						
v/c Ratio	0.59			0.16	0.26	
Uniform Delay, d1	38.3			2.7	2.9	
Progression Factor	1.00			0.11	0.10	
Incremental Delay, d2	4.6			0.1	0.2	
Delay (s)	42.9			0.4	0.5	
Level of Service	D			A	A	
Approach Delay (s)	42.9			0.4	0.5	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	4.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	166	7	83	31	3	72	187	350	49	59	485	261
Future Volume (vph)	166	7	83	31	3	72	187	350	49	59	485	261
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3242	1900	1509		1817	1429	3183	3471	1392	1719	3406	1442
Flt Permitted	0.95	1.00	1.00		0.96	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3242	1900	1509		1817	1429	3183	3471	1392	1719	3406	1442
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)	180	8	90	34	3	78	203	380	53	64	527	284
RTOR Reduction (vph)	0	0	63	0	0	72	0	0	30	0	0	121
Lane Group Flow (vph)	180	8	27	0	37	6	203	380	23	64	527	163
Heavy Vehicles (%)	8%	0%	7%	0%	0%	13%	10%	4%	16%	5%	6%	12%
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pt+ov
Protected Phases	8	8	8 5	4	4		5	2		1	6	6 8
Permitted Phases						4			2			
Actuated Green, G (s)	10.6	10.6	26.6		6.4	6.4	11.0	38.4	38.4	13.6	41.0	51.6
Effective Green, g (s)	10.6	10.6	26.6		6.4	6.4	11.0	38.4	38.4	13.6	41.0	51.6
Actuated g/C Ratio	0.12	0.12	0.30		0.07	0.07	0.12	0.43	0.43	0.15	0.46	0.57
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	381	223	445		129	101	389	1480	593	259	1551	826
v/s Ratio Prot	c0.06	0.00	0.02		c0.02		c0.06	0.11		0.04	c0.15	0.11
v/s Ratio Perm						0.00			0.02			
v/c Ratio	0.47	0.04	0.06		0.29	0.05	0.52	0.26	0.04	0.25	0.34	0.20
Uniform Delay, d1	37.1	35.2	22.7		39.6	39.0	37.0	16.6	15.0	33.7	15.8	9.2
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.59	0.44	0.81
Incremental Delay, d2	0.9	0.1	0.1		1.2	0.2	1.3	0.4	0.1	0.5	0.6	0.1
Delay (s)	38.0	35.2	22.8		40.9	39.2	38.3	17.0	15.2	20.4	7.5	7.6
Level of Service	D	D	C		D	D	D	B	B	C	A	A
Approach Delay (s)		33.0			39.7			23.7			8.5	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	211	19	400	70	11	7	559	819	119	14	396	96
Future Volume (vph)	211	19	400	70	11	7	559	819	119	14	396	96
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	1900	1583	1752	1786		3433	3471	1615	1805	3471	1599
Flt Permitted	0.51	1.00	1.00	1.00	1.00		0.95	1.00	1.00	0.15	1.00	1.00
Satd. Flow (perm)	965	1900	1583	1845	1786		3433	3471	1615	279	3471	1599
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)	229	21	435	76	12	8	608	890	129	15	430	104
RTOR Reduction (vph)	0	0	127	0	8	0	0	0	59	0	0	72
Lane Group Flow (vph)	229	21	308	76	12	0	608	890	70	15	430	32
Heavy Vehicles (%)	1%	0%	2%	3%	0%	0%	2%	4%	0%	0%	4%	1%
Turn Type	pm+pt	NA	pt+ov	pm+pt	NA		Prot	NA	Perm	pm+pt	NA	Perm
Protected Phases	7	4	4 5	3	8		5	2		1	6	
Permitted Phases	4			8					2	6		6
Actuated Green, G (s)	26.8	16.2	42.8	8.4	2.8		26.6	54.4	54.4	30.6	30.6	30.6
Effective Green, g (s)	26.8	16.2	42.8	8.4	2.8		26.6	54.4	54.4	30.6	30.6	30.6
Actuated g/C Ratio	0.27	0.16	0.43	0.08	0.03		0.27	0.54	0.54	0.31	0.31	0.31
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	6.0	6.0	5.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	414	307	677	149	50		913	1888	878	128	1062	489
v/s Ratio Prot	c0.10	0.01	0.19	0.03	0.01		c0.18	c0.26		0.00	c0.12	
v/s Ratio Perm	c0.04			0.01					0.04	0.03		0.02
v/c Ratio	0.55	0.07	0.45	0.51	0.24		0.67	0.47	0.08	0.12	0.40	0.07
Uniform Delay, d1	30.8	35.5	20.3	43.9	47.6		32.7	14.0	10.9	25.4	27.5	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.87	0.66	0.11	1.00	1.00	1.00
Incremental Delay, d2	1.6	0.1	0.5	2.9	2.5		1.8	0.8	0.2	0.4	1.1	0.3
Delay (s)	32.4	35.6	20.8	46.8	50.1		30.4	10.1	1.4	25.9	28.6	24.8
Level of Service	C	D	C	D	D		C	B	A	C	C	C
Approach Delay (s)		25.1			47.5			17.0			27.8	
Approach LOS		C			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	60.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	132	0	0	221	853	0	0	843	219
Future Volume (vph)	0	0	0	132	0	0	221	853	0	0	843	219
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0			5.0	6.0			6.0	4.0
Lane Util. Factor				1.00			1.00	0.95			0.95	1.00
Frt				1.00			1.00	1.00			1.00	0.85
Flt Protected				0.95			0.95	1.00			1.00	1.00
Satd. Flow (prot)				1719			1703	3505			3505	1583
Flt Permitted				0.95			0.25	1.00			1.00	1.00
Satd. Flow (perm)				1719			445	3505			3505	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	143	0	0	240	927	0	0	916	238
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	143	0	0	240	927	0	0	916	238
Heavy Vehicles (%)	2%	2%	2%	5%	0%	0%	6%	3%	2%	2%	3%	2%
Turn Type				Perm			pm+pt	NA			NA	Free
Protected Phases							5	2			6	
Permitted Phases				8			2					Free
Actuated Green, G (s)				13.4			75.6	75.6			60.7	100.0
Effective Green, g (s)				13.4			75.6	75.6			60.7	100.0
Actuated g/C Ratio				0.13			0.76	0.76			0.61	1.00
Clearance Time (s)				5.0			5.0	6.0			6.0	
Vehicle Extension (s)				3.0			3.0	3.0			3.0	
Lane Grp Cap (vph)				230			460	2649			2127	1583
v/s Ratio Prot							c0.05	0.26			0.26	
v/s Ratio Perm				c0.08			c0.34					0.15
v/c Ratio				0.62			0.52	0.35			0.43	0.15
Uniform Delay, d1				40.9			5.0	4.0			10.5	0.0
Progression Factor				1.00			1.77	1.77			0.78	1.00
Incremental Delay, d2				5.1			1.0	0.3			0.6	0.2
Delay (s)				46.1			9.9	7.5			8.8	0.2
Level of Service				D			A	A			A	A
Approach Delay (s)		0.0			46.1			8.0			7.0	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	185	0	0	889	557	0
Future Volume (vph)	185	0	0	889	557	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0			6.0	6.0	
Lane Util. Factor	1.00			0.95	0.95	
Frt	1.00			1.00	1.00	
Flt Protected	0.95			1.00	1.00	
Satd. Flow (prot)	1752			3505	3471	
Flt Permitted	0.95			1.00	1.00	
Satd. Flow (perm)	1752			3505	3471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	201	0	0	966	605	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	201	0	0	966	605	0
Heavy Vehicles (%)	3%	2%	2%	3%	4%	0%
Turn Type	Prot			NA	NA	
Protected Phases	7			2	6	
Permitted Phases						
Actuated Green, G (s)	16.8			72.2	72.2	
Effective Green, g (s)	16.8			72.2	72.2	
Actuated g/C Ratio	0.17			0.72	0.72	
Clearance Time (s)	5.0			6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	
Lane Grp Cap (vph)	294			2530	2506	
v/s Ratio Prot	c0.11			c0.28	0.17	
v/s Ratio Perm						
v/c Ratio	0.68			0.38	0.24	
Uniform Delay, d1	39.1			5.3	4.7	
Progression Factor	1.00			0.22	1.75	
Incremental Delay, d2	6.4			0.4	0.2	
Delay (s)	45.5			1.5	8.4	
Level of Service	D			A	A	
Approach Delay (s)	45.5			1.5	8.4	
Approach LOS	D			A	A	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	365	9	190	17	8	92	210	697	64	44	481	228
Future Volume (vph)	365	9	190	17	8	92	210	697	64	44	481	228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0	6.0	6.0	5.0	6.0	6.0
Lane Util. Factor	0.97	1.00	1.00		1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85		1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00		0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3242	1712	1482		1762	1583	3367	3539	1538	1770	3505	1538
Flt Permitted	0.95	1.00	1.00		0.97	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3242	1712	1482		1762	1583	3367	3539	1538	1770	3505	1538
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)	397	10	207	18	9	100	228	758	70	48	523	248
RTOR Reduction (vph)	0	0	138	0	0	94	0	0	36	0	0	104
Lane Group Flow (vph)	397	10	69	0	27	6	228	758	34	48	523	144
Heavy Vehicles (%)	8%	11%	9%	0%	13%	2%	4%	2%	5%	2%	3%	5%
Turn Type	Split	NA	pt+ov	Split	NA	Perm	Prot	NA	Perm	Prot	NA	pt+ov
Protected Phases	8	8	8 5	4	4		5	2		1	6	6 8
Permitted Phases						4			2			
Actuated Green, G (s)	18.8	18.8	33.4		6.2	6.2	14.6	48.8	48.8	5.2	39.4	63.2
Effective Green, g (s)	18.8	18.8	33.4		6.2	6.2	14.6	48.8	48.8	5.2	39.4	58.2
Actuated g/C Ratio	0.19	0.19	0.33		0.06	0.06	0.15	0.49	0.49	0.05	0.39	0.58
Clearance Time (s)	5.0	5.0			5.0	5.0	5.0	6.0	6.0	5.0	6.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	609	321	494		109	98	491	1727	750	92	1380	895
v/s Ratio Prot	c0.12	0.01	0.05		c0.02		c0.07	c0.21		0.03	0.15	0.09
v/s Ratio Perm						0.00			0.02			
v/c Ratio	0.65	0.03	0.14		0.25	0.06	0.46	0.44	0.05	0.52	0.38	0.16
Uniform Delay, d1	37.6	33.2	23.3		44.7	44.2	39.1	16.7	13.4	46.2	21.6	9.6
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.90	0.60	0.27
Incremental Delay, d2	2.5	0.0	0.1		1.2	0.3	0.7	0.8	0.1	5.2	0.8	0.1
Delay (s)	40.1	33.2	23.4		45.9	44.4	39.8	17.5	13.5	46.7	13.8	2.7
Level of Service	D	C	C		D	D	D	B	B	D	B	A
Approach Delay (s)		34.3			44.7			22.0			12.3	
Approach LOS		C			D			C			B	

Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	21.0
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	76	16	342	804	13
Future Vol, veh/h	14	76	16	342	804	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	8	6	6	4	0
Mvmt Flow	15	83	17	372	874	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1287	881	888	0	-	0
Stage 1	881	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.4	6.28	4.16	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.372	2.254	-	-	-
Pot Cap-1 Maneuver	183	337	746	-	-	-
Stage 1	408	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	178	337	746	-	-	-
Mov Cap-2 Maneuver	178	-	-	-	-	-
Stage 1	396	-	-	-	-	-
Stage 2	677	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.1	0.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	746	-	296	-	-
HCM Lane V/C Ratio	0.023	-	0.33	-	-
HCM Control Delay (s)	9.9	0	23.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.4	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↱		↑↑	↑↑	↱
Traffic Vol, veh/h	0	37	0	622	1030	19
Future Vol, veh/h	0	37	0	622	1030	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	40	0	676	1120	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	560	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	472	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	472	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	472	-	-
HCM Lane V/C Ratio	-	0.085	-	-
HCM Control Delay (s)	-	13.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	31	70	967	475	14
Future Vol, veh/h	16	31	70	967	475	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	6	3	6	3	4	0
Mvmt Flow	17	34	76	1051	516	15

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1727	524	531	0	-	0
Stage 1	524	-	-	-	-	-
Stage 2	1203	-	-	-	-	-
Critical Hdwy	6.46	6.23	4.16	-	-	-
Critical Hdwy Stg 1	5.46	-	-	-	-	-
Critical Hdwy Stg 2	5.46	-	-	-	-	-
Follow-up Hdwy	3.554	3.327	2.254	-	-	-
Pot Cap-1 Maneuver	95	551	1016	-	-	-
Stage 1	586	-	-	-	-	-
Stage 2	279	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	78	551	1016	-	-	-
Mov Cap-2 Maneuver	78	-	-	-	-	-
Stage 1	481	-	-	-	-	-
Stage 2	279	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.7	0.6	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1016	-	180	-	-
HCM Lane V/C Ratio	0.075	-	0.284	-	-
HCM Control Delay (s)	8.8	0	32.7	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↱		↑↑	↑↑	↱
Traffic Vol, veh/h	0	227	0	1497	778	31
Future Vol, veh/h	0	227	0	1497	778	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	200
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	3	3	3	3
Mvmt Flow	0	247	0	1627	846	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	423	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	-	-
Pot Cap-1 Maneuver	0	579	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	579	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	579	-	-
HCM Lane V/C Ratio	-	0.426	-	-
HCM Control Delay (s)	-	15.8	-	-
HCM Lane LOS	-	C	-	-
HCM 95th %tile Q(veh)	-	2.1	-	-

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	26	1	88	154	20	287	347	42	7	898	52
v/c Ratio	0.12	0.01	0.15	0.55	0.14	0.63	0.16	0.04	0.02	0.56	0.06
Control Delay	30.1	38.0	0.6	39.9	22.9	44.1	9.3	0.1	15.2	20.5	0.1
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	30.1	38.0	0.6	39.9	22.9	44.1	9.3	0.1	15.2	20.5	0.1
Queue Length 50th (ft)	14	1	0	83	2	70	36	0	2	212	0
Queue Length 95th (ft)	31	5	0	122	24	109	107	1	11	276	0
Internal Link Dist (ft)		808			693		749			365	
Turn Bay Length (ft)			200			300		350	150		200
Base Capacity (vph)	214	147	548	342	273	495	2125	1037	420	1608	850
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	0.12	0.01	0.16	0.45	0.07	0.58	0.16	0.04	0.02	0.56	0.06

Intersection Summary

Lane Group	WBL	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	190	160	383	1082	78
v/c Ratio	0.69	0.65	0.15	0.61	0.05
Control Delay	47.9	38.6	2.5	6.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	38.6	2.5	6.8	0.1
Queue Length 50th (ft)	102	92	14	38	0
Queue Length 95th (ft)	166	141	37	101	m0
Internal Link Dist (ft)			858	722	
Turn Bay Length (ft)		200			300
Base Capacity (vph)	349	305	2491	1773	1599
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.54	0.52	0.15	0.61	0.05

Intersection Summary

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

Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	110	433	679
v/c Ratio	0.51	0.16	0.25
Control Delay	44.6	0.5	0.5
Queue Delay	0.0	0.0	0.0
Total Delay	44.6	0.5	0.5
Queue Length 50th (ft)	60	3	1
Queue Length 95th (ft)	106	5	0
Internal Link Dist (ft)	181	207	319
Turn Bay Length (ft)			
Base Capacity (vph)	472	2735	2735
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.23	0.16	0.25

Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	180	8	90	37	78	203	380	53	64	527	284
v/c Ratio	0.47	0.04	0.16	0.24	0.23	0.52	0.24	0.07	0.22	0.33	0.29
Control Delay	40.8	34.0	0.6	41.7	1.6	41.7	19.9	0.2	19.8	8.1	1.5
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	40.8	34.0	0.6	41.7	1.6	41.7	19.9	0.2	19.8	8.1	1.5
Queue Length 50th (ft)	49	4	0	20	0	56	77	0	29	61	0
Queue Length 95th (ft)	80	17	0	49	0	87	129	0	51	87	3
Internal Link Dist (ft)		584		306			932			541	
Turn Bay Length (ft)	200		200			200		200	200		
Base Capacity (vph)	468	274	584	201	363	495	1627	736	310	1590	994
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	0.38	0.03	0.15	0.18	0.21	0.41	0.23	0.07	0.21	0.33	0.29

Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	229	21	435	76	20	608	890	129	15	430	104
v/c Ratio	0.59	0.08	0.58	0.44	0.15	0.75	0.42	0.12	0.07	0.34	0.15
Control Delay	38.1	34.5	9.5	40.3	34.9	36.9	9.8	0.3	28.0	27.2	0.4
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	38.1	34.5	9.5	40.3	34.9	36.9	9.8	0.3	28.0	27.2	0.4
Queue Length 50th (ft)	133	13	77	48	7	194	91	1	6	99	0
Queue Length 95th (ft)	172	30	86	65	31	210	148	2	25	183	0
Internal Link Dist (ft)		808			693		749			365	
Turn Bay Length (ft)			200			300		350	150		200
Base Capacity (vph)	492	494	941	174	132	961	2095	1048	211	1269	709
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	0.47	0.04	0.46	0.44	0.15	0.63	0.42	0.12	0.07	0.34	0.15

Intersection Summary

Lane Group	WBL	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	143	240	927	916	238
v/c Ratio	0.62	0.52	0.35	0.43	0.15
Control Delay	52.3	10.3	8.2	9.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	52.3	10.3	8.2	9.7	0.2
Queue Length 50th (ft)	87	38	138	124	0
Queue Length 95th (ft)	144	93	227	168	0
Internal Link Dist (ft)			858	722	
Turn Bay Length (ft)		200			300
Base Capacity (vph)	309	630	2649	2126	1583
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.46	0.38	0.35	0.43	0.15

Intersection Summary

Lane Group	EBL	NBT	SBT
Lane Group Flow (vph)	201	966	605
v/c Ratio	0.68	0.38	0.24
Control Delay	50.5	1.7	9.3
Queue Delay	0.0	0.0	0.0
Total Delay	50.5	1.7	9.3
Queue Length 50th (ft)	122	6	147
Queue Length 95th (ft)	183	14	157
Internal Link Dist (ft)	181	207	319
Turn Bay Length (ft)			
Base Capacity (vph)	543	2529	2505
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.37	0.38	0.24

Intersection Summary

Lane Group	EBL	EBT	EBR	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	397	10	207	27	100	228	758	70	48	523	248
v/c Ratio	0.65	0.03	0.33	0.20	0.40	0.54	0.41	0.08	0.34	0.35	0.23
Control Delay	42.3	30.8	3.2	46.8	7.7	45.3	18.9	0.3	45.5	14.0	0.8
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	42.3	30.8	3.2	46.8	7.7	45.3	18.9	0.3	45.5	14.0	0.8
Queue Length 50th (ft)	121	5	0	17	0	70	173	0	32	48	2
Queue Length 95th (ft)	162	19	29	43	22	105	257	3	68	127	6
Internal Link Dist (ft)		584		306			932			541	
Turn Bay Length (ft)	200		200			200		200	200		
Base Capacity (vph)	745	393	683	158	271	486	1832	859	159	1496	1085
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	0.53	0.03	0.30	0.17	0.37	0.47	0.41	0.08	0.30	0.35	0.23

Intersection Summary

Intersection: 1: Route 30 & North #1/Fieldstone Pkwy

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	L	T	T	L	T	T
Maximum Queue (ft)	63	12	108	189	45	139	162	148	20	37	170	216
Average Queue (ft)	17	1	44	94	14	73	97	44	1	3	85	116
95th Queue (ft)	46	6	90	156	38	122	145	106	10	20	147	182
Link Distance (ft)	808	808		675	675			748	748		365	365
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)			200			300	300			150		
Storage Blk Time (%)											0	0
Queuing Penalty (veh)											0	0

Intersection: 1: Route 30 & North #1/Fieldstone Pkwy

Movement	SB
Directions Served	R
Maximum Queue (ft)	49
Average Queue (ft)	14
95th Queue (ft)	41
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Route 30 & Ramp B To I-64 WB/Ramp From I-64 WB

Movement	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	T	T
Maximum Queue (ft)	106	198	167	80	145	265
Average Queue (ft)	88	96	45	13	42	119
95th Queue (ft)	112	169	119	49	105	221
Link Distance (ft)	89		869	869	700	700
Upstream Blk Time (%)	29					
Queuing Penalty (veh)	51					
Storage Bay Dist (ft)		200				
Storage Blk Time (%)		1	0		0	
Queuing Penalty (veh)		1	0		0	

Intersection: 3: Route 30 & Ramp From I-64 EB

Movement	EB	NB	NB	SB	SB
Directions Served	L	T	T	T	T
Maximum Queue (ft)	141	66	58	62	89
Average Queue (ft)	59	14	10	14	23
95th Queue (ft)	110	48	40	45	68
Link Distance (ft)	151	179	179	309	309
Upstream Blk Time (%)	0				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: Route 30 & Old Stage Road/Convenience Store

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	LT	R	L	L	T	T	R	L
Maximum Queue (ft)	111	145	44	124	79	79	156	143	130	140	39	118
Average Queue (ft)	46	68	5	46	27	29	59	56	41	40	3	34
95th Queue (ft)	92	119	26	99	63	61	123	112	96	101	19	83
Link Distance (ft)		482	482		305	305			914	914		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			200			200	200			200	200
Storage Blk Time (%)		0					0		0			
Queuing Penalty (veh)		0					0		0			

Intersection: 4: Route 30 & Old Stage Road/Convenience Store

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	106	130	131
Average Queue (ft)	33	41	38
95th Queue (ft)	81	95	96
Link Distance (ft)	551	551	551
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Route 30 & Ramp From I-64 EB/Ramp D To I-64 EB

Movement	EB
Directions Served	R
Maximum Queue (ft)	3
Average Queue (ft)	0
95th Queue (ft)	3
Link Distance (ft)	271
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Route 30 & Loop A to I-64 EB

Movement	SB
Directions Served	R
Maximum Queue (ft)	67
Average Queue (ft)	10
95th Queue (ft)	41
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 7: Route 30 & Barnes Road

Movement	EB	NB	B16	SB
Directions Served	LR	LT	T	TR
Maximum Queue (ft)	110	145	6	3
Average Queue (ft)	47	22	0	0
95th Queue (ft)	89	87	6	3
Link Distance (ft)	936	112	329	1180
Upstream Blk Time (%)		1		
Queuing Penalty (veh)		2		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 8: Route 30

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)	

Intersection: 13: Ramp C From I-64 WB & Ramp From I-64 WB

Movement	NW
Directions Served	L
Maximum Queue (ft)	188
Average Queue (ft)	59
95th Queue (ft)	162
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: Route 30 & Ramp From I-64 WB

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)	

Intersection: 17: Ramp From I-64 EB & Ramp A From I-64 EB

Movement	EB
Directions Served	TR
Maximum Queue (ft)	24
Average Queue (ft)	1
95th Queue (ft)	20
Link Distance (ft)	1148
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 27: Route 30 & North #2

Movement	EB
Directions Served	R
Maximum Queue (ft)	49
Average Queue (ft)	18
95th Queue (ft)	40
Link Distance (ft)	811
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 28: Old Stage Road & South #2

Movement	EB	WB	WB	SB
Directions Served	LT	UT	R	LR
Maximum Queue (ft)	65	34	5	56
Average Queue (ft)	11	2	0	15
95th Queue (ft)	42	16	5	42
Link Distance (ft)	385	482	482	916
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 34: Old Stage Road & South #1

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	42	20	49
Average Queue (ft)	3	1	4
95th Queue (ft)	21	9	24
Link Distance (ft)	403	385	895
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 55

Intersection: 1: Route 30 & North #1/Fieldstone Pkwy

Movement	EB	EB	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	TR	L	L	T	T	L	T	T
Maximum Queue (ft)	211	160	274	115	56	229	395	508	434	50	166	195
Average Queue (ft)	115	18	138	53	14	133	165	237	36	13	80	103
95th Queue (ft)	193	94	236	100	42	204	286	427	215	40	136	169
Link Distance (ft)	808	808		675	675			748	748		365	365
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								1	0			
Storage Bay Dist (ft)			200			300	300			150		
Storage Blk Time (%)			3					5	0		0	0
Queuing Penalty (veh)			1					30	0		0	0

Intersection: 1: Route 30 & North #1/Fieldstone Pkwy

Movement	SB
Directions Served	R
Maximum Queue (ft)	75
Average Queue (ft)	33
95th Queue (ft)	64
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	200
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 2: Route 30 & Ramp B To I-64 WB/Ramp From I-64 WB

Movement	WB	NB	NB	NB	SB	SB
Directions Served	L	L	T	T	T	T
Maximum Queue (ft)	100	197	193	136	141	252
Average Queue (ft)	79	91	74	39	51	117
95th Queue (ft)	111	165	153	99	114	210
Link Distance (ft)	89		869	869	700	700
Upstream Blk Time (%)	18					
Queuing Penalty (veh)	24					
Storage Bay Dist (ft)		200				
Storage Blk Time (%)		0	0			0
Queuing Penalty (veh)		2	0			0

Intersection: 3: Route 30 & Ramp From I-64 EB

Movement	EB	NB	NB	SB	SB
Directions Served	L	T	T	T	T
Maximum Queue (ft)	161	117	101	96	121
Average Queue (ft)	110	30	22	35	41
95th Queue (ft)	168	84	68	80	95
Link Distance (ft)	151	179	179	309	309
Upstream Blk Time (%)	4				
Queuing Penalty (veh)	7				
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 4: Route 30 & Old Stage Road/Convenience Store

Movement	EB	EB	EB	EB	WB	WB	NB	NB	NB	NB	NB	SB
Directions Served	L	L	T	R	LT	R	L	L	T	T	R	L
Maximum Queue (ft)	200	227	41	206	62	90	129	114	192	207	27	78
Average Queue (ft)	108	122	7	90	20	36	56	52	82	84	2	25
95th Queue (ft)	175	192	29	167	51	69	109	100	158	166	14	62
Link Distance (ft)		482	482		305	305			914	914		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	200			200			200	200			200	200
Storage Blk Time (%)	1	1		1					0	0		
Queuing Penalty (veh)	1	1		0					0	0		

Intersection: 4: Route 30 & Old Stage Road/Convenience Store

Movement	SB	SB	SB
Directions Served	T	T	R
Maximum Queue (ft)	120	122	122
Average Queue (ft)	50	53	36
95th Queue (ft)	101	106	91
Link Distance (ft)	551	551	551
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 5: Route 30 & Ramp From I-64 EB/Ramp D To I-64 EB

Movement	SB
Directions Served	T
Maximum Queue (ft)	3
Average Queue (ft)	0
95th Queue (ft)	3
Link Distance (ft)	179
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 6: Route 30 & Loop A to I-64 EB

Movement	SB
Directions Served	R
Maximum Queue (ft)	40
Average Queue (ft)	2
95th Queue (ft)	17
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	50
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 7: Route 30 & Barnes Road

Movement	EB	NB	B16	B8	SB
Directions Served	LR	LT	T	T	TR
Maximum Queue (ft)	109	184	139	10	6
Average Queue (ft)	36	70	7	0	0
95th Queue (ft)	82	169	71	10	6
Link Distance (ft)	936	112	317	539	1180
Upstream Blk Time (%)		2	0		
Queuing Penalty (veh)		25	1		
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 13: Ramp C From I-64 WB & Ramp From I-64 WB

Movement	NW
Directions Served	L
Maximum Queue (ft)	148
Average Queue (ft)	30
95th Queue (ft)	103
Link Distance (ft)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	400
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 14: Route 30 & Ramp From I-64 WB

Movement	NB	NB	NW
Directions Served	T	T	R
Maximum Queue (ft)	47	16	57
Average Queue (ft)	2	1	3
95th Queue (ft)	23	10	32
Link Distance (ft)	700	700	773
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 17: Ramp From I-64 EB & Ramp A From I-64 EB

Movement	EB
Directions Served	TR
Maximum Queue (ft)	100
Average Queue (ft)	9
95th Queue (ft)	53
Link Distance (ft)	1148
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 27: Route 30 & North #2

Movement	EB	NB	NB	B9	B9	B9
Directions Served	R	T	T	T	T	
Maximum Queue (ft)	156	34	17	474	517	333
Average Queue (ft)	61	2	1	34	42	22
95th Queue (ft)	116	28	17	245	270	199
Link Distance (ft)	811	170	170	511	511	511
Upstream Blk Time (%)		0	0	0	0	0
Queuing Penalty (veh)		1	0	1	1	1
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 28: Old Stage Road & South #2

Movement	EB	WB	SB
Directions Served	LT	UT	LR
Maximum Queue (ft)	111	16	106
Average Queue (ft)	42	1	36
95th Queue (ft)	87	10	82
Link Distance (ft)	385	482	916
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

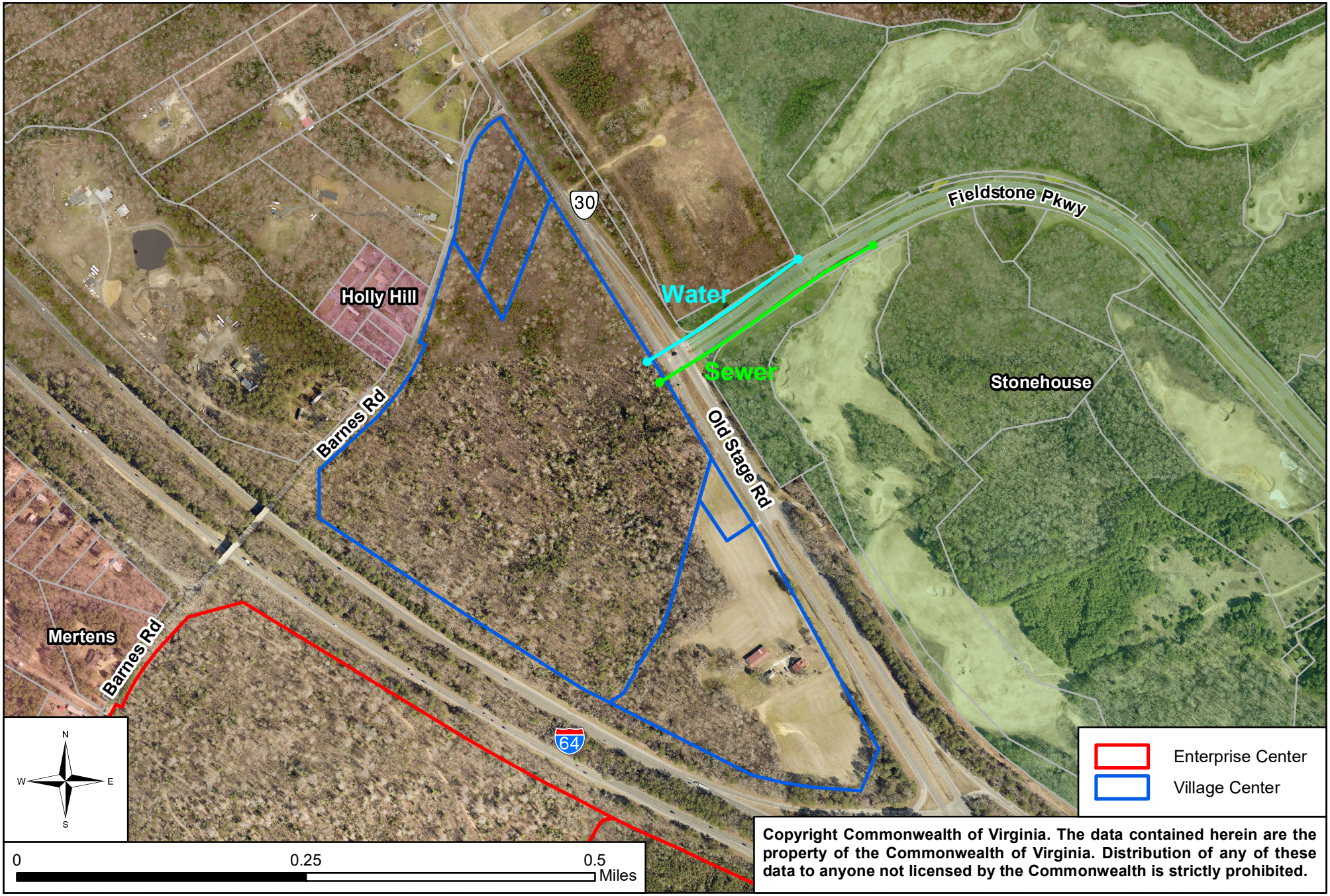
Intersection: 34: Old Stage Road & South #1

Movement	EB	WB	SB
Directions Served	LT	TR	LR
Maximum Queue (ft)	38	3	78
Average Queue (ft)	7	0	19
95th Queue (ft)	30	3	59
Link Distance (ft)	403	385	895
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 97

JCC Z-19-0006, SUP-19-0005 & SUP-19-0006: Hazelwood Enterprise Center & Village Center



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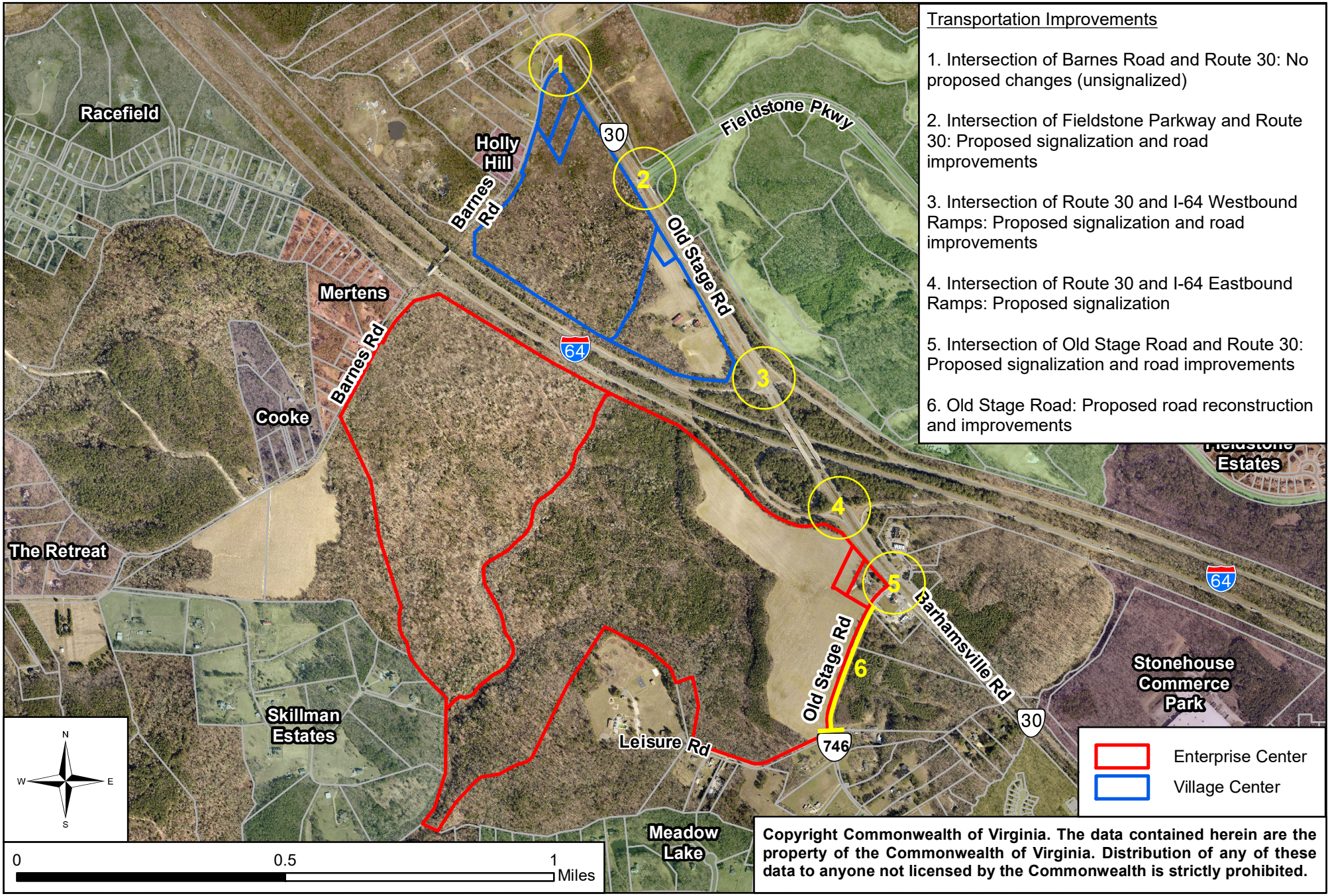
JCC Z-19-0006, SUP-19-0005 & SUP-19-0006: Hazelwood Enterprise Center & Village Center



Transportation Improvements

1. Intersection of Barnes Road and Route 30: No proposed changes (unsignalized)

2. Intersection of Fieldstone Parkway and Route 30: Proposed signalization and road improvements

3. Intersection of Route 30 and I-64 Westbound Ramps: Proposed signalization and road improvements

4. Intersection of Route 30 and I-64 Eastbound Ramps: Proposed signalization

5. Intersection of Old Stage Road and Route 30: Proposed signalization and road improvements

6. Old Stage Road: Proposed road reconstruction and improvements

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N/F
ASSOCIATION AT STONEHOUSE INC (THE)
9330 FIELDSTONE PARKWAY
PARCEL ID:
0440100024B
ZONED PR PUD RESIDENTIAL

FIELDSTONE PARKWAY

SIGNALIZED INTERSECTION STA 313+08

STA 315+00

NORTH BOUND

STA 310+00

309+00

310+00

311+00

312+00

313+00

314+00

315+00

OLD STAGE ROAD
STATE ROUTE 30
VARIABLE WIDTH R/W

SOUTH BOUND

MATCHLINE – SEE BELOW

NORTH #1 ENTRANCE

GRAPHIC SCALE
20' 0' 20' 40'
SCALE: 1" = 20'

N/F
ASSOCIATION AT STONEHOUSE INC
9300 FIELDSTONE PARKWAY
PARCEL ID:
0440100027
ZONED PC PUD RESIDENTIAL

END TAPER
STA 321+09

GRAPHIC SCALE
20' 0' 20' 40'
SCALE: 1" = 20'

CLOSE CROSSOVER
STA 321+35

STA 320+00

NORTH BOUND

OLD STAGE ROAD
STATE ROUTE 30
VARIABLE WIDTH R/W

316+00

317+00

318+00

319+00

320+00

321+00

322+00

323+00

CLOSE CROSSOVER
AS DIRECTED BY VDOT

MATCHLINE – SEE ABOVE

SOUTH BOUND

PROPOSED RIGHT IN/RIGHT OUT

NORTH #2 ENTRANCE

Rev.	Date	Description	By
3	3/12/21	REVISED PER JCC COMMENTS	JAG
2	12/20/19	UPDATED PER JCC COMMENTS	JAG
1	8/20/19	UPDATED PER JCC COMMENTS	JAG

5248 Olde Towne Road, Suite 1
Williamsburg, Virginia 23188
Phone: (757) 253-0040
Fax: (757) 220-8994
www.aesva.com

AES CONSULTING ENGINEERS
Hampton Roads | Central Virginia | Middle Peninsula

SPECIAL USE PERMIT
FOR
VILLAGE CENTER
AT
HAZELWOOD FARMS

STONEHOUSE DISTRICT
JAMES CITY COUNTY
VIRGINIA

Project Contacts:	JAG
Project Number:	W10325-01
Scale: 1"=20'	Date: 2/7/19

Sheet Title:
CONCEPTUAL RT. 30 ROAD IMPROVEMENTS PLAN

Sheet Number
MP-6

S:\JOBS\W10325\01\Graphics\Exhibits\MP-6.dwg 2/12/2021 4:36:34 PM Darryl.grim

Thomas Wysong

From: Beth Klapper
Sent: Tuesday, October 5, 2021 9:04 AM
To: Thomas Wysong; Paul Holt; Josh Crump
Subject: FW: [External] Comments on SUP 19-0006 Hazelwood Farms for your review

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From: knlodding@cox.net <knlodding@cox.net>
Sent: Monday, October 4, 2021 2:09 PM
To: Community Development <community.development@jamescitycountyva.gov>
Subject: [External] Comments on SUP 19-0006 Hazelwood Farms for your review

To: Community Development Planning Commission

Subject: Special Use Permit 19-0006 Hazelwood Farms request

As residents of Stonehouse at Mill Pond, we wish to enter the following comments to encourage ***denial*** of SUP 19-0006.

1. If granted, those very large-scale, irreversible alterations would result in significant and unimaginable damage to the area. The permit would have wide-spectrum impact, which would negatively affect everything from traffic volume to overall quality of life.

2. It would unnecessarily replicate existing local businesses, specifically a new and unnecessary gas/convenience store.

3. It is an open-ended wish-list for building environmental and quality of life blights. There is no information presented that shows a global plan for safe and considerate development with respect for both the environment and the local neighborhoods' quality of life. Information presented shows a common denominator of predominately industrial development with maximum use of the land. There is not even mention of a buffering green-zone to separate industry from neighborhoods. There is no consideration for the impact that SUP 19-00006 would have on current residents.

4. The traffic increase resulting from stores, businesses, warehouses, apartments, and other establishments would have a potentially dangerous impact on the Rt. 30/Fieldstone Parkway intersection, minimally requiring traffic control devices and potentially requiring re-design of alternate roadways. Each solution would have non-trivial, non-zero cost impact on the environment as measured in quality of life.

5. Environmental impacts of the plan are potentially significant. There would most likely be increased roadside trash from the convenience store and other industrial/storage/transportation businesses. Air quality would definitely degrade from the increased numbers of cars and trucks traversing the area. There is a real environmental potential for spillage/leakage of harmful and dangerous chemicals from the proposed businesses.

6. The proposed convenience store is likely to be permitted to sell alcoholic beverages for off-site consumption. It has been established by several studies that criminal activity is increased by such sales and the 24-hour nature of those businesses. This could lead to a significant negative impact on the residents of local neighborhoods, necessitating increased policing.

7. JCC faces the known issue of providing affordable water for the growing community. With no optimal solution in place, or currently planned, extreme care needs to be undertaken when authorizing significant new, open-ended growth on our already taxed water supply system.

There are numerous other issues with the proposed permit. A line-by-line analysis of the document would be both lengthy and revealing as to the detrimental nature of this open-ended request. The unbounded scope of the proposal opens a pandora's box of questions and issues that must be addressed. The proposed uses, not constrained in any reasonable manner, offers a worse-case scenario over time that would turn the local area into a non-desirable, low-tech industrial site. Over time, alternate scenarios could very well lead, to significant population growth that would drain resources, such as water and increase tax demands to pay for additional policing, schools, roads, and similar infrastructure construction.

What looks initially shiny will inevitably decay with time. It is nature. Decay sets in, no matter the original intentions. Those who would economically benefit from this special use permit will be isolated by a cash infusion from all the damages it will cause. This special use permit is a request for carte blanche to irrevocably alter the land and the lives of numerous local citizens for the sole benefit of the permit applicant. The area in question has been and is agricultural in purpose. Let us keep and maintain it that way, rejecting the irrevocable ecological and economic damages the permit would force upon the environment and those who live here and call it home.

Thank you.

Kenneth and Deborah Lodding
3551 Splitwood Road,
Toano, VA. 23168
757.719.2934
knlodding@cox.net

Thomas Wysong

From: Paul Holt
Sent: Wednesday, August 25, 2021 10:28 AM
To: Thomas Wysong
Cc: Josh Crump
Subject: FW: [External] No Truck Stops

Citizen input for staff report

On Aug 24, 2021, at 2:48 PM, Ken Siegel <kensiegel2@aol.com> wrote:

I am writing with regard to the proposed Truck Stop off Exit 227. I am sure you realize that Toano and Historic Toano on one side and Stonehouse and other expensive neighborhoods on the other side will be greatly impacted by significant pollution, noise pollution, and unwanted people, traffic, and crime that a Truck Stop will bring. If you look at historical information regarding Truck Stops, once one is allowed, other approvals will follow shortly afterwards.

There is no reason what so ever that James City County and Toano need a Truck Stop of any kind or size. 64 has several Truck Stops just a few miles up the road in addition to the two Truck Rest Areas at exit 214. Truckers do not need additional places to stop anywhere in between exit 211 to Newport News. Please vote NO to keep our area free from these types of businesses. This is not what we need to represent the entrance to James City County and the Toano local community.

Thank you,

Ken

<IMG_9465.tiff>

JSG CORPORATION

September 21, 2021

Planning Commission Members James City County

Mr. Richard Krapf	Mr. Tim O'Connor
Mr. Bob Rose	Mr. Frank Polster
Ms. Julia Leverenz	Ms. Barbara Null
Mr. Jack Halderman	

Ref: Z-19-0006 / SUP-19-0005 Hazelwood Farms – The Enterprise Center
SUP-19-0006 Hazelwood Farms – The Village Center

Dear Members and Staff:

Regarding the above referenced rezoning and Special Use Permit I want to provide my full support and ask for an affirmative vote from the Planning Commission. Due to a previous commitment, I am out of town at the October meeting. Please do not take my lack of attendance nor my failure to publicly speak at the hearing as a lack of enthusiasm for this project. I support the project and urge support from each member of the Planning Commission.

We are fortunate that the Hazelwood family has been a good steward of the property. They have maintained the property in a large tract. They have tended the land to be sure that it is available for a more desirable use. Strategically located at the 227 interchange on I-64 the referenced development has few traffic impacts. The property can be a tax generating asset to the community. It can help maintain the quality of life for our community by contributing to our tax revenues and provide employment opportunities for our citizens.

Important quality points that I urge you to consider in your approval are:

- The project is conveniently located to Richmond airport and the Newport News Williamsburg airport
- The entire project is within the Primary Service Area
- Water and sewer are available for the project
- Immediate access to exit 227 on interstate 64 allows the change in Land Use to add tax dollars to our community without additional traffic burdens.

- The property is already assembled in two large contiguous tracts with common ownership. These parcels have been assembled and maintained by the Hazelwood family. Now with willing family members, who share a quality vision James City County can move forward and make a Land Use change that can benefit our citizens.

In recent years there has been a cry from citizens of "No Growth" or "No Rezoning". Those cries regarding this proposal would be out of place and incorrect. The proposed rezoning adds jobs, tax base, and additional citizens in a mix that is healthy for a vibrant community. Saying "No" to quality Land Use changes is a mistake.

In addition, you must look at what might happen if you said "No" to this opportunity. The land holding could become fragmented. Undesirable uses could be developed that would have less controls by the county and produce less tax income for our citizens.

This is a quality proposal with benefits for our citizens. I urge the Planning Commission to vote to approve the above referenced Rezoning and Special Use Permit.

Sincerely,

Gary M. Massie
Manager
J.S.G. Corporation

Thomas Wysong

From: Paul Holt
Sent: Monday, September 27, 2021 11:56 AM
To: Thomas Wysong
Cc: Josh Crump
Subject: FW: [External] Hazelwood Farm Proposal

Please include with staff report materials

From: Scott Maye <forensicearl@gmail.com>
Date: September 27, 2021 at 11:17:02 AM EDT
To: Sue Sadler <Sue.Sadler@jamescitycountyva.gov>
Subject: [External] Hazelwood Farm Proposal

Good morning Ms. Sadler,
I am a resident of Toano and live in the Meadow Lake subdivision adjacent to the proposed development. I am working with a group of concerned neighbors to oppose this development. A small group of us are meeting next week to develop a plan to speak at the upcoming public meeting. Based on my communications with my neighbors including residents of skillman estates and stonehouse there is a lot of opposion to this project as proposed. I am all for development, however, this project as proposed, specifically the Enterprise Center, is not suited for this location. There is an undeveloped Commerce Center right down the street more suitable for manufacturing. There are many many concerns regarding this proposal that are too lengthy for this email. I just wanted to share my opposition with you and I appreciate your service to the Stonehouse District. Thanks, Scott Maye

Thomas Wysong

From: Paxton Condon
Sent: Tuesday, September 28, 2021 3:54 PM
To: Thomas Wysong
Subject: FW: [External] Hazelwood Farms (Comprehensive Plan)

Follow Up Flag: Flag for follow up
Flag Status: Flagged

From: Scott Maye <scottmaye@hotmail.com>
Sent: Tuesday, September 28, 2021 3:32 PM
To: Planning <planning@jamescitycountyva.gov>
Subject: [External] Hazelwood Farms (Comprehensive Plan)

Please do not destroy the rural character of Toano by creating manufacturing opportunities on the Hazelwood Farm property. How many century farms are left in the county? My view is shared by many, many, many calling this area home.
Thanks, Scott Maye

Sent from my Verizon, Samsung Galaxy smartphone
Get Outlook for Android

Thomas Wysong

From: Paul Holt
Sent: Thursday, September 30, 2021 7:39 AM
To: Thomas Wysong
Subject: FW: [External] Hazelwood Farms development

On Sep 28, 2021, at 11:04 PM, Darlene Previsch <dprevish@gmail.com> wrote:

I am so distressed at the potential development of this Centurion Farm. Nothing could be farther from Mr Hazelwood's dream than what the board of supervisors has proposed. I know development is inevitable but the proposed truck terminal at this already overcrowded intersection is sure to be a deadly combination. I never understand why our elected officials think they are helping make our County more appealing by ruining the very reason most of our newer residents moved here. We have almost 100 acres of industrial land for sale at our already empty industrial park just a mile or two up the road. This location has less crowding for safer entry in and out of the park. Anderson's Corner is so much better a location for the commercial improvements as well with a wide four way intersection already in place. Could we please leave this land agricultural? I've never driven along the interstate at Jefferson Avenue, in Fredericksburg or Northern Virginia and thought, "Wow, I'd love to live here." In fact, quite the opposite. I do everything I can to avoid those overcrowded areas even if it means going out of my way to avoid the congestion. I implore you to seek help from your fellow supervisors to stop this horrible development.

Darlene Previsch

Stonehouse District

HISTORIC TRIANGLE
BICYCLE ADVISORY COMMITTEE

JAMES CITY COUNTY *CITY OF WILLIAMSBURG* *YORK COUNTY*

October 22, 2021

Mr. Tom Leininger, Senior Planner
James City County Community Development
101-A Mounts Bay Road
Williamsburg, VA 23185

RE: Hazelwood Farms Requests

Dear Tom,

The Historic Triangle Bicycle Advisory Committee (HTBAC) reviewed the proposed Hazelwood Farms requests at their meeting on October 18, 2021. The Committee was pleased with the proposed provisions for pedestrian and bicycle infrastructure.

Specifically, the Committee had the following comments:

- **Z190006 and SUP190005. Hazelwood Farms, The Enterprise Center:** The Historic Triangle Bicycle Advisory Committee supports the proposed bicycle and pedestrian accommodations (multi-use paths) outlined in the master plan for the Enterprise Center.

- **SUP190006. Hazelwood Farms, The Village Center:** The Historic Triangle Bicycle Advisory Committee supports the overall proposed bicycle and pedestrian accommodations (multi-use paths) outlined in the master plan for the Village Center. HTBAC recommends that the applicant consider including bicycle and pedestrian accommodations within the internal streets as well as connecting those accommodations directly to Barnes Road.

These proposed improvements are in accord with the recommendations of the Regional Bikeway Plan, and will enhance the safety of cyclists in this part of James City County, and especially along Route 30.

Sincerely,

Reed T. Nester

Reed T. Nester, Chair
Historic Triangle Bicycle Advisory Committee

Thomas Wysong

From: Josh Mathias <valegacy@yahoo.com>
Sent: Thursday, September 30, 2021 8:21 PM
To: Julia Leverenz; Tim OConnor; John Haldeman; Frank Polster; Richard Krapf; Rob Rose; Barbara Null; Thomas Wysong; Paul Holt; Jim Icenhour; Ruth Larson; John McGlennon; Michael Hipple; Sue Sadler
Cc: dprevish@gmail.com
Subject: [External] Opposition to Hazelwood Farms rezoning

Dear planning commission members, board members, and staff,

Please include this correspondence as public input for the Wednesday, October 6th planning commission meeting.

In regard to the proposed rezoning of the Hazelwood Farm estate and development plan, I would like to voice my strong opposition, and echo the overwhelming opposition I have received from friends, family, co-workers and neighbors.
While everyone would agree that more business would result in more tax revenue for the county, this rezoning and proposed development is attempting to solve a problem that doesn't exist. The addition of sporadic businesses peppered throughout the county in rural areas should not be a solution for generating tax revenue.
Additionally, there has been no cry for development in upper James City County. In fact, quite the opposite is true. The majority of the residents who have decided to settle in this portion of the county specifically chose this area due to it's rural nature. It almost strikes me as odd that the planning commission would consider this proposal due to this obvious fact.
I do understand the land owners desire to want to be able to develop their land, but I would ask the commission to consider the interests of the entire county, especially residents in this area of the county. I am also aware that in 2014 the land owner(s) showed interest and submitted their initial plans for development of this land to the county, which was subsequently included as an "Economic Opportunity Area" for James City County in the 2035 Comprehensive Plan. https://wydaily.com/local-news-old/2014/12/02/stonehouse-farm-owners-envision-future-industrial-or-commercial-development/
This rezoning proposal is more than just generating tax revenue for the county. It is about protecting the rural nature of appeal of James City County which make it such a desirable place for people to live. It is also about the county planning commission and board of supervisors recognizing, understanding, and protecting the will of it's residents.

These sentiments are shown as factual as seen in the 2019 Comprehensive Plan Survey results. At the bottom of this correspondence are a few highlights from that survey regarding the results of the 2019 survey, which give a clear indication of the desires of the residents of James City County regarding development issues.

Community Development and Planning Director Paul Holt has this to say in regards to the surveys that are sent to residents of the county:

“All the citizen input is vitally important because it is the citizen [comprehensive plan].....one of the important aspects of this survey was that as a whole, it can be used to represent the county.” https://wydaily.com/local-news/2019/08/14/county-takes-results-of-residents-survey-into-consideration/

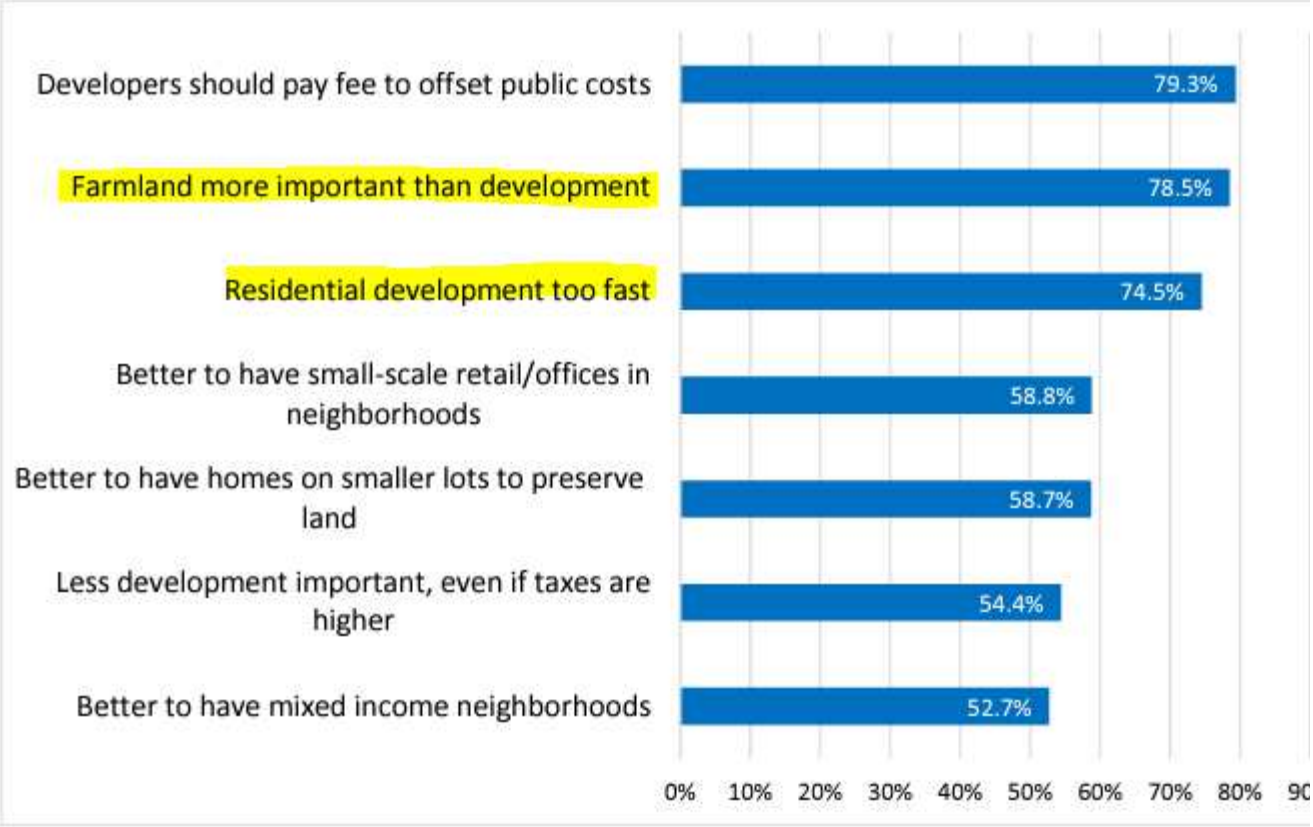
I hope the board will reconsider this rezoning proposal and look forward to further discussion and community input on this matter.

With Warmest Regards,
Josh Mathias
3428 Colony Mill Rd
Toano, VA 23168

(757)272-4142

	Percent strongly agree/somewhat agree	Percent somewhat disagree/strongly disagree
Developers who wish to build businesses or residences should always be required to pay a fee to the County to offset public costs even if it means increases in the price of their services and new housing.	79.3%	20.7%
It is more important to preserve farmland in the County than it is to have more development.	78.5%	21.5%
Residential development of the land in James City County is happening too quickly.	74.5%	25.5%
It is better to have neighborhoods in which there is a mix of housing options and small-scale retail and office development.	58.8%	41.2%
It is better to have more homes on smaller lots and set aside areas for open space in order to permanently preserve land and maintain the character of the community.	58.7%	41.3%
It is important to have less development in the County even if it means you may pay more in taxes.	54.4%	45.6%
It is better to have neighborhoods in which there is a mix of low-middle-, and high-income housing options.	52.7%	47.3%

Figure III-2: Opinion on Development Issues: Percent Strongly Agreeing/Somewhat Agreeing



The strongest level of agreement, at 79 percent, pertained to the statement that developers shou fee to the County to offset public costs. About the same number (78.5 percent) think it is more i to preserve farmland than to have more development. Nearly three-quarters (74 percent) of r agree that residential development in James City County is happening too quickly. But whe whether it is important to have less development, even if it means paying more in taxes, the agreement drops to 54 percent (still more than half of respondents).

Unapproved Minutes of the October 6, 2021
Planning Commission Regular Meeting

SUP-19-0006. Hazelwood Farms - The Village Center

Mr. Thomas Wysong, Senior Planner, stated that Mr. Tim Trant of Kaufman and Canoles has applied on behalf of Hazelwood Farms LLC and Hazelwood R M III Trustee et al for a Special Use Permit on approximately 79 acres to permit up to approximately 510,000 square feet of commercial development to allow for the following specially permitted uses on the properties:

- a convenience store which sells and dispenses fuel;
- extension of public water and sewer facilities;
- commercial buildings or groups of buildings that exceed 10,000 square feet of floor area pursuant to County Code Section 24-11(a)(2) and within the square footage limits shown on the master plan;
- commercial buildings or groups of buildings, not including office uses, which generate, or would be expected to generate, a total of 100 or more additional trips to and from the site during the peak hour of the operation pursuant to County Code Section 24-11(a)(3); and
- any buildings, additions, and expansions requiring an SUP pursuant to County Code Section 24-11(b).

Mr. Wysong stated that the site is located inside the PSA and is designated for Mixed Use-Stonehouse in both the current 2035 and draft 2045 Comprehensive Plans. Mr. Wysong further stated that for the area between I-64 and Old Stage Road, the Comprehensive Plan specifically recommends community–scale commercial uses such as shopping centers, hotels, restaurants and office uses.

Mr. Wysong stated that staff is proposing conditions to mitigate impacts associated with the proposed uses. Mr. Wysong further stated that the conditions include construction of the transportation improvements recommended in the Traffic Impact Analysis for this project, enhanced landscape buffering along the Barnes Road, Route 30, and Interstate-64 right- of-way, enhanced site design and architectural design for each building, incorporation of sustainable design initiatives, and specific restrictions regarding location and site features for certain commercial uses to protect community character.

Mr. Wysong stated that staff finds that the special use permit will not negatively impact surrounding development, and the proposed conditions will help mitigate impacts generated by the proposal. Staff also finds that the development of the property for the proposed commercial uses is consistent with recommended uses and GSAs in the current 2035 and draft 2045 Comprehensive Plans.

Mr. Wysong stated that staff recommends that the Planning Commission recommend approval of this application to the Board of Supervisors, subject to the proposed SUP conditions.

Mr. Polster inquired if condition for installation of water and sewer facilities for the commercial area was the same as for The Enterprise Center. Mr. Polster further inquired if there was a 60-month condition for commencing construction of at least one of the specially permitted uses.

Mr. Wysong stated that the 60-month stipulation is the same as for The Enterprise Center. Mr. Wysong further stated that he would need to check the requirements of the B-1 Zoning District regarding whether public water and sewer is required.

Mr. Polster inquired about the scenarios that drove the traffic analysis for The Village Center.

Mr. Wysong stated that he would defer to the applicant on that question; however, the recommended traffic improvements were based on the analysis done by the County's consultant.

Mr. Holt stated that the traffic analysis was modeled on the amount of square footage for the shopping center. Mr. Holt further stated that he does not believe there is a requirement in the B-1 Zoning District to connect to public water and sewer.

Mr. Polster requested verification that there must be a first structure on the property within 60 months, not including the water and sewer facilities.

Mr. Holt confirmed that a first structure must be constructed within the 60 month. Mr. Holt noted that the SUP was necessary to extend water and sewer to this property so that it could also be extended for the uses on the Economic Opportunity property.

Mr. O'Connor inquired if there were plans to improve this interchange in the near future.

Mr. Holt stated that there were no plans at this time.

Mr. O'Connor inquired if it was a matter of land acquisition or simply not being designated as needing improvement.

Mr. Holt stated that the interchange was operating satisfactorily at this time and that the improvements proposed in the two applications would allow the interchange to continue to operate at acceptable levels.

Ms. Leverenz stated that there is a discrepancy where the SUP conditions state that no single building shall exceed 70,000 square feet and the Design Guidelines state that buildings over 70,000 square feet shall not be subject to the design guidelines.

Mr. Wysong stated that the SUP Conditions would be the controlling document.

The Commission inquired if there was an update on whether the B1 Zoning district required connection to public water and sewer.

Mr. Wysong stated that the Zoning Ordinance did not require it.

Mr. Holt stated that staff would then look to the James City Service Authority (JCSA) regulations which stipulate connecting to public water and sewer when within a certain distance from existing lines. Mr. Holt further stated that the SUP is required if water and sewer must be extended.

Mr. Haldeman called for disclosures from the Commission.

Mr. Krapf, Mr. O'Connor, Mr. Polster, and Mr. Haldeman stated that they had spoken with Mr. Geddy.

Mr. Tim Trant, Kaufman and Canoles, PC, representing the Hazelwood family, made a presentation to the Commission on the proposed project.

Mr. Krapf noted that SUP would be valid for any commercial buildings or group of buildings that exceed 10,000 square feet of floor area and commercial buildings or group of buildings, not including office uses, which generates, or
would be expected to generate, a total of 100 or more additional trips. Mr. Krapf stated that he was looking for specificity on how many buildings over 10,000 square feet would be permitted.

Mr. Krapf noted that there is already an approved master plan for the Moss Creek parcel that includes office and warehouse, convenience store with fuel sales, restaurants and retail. Mr. Krapf further noted that there is the Stonehouse Land Bay V master plan which is designated for up to 180 residential units. Mr. Krapf inquired if the applicant has any concern that the Moss Creek development would impact this proposal.

Mr. Trant stated that there may be some overlapping uses; however, this is not an impediment to the project. Mr. Trant stated that there would be more than sufficient demand for those services in that location.

Mr. Trant noted that, in regard to the size and arrangement of buildings on the property, the design team position the development in land bays with the associated square footage to give a sense of scale and order. Mr. Trant noted that there would be commercial outparcels along Route 60 and a larger shopping center area on the interior.

Mr. John Hopke, Hopke and Associates, stated that the design goal was for the complex to look like an assembly of building rather than having the giant monolithic buildings.

Mr. Norris L. Shave, 9563 Barnes Road, addressed the Commission with concerns about the traffic impacts of the proposal.

Mr. William Hewitt, 8741 Merry Oaks Lane, addressed the Commission about the impacts of the project on Barnes Road.

Mr. Kimber Smith, 3051 Heritage Landing Road, stated that he had provided comments in support of both proposals in his comments on The Enterprise Center.

John Lockwood, 20251 Triangle Road, addressed the Commission with Concerns about traffic impacts for both applications.

Carol Coomer, 9825 Hidden Nest, addressed the Commission with concerns about the lack of notification to Stonehouse residents.

Ms. Darlene Previsch, 211 Old Stage Road, addressed the Commission with concerns about the public notification process.

As no one else wished to speak, Mr. Haldeman closed the Public Hearing.
Mr. Haldeman opened the floor for discussion by the Commission.

Mr. O'Connor stated that, for clarification, the traffic study was performed by the applicant's consultant. Mr. O'Connor further stated that staff had a third-party traffic study done by the County's on-call consultant. Mr. O'Connor stated that staff reviewed and considered the findings of both studies.

Mr. O'Connor stated that one of the unintended, but beneficial, consequences of the traffic study is the recommendation that the entrance to the Moss Creek Commerce Center be shifted to Barnes Road and signalized.

Mr. Polster stated that predictions for where growth will occur in the County focus on the upper part of the County. Mr. Polster further stated that the amenities proposed for The Village Center will be required to meet the demands of residents in that area.

Mr. Polster stated that he appreciated the coordination between the applicant and the Stonehouse Development on the traffic study and the signalization.

Mr. Polster stated that he would support the application.

Mr. Krapf stated that he finds the application to be favorable since the scale is more modest in scale, and the SUP is being requested to allow uses for the property as it is currently zoned. Mr. Krapf further stated that the development is envisioned as an entertainment, retail, office, and business support center. Mr. Krapf noted that these are services that could benefit the existing community and anticipated future growth.

Mr. Krapf stated that he has come concerns about an open-ended series of 10,000-square-foot buildings; however, the applicant's explanation of trying to create the appearance of individual components was a very thoughtful solution. Mr. Krapf stated that he would support the application.

Mr. O'Connor inquired if the Director of Planning will review the building plans to ensure consistency with the Design Guidelines.

Mr. Holt stated that a building permits are pulled, they will be reviewed against the Design Guidelines. Mr. Holt stated that inconsistencies would be brought to the Development Review Committee for a determination.

Mr. Polster made a motion to recommend approval of the application with the conditions recommended by staff.

On a roll call vote, the Commission voted to recommend approval of SUP-19-0006. Hazelwood Farms - The Village Center. (6-0)

AGENDA ITEM NO. H.1.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Adam R. Kinsman, County Attorney

SUBJECT: 2022 Legislative Agenda

ATTACHMENTS:

	Description	Type
🗋	memo	Cover Memo
🗋	reso	Resolution
🗋	Draft 2022 Agenda	Exhibit

REVIEWERS:

Department	Reviewer	Action	Date
Attorney	Kinsman, Adam	Approved	10/28/2021 - 9:28 AM
Publication Management	Pobiak, Amanda	Approved	10/28/2021 - 9:40 AM
Legal Review	Kinsman, Adam	Approved	10/28/2021 - 9:40 AM
Board Secretary	Fellows, Teresa	Approved	10/28/2021 - 10:34 AM
Board Secretary	Purse, Jason	Approved	11/2/2021 - 3:48 PM
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:54 PM

M E M O R A N D U M

DATE: November 9, 2021

TO: The Board of Supervisors

FROM: Adam R. Kinsman, County Attorney

SUBJECT: 2022 Legislative Program

Attached for your consideration is a resolution approving James City County's 2022 Legislative Program. Also attached is the 2022 Legislative Program.

I recommend adoption of the attached resolution.

ARK/ap
LegislativePrgm22-mem

Attachment

R E S O L U T I O N

2022 LEGISLATIVE PROGRAM

WHEREAS, James City County has developed a Legislative Program for the consideration of the 2022 session of the General Assembly which outlines certain legislative policies which the Board believes ought to guide the General Assembly and proposes certain legislation that would benefit the County; and

WHEREAS, the Board has carefully considered its Legislative Program and believes that it is in the best interests of the citizens of James City County.

NOW, THEREFORE, BE IT RESOLVED that the Board of Supervisors of James City County, Virginia, hereby approves the County's 2022 Legislative Program and commends it to the County's representatives in the General Assembly for action.

BE IT FURTHER RESOLVED that a copy of the County's 2022 Legislative Program be forwarded to the County's elected representatives to the General Assembly.

_____
Michael J. Hipple
Chairman, Board of Supervisors

ATTEST:

_____
Teresa J. Fellows
Deputy Clerk to the Board

	VOTES			
	AYE	NAY	ABSTAIN	ABSENT
SADLER	____	____	____	____
ICENHOUR	____	____	____	____
LARSON	____	____	____	____
MCGLENNON	____	____	____	____
HIPPLE	____	____	____	____

Adopted by the Board of Supervisors of James City County, Virginia, this 9th day of November, 2021.

LegislativePrgm22-res

JAMES CITY COUNTY
2022 LEGISLATIVE PROGRAM

Position/Legislation Supported by the County

1. CHANGE THE SCHOOL FUNDING INDEX TO MORE FAIRLY ALLOCATE STATE FUNDS AMONG LOCALITIES AND TO RAISE THE COMMONWEALTH'S MONETARY CONTRIBUTION TO LOCAL SCHOOLS

2. DECENTRALIZE THE HAMPTON/PENINSULA HEATH DISTRICT INTO THREE SEPARATE, SMALLER DISTRICTS

3. AMEND THE JAMES CITY COUNTY CHARTER TO ALLOW JAMES CITY COUNTY TO REFUSE TO ACCEPT BONDS AS A FORM OF SUBDIVISION IMPROVEMENT SECURITY

Virginia Code section 15.2-2241 requires that localities accept bonds as a form of surety for public improvements associated with new subdivisions. Over the past several years, the County has made more than a half-dozen bond calls and all have proven time consuming and difficult. Letters of credit and cash escrow options are better options to ensure that County citizens receive all approved subdivision improvements in a timely manner.

4. IMPACT FEES

The County encourages the General Assembly to revise existing impact fee laws to encourage the use of statutorily-calculated impact fees which reflect the true cost of residential development in lieu of cash proffers.

5. LEGISLATIVE PROGRAMS OF VML/VACO/VIRGINIA COALITION OF HIGH GROWTH COMMUNITIES

James City County supports the legislative agendas of the Virginia Municipal League, the Virginia Association of Counties, and the Virginia Coalition of High Growth Communities.

6. STATE FUNDING

James City County requests that the state adequately fund for local road improvements, tourism, substance abuse and mental health treatment, public education, stormwater local assistance funds ("SLAF" funding), reforestation, and public libraries.

7. QUALIFIED IMMUNITY

James City County encourages the General Assembly to vote against any bills that would eliminate or otherwise reduce the qualified immunity of police officers.

DRAFT

AGENDA ITEM NO. J.1.

ITEM SUMMARY

DATE: 11/9/2021

TO: The Board of Supervisors

FROM: Teresa J. Fellows, Deputy Clerk

SUBJECT: Adjourn until 1 p.m. on November 23, 2021 for the Business Meeting

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REVIEWERS:

Department	Reviewer	Action	Date
Board Secretary	Fellows, Teresa	Approved	11/2/2021 - 3:53 PM