



BOARD OF SUPERVISORS Agenda Item

Meeting Date:	June 20, 2017
Title:	Consider a Request for Reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density and B-2, Urban Commercial Zoning Districts on a Portion of Tax Map Parcel No. 37-80.
Department:	Planning and Zoning
Staff Contact:	Jeffrey A. Harvey, Director
Board Committee/ Other BACC:	Planning Commission
Staff Recommendation:	Denial
Fiscal Impact:	N/A
Time Sensitivity:	June 29, 2017 (applicant has expressed a willingness to grant an eextension to July 31, 2017 if necessary)

ATTACHMENTS:

1.	Background Report	9.	Impact Statement
2.	Proposed Ordinance O17-15 (Approval)	10.	TIA dtd 6/24/16
3.	Proposed Resolution R17-69 (Denial)	11.	VDOT Comments and Applicant Responses
4.	Proffer Statement, dtd 5/23/17	12.	Stafford Regional Airport Comments, dtd 11/23/16
5.	GDP dtd 12/28/16	13.	Phase 1 Cultural Resources Survey, dtd June 2016
6.	Zoning Plat, dtd 6/8/16	14.	Economic and Fiscal Impact Study, dtd 6/29/16
7.	Architectural Guidelines, dtd 11/21/16	15.	Application and Related Materials
8.	Land Use Action Request	16.	PC Minutes dtd 2/22/17 & 4/26/17

Consent Agenda		Other Business	Unfinished Business
Discussion		Presentation	Work Session
New Business	X	Public Hearing	Add-On

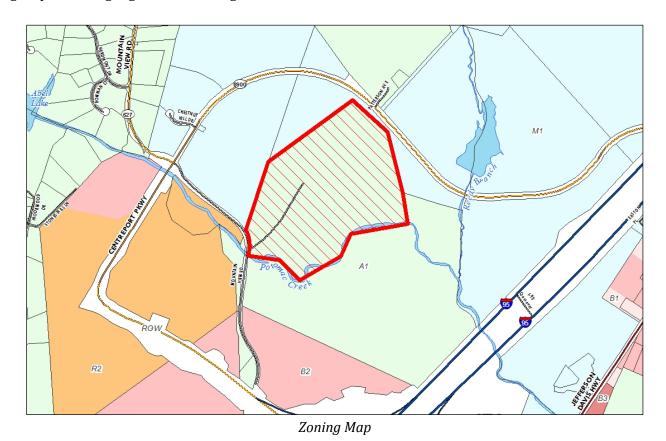
REVIEW:

X	County Administrator	Thomas C. Foley
X	County Attorney (legal review only)	Charles It huma

DISTRICT:	Hartwood			

BACKGROUND REPORT

The Board is asked to consider a request from IVI Strategies, LLC (Applicant) for a reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density (88.27 acres) and B-2, Urban Commercial (10.17 acres) Zoning Districts, to allow for a mix of 170 single-family detached residential units and 150,000 square feet of commercial retail and office (Project). The property is a 98.44-acre portion of Tax Map Parcel No. 37-80, located on the east side of Centreport Parkway, and the north side of Mountain View Road. The zoning map below highlights the rezoning area in red outline.



Zoning History

An application for a cluster subdivision was submitted in 2013 for development of Tax Map Parcel No. 37-80 in its entirety (231.6 acres). That application was not approved. During the review of the Project, the cluster subdivision regulations were amended. This reduced the potential dwelling unit yield from 105 to 77. The applicant is contesting this change and filed a lawsuit. In evaluating the by-right impacts in this application, the applicant is using the higher density of 105 by-right dwelling units. Staff notes that the by-right impacts would likely be lower than estimated by the applicant, as staff has estimated a by-right density of 77 dwelling units.

Also in 2013, a zoning reclassification was requested to the Planned Traditional Neighborhood Development (P-TND) Zoning District on the entirety of Tax Map Parcel 37-80 for 650 dwelling units and 250,000 square feet of commercial Development. In September 2014, the request was denied. The applicant filed a lawsuit appealing

that decision. Both lawsuits are currently stayed until this zoning reclassification application is considered. To date, no other development is proposed on the property.

Existing Conditions

The site consists of a mix of forested land-cover, with mature deciduous and coniferous trees, open agricultural fields, and pasture land. The site is located on the north side of Potomac Creek with perennial and intermittent tributary stream channels draining to Potomac Creek. The site includes wetlands, 100-year floodplain, and due to its location downstream of both Curtis Lake and Abel Reservoir, portions of the property are within a dam break inundation zone (DBIZ). The applicant has conducted a perennial stream evaluation for the site to determine the location of the critical resource protection area (CRPA). The topography includes rolling terrain and areas of steep slopes to the north and west of Potomac Creek



Site - Aerial View

Traditional farming activities previously occurred on the property. Cultural resources associated with the farmstead are located near the center of the property. Access is from a one lane private road known as Oakenwold Lane. Oakenwold Lane intersects with Mountain View Road north of Potomac Creek.

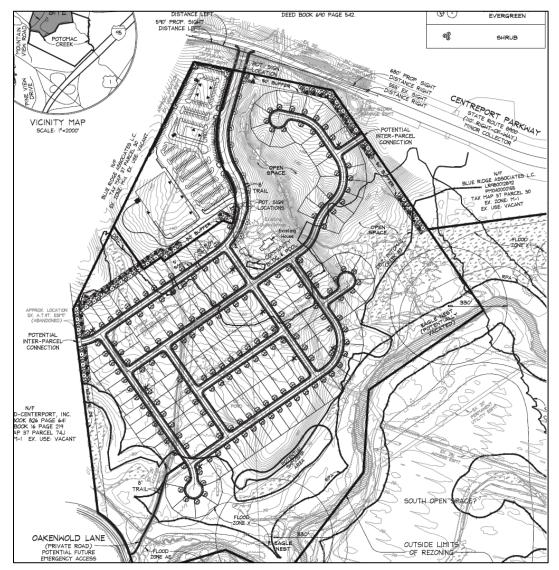
Generalized Development Plan (Attachment 5)

The Generalized Development Plan (GDP) depicts the proposed design of the site to include a residential subdivision of 170 single family detached home lots and 150,000 square feet of commercial development. The following image highlights the proposed areas of the B-2 zoning (red) and R-2 zoning (yellow).



The development would be accessed primarily from a single point off of Centreport Parkway. Additional access points may be provided in the future from inter-parcel access points identified on the GDP. A collector road would provide access to the 10.2 acre commercial area to be located on the western side of the road. Commercial retail and office uses are shown totaling 75,000 to 150,000 square feet in a conventional low-rise suburban development pattern.

The collector road continues past the commercial area into the 88.3 acre residential component of the project with the site layout including a combination of grid pattern and cul-de-sac streets. Within the proposed R-2 zone, the GDP reflects 26.49 acres of open space accounting for 30% of that zoning district. This exceeds the 25% minimum requirement. The open space will be used for active and passive recreation, stormwater management facilities, and protection of sensitive natural resources. For the active recreation use in the open space, a community center building and pool is proposed. A 50-foot buffer is shown adjacent to commercial uses and districts. Eight-foot wide trails are proposed in addition to the standard subdivision sidewalks.



Generalized Development Plan

The remainder of Tax Map Parcel No. 37-80B not being rezoned (133 acres) would be retained as open space. The area is referred to in the proffers as the "South Open Space" since it is located on the south side of Potomac Creek. Limited uses would be permitted in this area. The proffers define the following "Permitted Actions:"

- Extension of utilities:
- Construction of roads for purposes of providing access to and from Mountain View Road;
- Community gardening by residents of the Project;
- Wetland mitigation;
- Undertaking stormwater and low impact development measures;
- Maintenance of existing and subsequent obligations of the Project;
- Providing Project amenities including, without limitation, trails;

Note that this open space area is outside of the area of the rezoning and associated proffers. The referenced use restrictions would be contingent on being incorporated into the future covenants of the Homeowners Association.

- Temporary grading;
- Ingress/egress regarding all of the foregoing; and





Transportation

The applicant performed a transportation impact analysis (TIA) (Attachment 10). The study evaluated select intersections along the entire length of Centreport Parkway from Ramoth Church Road to Jefferson Davis Highway. Results of the TIA indicate that the site development would have a negative impact on several intersections at build-out in 2023 without mitigation. Listed below is Table 6 out of the TIA highlighting the impacts to the level of service at the intersection.

Comparison of Yr. 20	23 "Bac		LE 6 ind" vs.	"Total'	' Inter	section L	OS's
Yr. 2023 Buildout		Peak I	<u>Hour</u>		Γ Peak Total	Hour	
Unsignalized Intersection #1) Centreport Pkwy./Ramoth Church Rd. #2) Centreport Pkwy./Mountain View Rd. #6) Centreport Pkwy./Main Site Entrance	 D 	 F A	no yes	 C 	 F A	no yes no	
Signalized Intersection #3) Centreport Pkwy./I-95 SB Ramps #4) Centreport Pkwy./I-95 NB Ramps #5) Centreport Pkwy./U.S. Rt.1	F B D	F C E	no no yes	C B C	F C	yes yes	

Attachment 1 017-15 R17-69 Page 6

The greatest impacts are to the intersections with Mountain View Road and Interstate 95 ramps. The applicant would mitigate these impacts with the following improvements:

Mountain View Road/Centreport Parkway Intersection:

- On Centreport Parkway, add northbound left turn lane (onto Mountain View Road);
- On Mountain View Road, add a dedicated eastbound right turn lane (onto Centreport Pkwy);
- Cash contributions toward a warrant study (\$15,000) and traffic signal (\$200,000) if warranted. If the traffic signal is not warranted, the funds may be used for other transportation uses in the immediate area.

I-95 Southbound Ramp:

- On Centreport Pkwy, add a dedicated eastbound right-turn lane, onto I-95 south;
- On Centreport Parkway, add an additional through lane.

The improvements at the I-95 southbound ramp intersection would improve LOS conditions at the northbound ramp and Jefferson Davis Highway with signal timing adjustments. The in-kind improvements cited are contingent on the applicant being able to acquire any necessary right-of-way. This would include the County pursuing acquisition of the right-of-way through condemnation following diligent pursuit by the applicant.

The applicant also proffered to construct a FRED bus stop, if FRED should agree to provide service to the site. The series of Virginia Department of Transportation (VDOT) review comments of the TIA, and applicant responses, are included in Attachment 11. The remaining issues from VDOT include:

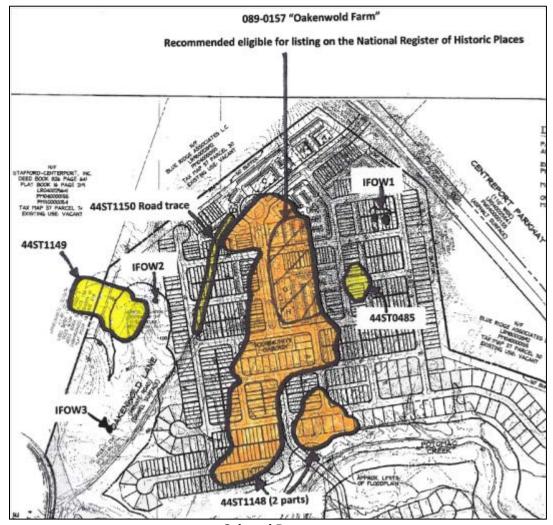
- At the Centerport Parkway/Mountain View Road intersection, VDOT recommends the applicant, if warranted, install the traffic signal fully at their cost, including right-of-way acquisition. Furthermore, VDOT estimates a significantly higher cost to signalize this intersection, at \$350,000, excluding right-of-way costs;
- For the second eastbound through lane at the I-95 southbound signal, VDOT requested the applicant clarify how the second lane would be terminated;
- At the Centerport Parkway/Mountain View Road intersection, (in order to meet an obligation to determine
 the best mitigation for the intersection), VDOT is requesting the applicant readdress consideration of a
 roundabout versus a traffic signal that is not solely focused on cost. In the VDOT design manual,
 roundabouts are identified as preferred over signalization.

Cultural Resources

A Phase 1 Cultural Resources Survey (Attachment 13) prepared in 2013 as part of the prior Oakenwold rezoning application identified the presence of one architectural resource, four archaeological sites, and six isolated finds. Provided is a summary of the resources and a map identifying their locations on the site.

- Site 089-0157, an Architectural Resource, is the ca. 1855 Oakenwold Farm complex, with one house, one school, one corn crib, one shed, and one kitchen. The original house is an architecturally significant example of a Gothic Revival Cottage. There are several additions to the original structure.
- Site 44ST0485 is a small seasonal Native American campsite.
- Site 44ST1148 is an extensive Native American settlement with signs of 18th century occupation.
- Site 44ST1149 is another small seasonal Native American campsite.

- Site 44ST1150 is an old dirt road bed that crosses the site, a landscape feature of the Oakenwold Farm.
- Isolated finds date back to Native American use of the site.



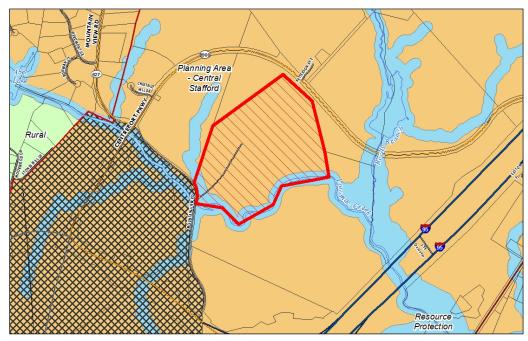
Cultural Resources

With this application, the applicant submitted an Addendum to the 2013 Phase 1 Cultural Resource Survey, specifically for the Site 089-0157, ca. 1855 Oakenwold Farm complex. The addendum notes further deterioration of the kitchen, school and corn crib, likely due to weather events. The farm complex is still eligible for listing on the National Register of Historic Places, although these supporting structures will need major repair. The applicant is proffering to secure the house and outbuildings with berms and fencing and preserve the house from further deterioration. In addition, the applicant will also conduct a Phase II study on the Native American settlement (44ST1148).

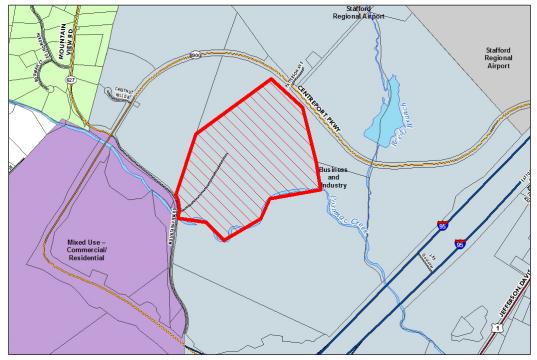
Comprehensive Plan

Future Land Use

The Comprehensive Plan identifies this site as being within the central Stafford business planning area. This planning area includes a conceptual land use plan, which recommends the site for business and industry and highway commercial future land use.



Central Stafford Planning Area – Future Land Use Map



Planning Area Land Use Concept Map

Airport Land Use Compatibility

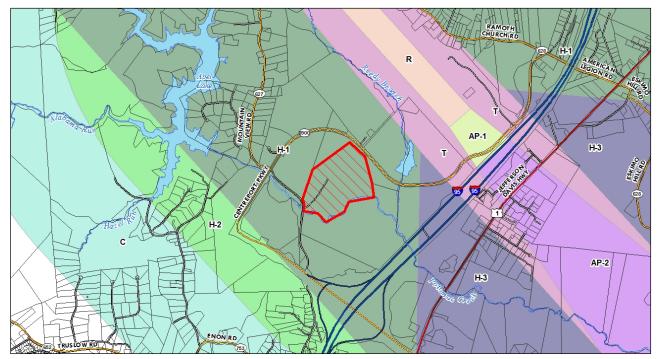
The property lies within the Airport Land Use Compatibility Zones (Airport Zone), as identified in the recently amended Comprehensive Plan. The Airport Zones are divided into sub-zones and use-compatibility is

recommended in each zone. The property is within zone H-1, the Horizontal Inside Flight Zone. This is an area where planes fly parallel to the runway when circling the Airport.

Within the central Stafford business planning area, the Comprehensive Plan designates sectors around the airport that correspond with various influence of airport activities, and identifies what uses otherwise permitted in the land use district, that would be considered not compatible, or require additional review based on use compatibility tables. This site is located in Area 3. Since residential use is not recommended in Area 3, it is not identified as a permitted use. Some commercial uses are identified as requiring additional review. Additional review standards that apply to commercial development in the H-1 zone include not exceeding population concentration thresholds and providing usable open space. This Project provides that with the extensive A-1 zoned preservation area.

As an attempt to address the residential incompatibility issue, the applicant is proffering to incorporate soundproofing construction materials and provide real estate marketing disclosure notices and notification in the deeds of all new homes sold. Proffers require construction design specifications for the exterior walls, roofs, and windows that reduce internal noise levels in each residential unit from ambient exterior noise levels to 45dBa Ldn (Average Daily Noise Level) or less. The site would have significant open space areas, and staff notes that these are recommended mitigation measures if the proposal is identified as needing additional review.

The Comprehensive Plan recommends population concentration thresholds for areas within the airport impact zones, including no greater than 300 people per acre across the entire site and 1,200 people per acre in a single acre area. The applicant has identified population concentrations of 6.9 people per acre site-wide and 16.2 people per acre in a single acre. These numbers are the combined residential and commercial uses. Single acre concentrations in commercial areas would be 110.2, which is still within the recommended range.



Airport Impact Zones

In a memorandum from Mr. Charles Kirkland, Vice-Chairman of the Stafford Regional Airport Authority (SRAA) (Attachment 12), he notes that the B-2 zoning is supported by the SRAA, but the R-2 zoning is not supported given

density under the aircraft traffic pattern. SRAA noted that they would be supportive of a density up to 44 residential units, consistent with Comprehensive Plan guidance.

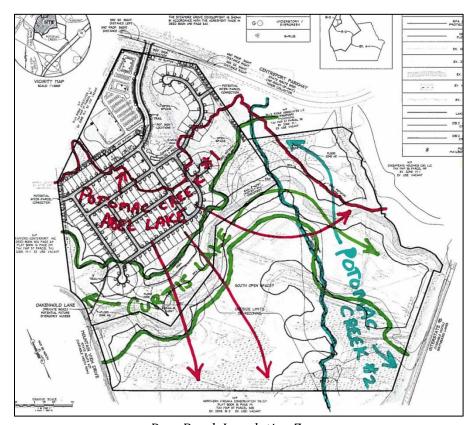
Staff notes that although this Project was submitted prior to the Airport Zone being adopted as part of the new Comprehensive Plan, this application is being evaluated based upon the Comprehensive Plan as it exists today, so the Airport Zone recommendations apply.

Environmental

Staff notes that the GDP identifies a development scenario that may conflict with natural resources on the site, including wetlands. Staff discourages development that would result in these impacts. Policies in the Comprehensive Plan recommend protection of these resources.

 Policies 1.1.3 and 1.2.7 both recommend new development be sensitive to existing environmental features and protect natural resources.

Three DBIZs are present on the site and include significant portions of the residential units. The DBIZs are associated with Potomac Creek #1 Dam, Potomac Creek #2 Dam, and Curtis Lake Dam. Comprehensive Plan Policy 4.4.2 discourages development of new buildings and structures within dam break inundation zones. The current development scenario is inconsistent with this policy. The following image is a version of the GDP that highlights the location of the three DBIZs.



Dam Break Inundation Zones
Red: Potomac Creek #1 (Abel Lake)
Blue: Potomac Creek #2

Attachment 1 017-15 R17-69 Page 11

Green: Curtis Lake

These three dams are designated as high-hazard dams by the Virginia Department of Conservation and Recreation. Downstream development within the DBIZ cannot be prohibited but may require notification and potential evacuation during significant storm events due to the potential for loss of life if a dam failure were to occur.

Two bald eagle nests are located along Potomac Creek. The applicant will be required to meet guidelines for minimizing disturbance to the nests, under the Bald and Golden Eagle Protection Act and Migratory Bird Treaty Act. These guidelines may include development setbacks ranging from 330 to 660 feet. The GDP identifies development set back 330 feet from active eagle nests. A proffer requires a statement and identification of any bald eagle protection zones on each final site plan in accordance with state and federal laws governing the protection of active bald eagle nests.

The remainder of the property outside of the area to be rezoned, consisting of 133.1 acres, would be proffered to be preserved as open space, either maintained by the Homeowners Association for the sole benefit of the residents and businesses, or via a conservation easement or restrictive covenants. The future land use plan designation for business and industry use and the proximity to I-95 provides the appearance that this property would be a prime development location. Staff notes that this area includes significant areas of sensitive resources, wetlands, floodplain, dam break inundation zones, and critical resource protection areas that limit the site's development potential. Given these factors, staff believes the preservation of this area as open space is desirable.

Fiscal Evaluation

The applicant submitted an Economic, Fiscal, and Capital Impact Analysis (FIA) of the proposed project, prepared by Dean D. Bellas, Ph.D., dated June 29, 2014. Generally, the FIA concludes that for purposes of complete build-out, the project would generate the following net benefit annually:

Residential Land Uses	Total	Per-Unit Basis
Estimated County Revenues Generated	\$ 1,321,658	\$ 7,774
Estimated County Expenditures Impact	\$ 960,985	\$ 5,653
Estimated County Revenue Surplus	\$ 360,673	\$ 2,122
		Per-Sq. Ft
Non-residential Land Uses	Total	Basis
Estimated County Revenues Generated	\$ 575,262	\$ 3.84
Estimated County Expenditures Impact	\$ 196,650	\$ 1.31
Estimated County Revenue Surplus	\$ 378,612	\$ 2.52
Combined Land Uses	Total	
Estimated County Revenues Generated	\$ 1,896,920	
Estimated County Expenditures Impact	\$ 1,157,635	
Estimated County Revenue Surplus	\$ 739,285	

Staff notes that the Study assumes full build-out of both residential and commercial uses. Although the proffers require phasing to ensure a land-use mix, only 20,000 square feet of commercial development is required prior to construction of all the residential units. This would lower the fiscal benefit of the project if the full commercial development potential was not realized.

These are the estimated revenue and expenditure figures that could have been generated had the Sycamore Grove project been fully built-out and occupied by the end of FY2014. Revenues and expenditures are based on the Stafford County, Virginia FYE 2014

Comprehensive Annual Financial Report (CAFR).

Note:

Staff reviewed this conclusion by comparing its findings relative to the fiscal analysis that was developed and accepted as part of the approval of the Comprehensive Plan in December 2010, entitled The Fiscal and Economic Impacts of Stafford County's Proposed 2008 and 2010 Comprehensive Plans, prepared by Dr. Stephen Fuller. The fiscal impacts in the Study apply to regular County operations, not capital needs. The fiscal impact for each land use type is \$429.51 for single-family units; \$1.72 for office; and \$4.09 for retail. Under full build-out, the annual fiscal benefit of \$544,316.70 could be derived from the Comprehensive Plan, as shown in the table below:

Use Type	Units/ Square feet	Net Fiscal Impact	Total
Single-Family	170	\$ 429.51 per unit	\$ 73,016.70
Retail	90,000	\$4.09 per sq ft	\$ 368,100.00
Office	60,000	\$1.72 per sq ft	\$ 103,200.00
		Total	\$ 544,316.70

Applying the "worst-case" scenario of build-out based on proffer phasing assumes only 20,000 square feet of commercial development that would be required to be built prior to the construction of a total of 170 dwelling units. The annual fiscal benefit of \$107,416.70 could be derived from the Comprehensive Plan, as shown in the table below.

Use Type	Units/ Square feet	Net Fiscal Impact	Total
Single-Family	170	\$ 429.51 per unit	\$ 73,016.70
Office	20,000	\$ 1.72 per sq ft	\$ 34,400.00
		Total	\$ 107,416.70

Monetary Proffers

Staff notes that the Comprehensive Plan analysis was based on average value and income generation, actual home prices and types of commercial development can produce a different result. This application was submitted on June 28, 2016, prior to the effective date of July 1, 2016, when residential proffer legislation was amended pursuant to Virginia Code § 15.2-2303.4. Therefore, the December 15, 2015 proffer guidelines remain in effect for this application.

A proffer statement was submitted with this application (Attachment 4). Monetary proffers include per-unit contributions of \$13,656.44 for the 170 new lots. This amount is below the County proffer guideline of \$48,342 for single-family homes. The following table shows a comparison of the proposed proffers to the current guidelines considering by-right credits (credit for the number of homes that could be built without the zoning change). Staff notes that consideration of by-right credits was never officially adopted by the Board as policy, but is provided for informational purposes.

Total Units	170
By-Right Units	77
New Development Units	93
Proposed Proffers Per Unit	\$13,656.44
Proffers per Unit for New Development Units	\$24,963.39
Current Guidelines Recommendation	\$48,342.00

The proffer statement includes lump-sum cash contributions for transportation and other purposes. A total of \$215,000 would be contributed for traffic signal warrant studies, traffic signal construction costs, or other transportation uses. Other payments are being offered for off-site purposes, including \$50,000.00 to establish a McCarty "Mack" Moncure endowed scholarship fund, provided directly to the Stafford County School Board. Staff notes that this proffer is not enforceable since it is a gift to the School Board rather than a proffer to the Board of Supervisors that can be used towards the construction of public school facilities. State law limits the expenditure of proffer funds to capital facilities that add capacity.

Proffer Summary

The applicant submitted the following proffers:

• Require the property to be developed in general accordance with the generalized development plan (GDP);

- Limit the development to no more than 170 single-family detached residential units, and require at least 75,000 square feet but not more than 150,000 square feet of commercial development;
- Prohibit several commercial uses which would otherwise be permitted by-right;
- Require the development be phased such that no more than 101 dwelling units can be constructed before
 issuance of a building permit for at least 20,000 square feet of commercial space, with approximately 40%
 of the commercial space leased as non-retail uses;
- Require inter-parcel access be provided, as generally shown on the GDP;
- Require the following improvements at the intersection of Centreport Parkway and Mountain View Roads:
 - payment of \$15,000 toward a signal warrant study, and an additional \$200,000 for the installation of a signal or for other transportation uses in this immediate area, prior to the County's approval of the initial site plan; and
 - o construction of a northbound left turn lane along Centerport Parkway and restripe eastbound Mountain View Road to create a dedicated right turn lane and left/thru lane, on or before the issuance of the 125th residential occupancy permit;
 - o restripe the Centreport Parkway and I-95 southbound ramp intersection for the purposes of accommodating a dedicated eastbound right turn lane onto I-95 southbound, as well as an additional Eastbound thru lane on Centerport Parkway, by the 101st residential certificate of occupancy if not already completed by others;
- If FRED agrees to service the development, require the construction of a bus stop for FRED service, at the applicant's choice of location, within 12 months of the issuance of the 101st certificate of occupancy;
- Require the applicant to diligently pursue, but not require acquisition of, any offsite right-of-way areas
 required for any proffered in-kind transportation improvements; if unable to obtain such right-of-way, the
 applicant will request the County to exercise its condemnation authority to obtain necessary right-of-way
 areas for public purposes;
- Require construction of an approximately 2,500 square-foot community center prior to the issuance of the 101st residential occupancy permit;
- Require construction of pedestrian and shared-use trails and/or sidewalks in the residential, commercial, and open space areas, to be open to the public and privately maintained by the applicant or the homeowners' association (HOA);
- Prohibit the applicant from requesting credits for the Transportation Impact Fee program resulting from the off-site transportation proffers;
- Require the contribution of \$13,656.44 per residential unit, subject to annual increases (up to 2% annually)
 or decreases to be calculated on a yearly basis commencing two years after the date of the approval of this
 rezoning request;
- Require a one-time payment of \$50,000.00 to establish a McCarty "Mack" Moncure endowed scholarship fund;
- Require the property, prior to development, to be encumbered with a declaration of conditions, covenants, restrictions, and easements to protect property values, ensure unified development, and provide maintenance requirements;
- Require the installation of fencing and earthen berms around the Oakenwold House, stabilization of the House, and performance of a Phase II archaeological study in the area recommended for analysis;
- Limit the development or disturbance of the open space area south of Potomac Creek (South Open Space) for purposes of providing limited recreation and conservation uses, and ingress-egress;

- Require all the open space within the property to be owned and maintained by the HOA for the sole benefit
 of the residents and businesses of the Project, upon request by the County prior to the issuance of the 101st
 residential building permit, to allow the South Open Space to be preserved via a conservation easement or
 restrictive covenants;
- Require disclosures be provided to purchasers regarding noise and proximity to the Stafford Regional Airport, and units be designed to reduce ambient exterior noise levels to a 45 dBa Ldn or less;
- Require, on each final site plan, a statement and identification of occupied bald eagle nests or bald eagle
 protection zones in accordance with state and federal laws governing the protection of active bald eagle
 nests;
- Require the architectural design of the buildings to be in general accordance with submitted architectural renderings; and
- Require construction of a gated emergency access, generally along the existing alignment of Oakenwold Lane, if no inter-parcel connections are constructed prior to the issuance of the 120th building permit.

Architectural Design

For purposes of this rezoning, the architectural design of the buildings shall be in general accordance with the architectural guidelines submitted with the application. There are guidelines that apply to both the commercial and residential portions of the project. Representative images are included, as provided below.

These images are illustrative only and do not depict the final elevations for this project. In this regard, the renderings depict (i) a commitment to a general type, character, and quality of architectural design, details and materials; and (ii) the general types of architectural and decorative elements and features. The design standards are in conformance with several of the recommendations in the Neighborhood Design Standards (NDS) Plan of the Comprehensive Plan.









Architectural Elevations

EVALUATION CRITERIA:

County Code Sec. 28-206 lists 12 criteria to be considered at each public hearing for reclassification.

- 1. Compliance of the request with the stated requirements of the district or districts involved *The request is in compliance with the stated requirements of the B-2 and R-2 Zoning Districts.*
- 2. The existing use and character of the property and the surrounding property *The property currently has a single residence with limited agricultural use. The site is a mix of open pasture and forest land. Land surrounding the site is largely undeveloped and forested. The surrounding zoning is primarily M-1 and B-2, and Interstate 95 borders the property to the east.*
- 3. The suitability of the property for various uses The conditions of the site make it suitable for a variety of uses. The size and existing conditions of the site allow for both a large centralized land bay and smaller land bays. The site has several environmental constraints. Special consideration should be given to cultural and sensitive natural resources that are present on the site. The dam break inundation zones are associated with flood hazard threats in the event of dam failure(s). Those areas are not desirable for residential occupation or commercial uses with high population thresholds.
- 4. The trend of growth and development in the surrounding area The area immediately surrounding the site is largely undeveloped. The closest uses include a large lot residential use and a parcel shipping facility. Much of the surrounding property has been zoned M-1 for many years. The Comprehensive Plan recommends the area for business and industry uses.
- 5. The current and future requirement of the County for land *This project is located along Centreport Parkway, which has adequate right-of-way for planned widening. No other County needs are identified on the site.*
- 6. The transportation requirements of the project and the County, and the impact of the proposed land-use on the County's transportation network *It has been determined that the proposed development, with proffered improvements, would mitigate any negative impacts to the existing transportation network.*

Attachment 1 017-15 R17-69 Page 17

- 7. Requirements for schools, parks, recreational lands and facilities, and other public services, potentially generated by the proposed classification *The proposal would increase the impacts on parks, recreational lands, schools, and other public facilities. The monetary proffers include a per-unit contribution for Fire and Rescue, Parks and Recreation, and Schools but do not address libraries, general government (Transportation Impact Fees of \$2,999 per unit will be required). The amount allocated for Fire and Rescue, Parks and Recreation, and Schools are less than the recommended guidelines.*
- 8. The conservation of property values in the surrounding area Staff believes that the Project would not have a negative effect on any property values in the surrounding area. The uses in the Project would generate minimal noise, dust or smoke emissions.
- 9. The preservation of natural resources and the impact of the proposed uses on the natural environment The development is avoiding the majority of the sensitive natural resources on the site with a significant portion of the parent parcel preserved as open space. The development area accounts for the presence of bald eagles. In the development area, wetlands are being impacted. Significant cultural resources on the site are being documented or preserved.
- 10. The most appropriate use of land The Land Use Plan recommends this area for business and industry use in the Central Stafford Business Planning Area. The proposed commercial uses meet the intent in the Comprehensive Plan. The residential uses are not consistent. A significant amount of the development is within a designated dam break inundation zone from which the Comprehensive Plan discourages development. The residential uses are also not consistent with the Airport Impact Zone recommendations.
- 11. The timing of the development of utilities and public facilities, and the overall public costs of the development Water and sewer utilities are present and may include upgrades. The applicant will be required to install any required transportation and utility improvements required for their project. The development will generate a need for additional public services which are partially mitigated through monetary proffers.
- 12. The consistency, or lack thereof, of the proposed rezoning with the Stafford County Comprehensive Plan as in effect at that time The proposal is consistent with the Comprehensive Plan recommendations regarding the commercial land use, future transportation needs and Architectural design. However, the proposed use is inconsistent with the land use plan as it relates to residential uses, environmental policies regarding wetland impacts, health and safety policies regarding dam break inundation zones, and the airport land use compatibility recommendations.

SUMMARY OF POSITIVE AND NEGATIVE FEATURES:

POSITIVE:

- 1. The proposed commercial uses meet the land use recommendations in the Comprehensive Plan.
- 2. The Project serves to preserve significant cultural resources.

Attachment 1 017-15 R17-69 Page 18

- 3. Proffered road improvements mitigate transportation impacts, consistent with Comprehensive Plan recommendations.
- 4. Proffered Design Guidelines ensure a high-quality development, consistent with the NDS Plan.
- 5. Preserves a significant amount of open space where sensitive natural resources are located.
- 6. Current zoning allows for some residential use of the property.

NEGATIVE:

- 1. The proposed residential use is inconsistent with the Central Stafford Business Planning Area land use recommendations in the Comprehensive Plan.
- 2. Wetland impacts are inconsistent with environmental policies in the Comprehensive Plan.
- 3. The proposed density of the residential use is inconsistent with the Airport Land Use Compatibility recommendations.
- 4. Inconsistent with Comprehensive Plan policies that discourage development of new buildings and structures within dam break inundation zones.
- 5. Monetary proffers are below the per-unit amount recommended in the County's proffer guidelines to offset development impacts to Schools, Parks and Recreation, and Fire and Rescue services, and do not provide any mitigation for libraries and/or general government.

RECOMMENDATION:

Staff supports the proposed zoning change to B-2, Urban Commercial on a portion of the property. Staff does not support the zoning change to R-2, Urban Residential-Medium Density. It should be noted that the proposed proffers are predicated upon approval of both zoning reclassifications. If only a portion of the property is reclassified, or the property is reclassified differently from what the applicant applied for, the proffers would not apply.

At its meeting on April 26, 2017, the Planning Commission voted 7-0 to recommend denial of the application.

Given the above positive and negative features, staff recommends denial of the application pursuant to proposed Resolution R17-69.

O17-15

PROPOSED

BOARD OF SUPERVISORS COUNTY OF STAFFORD STAFFORD, VIRGINIA

ORDINANCE

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 20th day of June, 2017:

MEMBERS:

VOTE:

Paul V. Milde, III, Chairman Meg Bohmke, Vice Chairman Jack R. Cavalier Wendy E. Maurer Laura A. Sellers Gary F. Snellings

Robert "Bob" Thomas, Jr.

.....

On motion of , seconded by , which carried by a vote of , the following was adopted:

AN ORDINANCE TO AMEND AND REORDAIN THE STAFFORD COUNTY ZONING ORDINANCE BY AMENDING THE ZONING DISTRICT MAP TO RECLASSIFY FROM THE A-1, AGRICULTURAL ZONING DISTRICT TO THE R-2, URBAN RESIDENTIAL – MEDIUM DENSITY ZONING DISTRICT AND B-2, URBAN COMMERCIAL ZONING DISTRICT, A PORTION OF TAX MAP PARCEL NO. 37-80, LOCATED WITHIN THE HARTWOOD ELECTION DISTRICT

WHEREAS, IVI Strategies, LLC (Applicant), submitted application RC16151347, requesting a reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density Zoning District and B-2, Urban Commercial Zoning District, on a portion of Tax Map Parcel No. 37-80, located within the Hartwood Election District; and

WHEREAS, the Board carefully considered the recommendations of the Planning Commission and staff, and the public testimony, if any, received at the public hearing; and

WHEREAS, the Board finds that the requested zoning amendment is compatible with the surrounding land uses and meets the criteria for a rezoning in Stafford County Code Sec. 28-206; and

O17-15 Page 2

WHEREAS, the Board finds that public necessity, convenience, general welfare, and good zoning practice require adoption of this Ordinance to reclassify the subject property;

NOW, THEREFORE, BE IT ORDAINED by the Stafford County Board of Supervisors on this the 20th day of June, 2017, that the Stafford County Zoning Ordinance be and it hereby is amended and reordained by amending the Zoning District Map to reclassify from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density Zoning District and B-2, Urban Commercial Zoning District, on a portion of Tax Map Parcel No. 37-80, in the location identified on the plat entitled, "Zoning Plat on the Property of Michelle L. Moncure," prepared by The Engineering Groupe Inc., dated June 6, 2016, with proffers entitled "Voluntary Proffer Statement," dated May 23, 2017.

TCF:JAH:mz

R17-69

PROPOSED

BOARD OF SUPERVISORS COUNTY OF STAFFORD STAFFORD, VIRGINIA

RESOLUTION

At a regular meeting of the Stafford County Board of Supervisors (the Board) held in the Board Chambers, George L. Gordon, Jr., Government Center, Stafford, Virginia, on the 20th day of June, 2017:

MEMBERS:

VOTE:

Paul V. Milde, III, Chairman Meg Bohmke, Vice Chairman Jack R. Cavalier Wendy E. Maurer Laura A. Sellers Gary F. Snellings Robert "Bob" Thomas, Jr.

.....

On motion of , seconded by , which carried by a vote of , the following was adopted:

A RESOLUTION TO DENY THE REQUEST TO AMEND AND REORDAIN THE STAFFORD COUNTY ZONING ORDINANCE BY AMENDING THE ZONING DISTRICT MAP TO RECLASSIFY FROM THE A-1, AGRICULTURAL ZONING DISTRICT TO THE R-2, URBAN RESIDENTIAL – MEDIUM DENSITY ZONING DISTRICT AND B-2, URBAN COMMERCIAL ZONING DISTRICT, ON A PORTION OF TAX MAP PARCEL NO. 37-80, LOCATED WITHIN THE HARTWOOD ELECTION DISTRICT

WHEREAS, IVI Strategies, LLC (Applicant), submitted application RC16151347, requesting a reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density Zoning District and B-2, Urban Commercial Zoning District, on a portion of Tax Map Parcel No. 37-80, located within the Hartwood Election District; and

WHEREAS, the Board carefully considered the recommendations of the Planning Commission and staff, and the public testimony, if any, received at the public hearing; and

WHEREAS, the Board finds that the requested zoning amendment is incompatible with the surrounding land uses and does not meet the criteria for a rezoning in Stafford County Code Sec. 28-206;

R17-69 Page 2

NOW, THEREFORE, BE IT RESOLVED by the Stafford County Board of Supervisors on this the $20^{\rm th}$ day of June, 2017, that application RC16151347 be and it hereby is denied.

TCF:JAH:mz

VOLUNTARY PROFFER STATEMENT

Applicant:

IVI Strategies, LLC, a Virginia limited liability company

Property:

Tax Map Parcel 37-80, known as 68 Oakenwold Lane, containing a total of 231.6 acres, with only 98.5 acres of said parcel subject to this rezoning

(the "Property")

Owner:

Michelle Moncure

Project Name:

Sycamore Grove (the "Project")

Rezoning Request:

From A-1 to R-2 (Residential), ±88.3 acres &

B-2 (Commercial), ± 10.2 acres

Date:

May 23, 2017

File No.:

RC16151347

1. General Requirements & Use.

- (a) The following proffers are being made pursuant to Sections 15.2-2298 and 15.2-2303, et seq. of the Code of Virginia (1950), as amended, and Section 28-161, et seq. of the Stafford County Zoning Ordinance. The proffers provided herein are the only proffered conditions offered in this rezoning application, and any prior proffers in which the Property may be subject to or previously offered or otherwise previously proffered are hereby superseded by these proffers, and further said prior proffers are hereby void and of no further force and effect. In addition and notwithstanding the foregoing, the proffers provided hereunder are specifically conditioned upon and become effective only in the event the Applicant's above referenced Application file number RC16151347 is approved (including through any applicable appeal periods) by the Stafford County Board of Supervisors (the "County").
- (b) Subject to the terms hereunder, the Property will be developed in general accordance with that certain generalized development plan entitled "Generalized Development Plan, Sycamore Grove, B-2, R-2 Rezoning", dated June 27, 2016, as last revised, and prepared by The Engineering Groupe, Inc., which plan is attached hereto, made a part hereof by this reference and marked as Exhibit A (the "GDP").
- (c) The Project shall include the following: (i) no more than 170 single family detached residential units for the R-2 portion of the rezoning (the "Residential Project"); and (ii) a commercial footprint of at least 75,000 square feet and not more than 150,000 square feet for the B-2 portion of the rezoning (the "Commercial Project").
- (d) For purposes of the final site plan (which will supersede the GDP after County approval), proposed parcel lines, parcel sizes, building envelopes and footprints, access points, building sizes, building locations, public road locations, private driveway, road and travel way

locations, interparcel connectors, RPAs and wetland areas, utility locations, storm water management facilities, and dimensions of undeveloped areas shown on the GDP may be relocated adjusted and/or amended from time-to-time by the Applicant to address final development, engineering, and design requirements and/or compliance with federal or state agency regulations including, but not limited to, VDOT, DEQ, Army Corps of Engineers, etc., and compliance with the requirements of the County's development regulations and design standards manual.

- (e) These proffers shall run with and encumber the Property described herein and are binding upon the owner and all future assignees, successors, grantees, or lessees thereof.
- (f) The Applicant agrees that the following commercial uses shall not be permitted on the Property:
 - (1) Building material sale and storage yard and mulch sale;
 - (2) Funeral home;
 - (3) Lumber/building/electrical/plumbing supply with covered storage;
 - (4) Machinery sale and service;
 - (5) Printing, publishing, engraving;
 - (6) Outdoor pavilion greater than 5,000 square feet;
 - (7) Conference center greater than 10,000 square feet; and
 - (8) Exhibition center greater than 5,000 square feet.
- (g) The Applicant shall construct no more than 101 dwelling units before issuance of a building permit for at least 20,000 square feet of commercial space. The Applicant shall lease approximately forty percent (40%) of the commercial space within the initial 20,000 square feet as non-retail.
- **Transportation**. The Applicant, subject to necessary County and VDOT approvals for the development of the Project, agrees to provide the following in-kind transportation proffers:
- (a) <u>Interparcel Access</u>. The Applicant agrees to provide interparcel access, all as generally shown and noted on the GDP.
- (b) <u>Traffic Signal/Intersection</u>. The Applicant agrees to proffer the sum of \$15,000 toward a warrant study for purposes of analyzing the intersection of Centreport Parkway and Mountain View Roads. The Applicant further agrees to proffer an additional sum of \$200,000 to Stafford County for the installation of a signal at the said intersection or for other transportation uses in this immediate area as the County deems most appropriate. The Applicant further agrees to deposit into escrow the funds proffered under this Section 2(b), as may be applicable, prior to the County's approval of the initial site plan for the Project.

- (c) Improvements Centreport and Mountain View. The Applicant will (i) construct offsite one (1) northbound left turn lane along Centreport Parkway on to Mountain View Road, 150 feet in length, and within the limits of the existing bridge over Potomac Creek (including any required lane shifts for the southbound traffic on Centreport Parkway, North of the intersection); and (ii) restripe offsite the existing left only and thru/right turn lane from Mountain View Road (eastbound intersection approach) onto southbound Centerport Parkway to create a left/thru and a dedicated right turn lane, with all of the foregoing occurring on or before the issuance of the certificate of occupancy permit for the 125th residential unit. All improvements will be constructed in accordance with VDOT standards and the traffic study submitted by the Applicant with this application.
- (d) <u>Centreport Parkway and I-95 Southbound.</u> If not already completed by others, the Applicant will restripe (offsite) the Centreport Parkway and I-95 southbound ramp intersection, as may be requested by VDOT or Stafford County, for purposes of accommodating a 300' dedicated eastbound right turn lane with 100' taper on to I-95 southbound, as well as an additional Eastbound thru lane on Centerport Parkway with a 650' stacking length. The thru lane shall be accomplished thru restriping only while the turn lane may require restriping and additional pavement widening or depth. The Applicant will complete this in kind proffer by the 101st residential certificate of occupancy.
- (e) <u>FRED Stop</u>. The Applicant agrees to construct a bus stop for FRED service, at the Applicant's choice of location, at such time as FRED agrees to service the development. Said obligation will cease if FRED has not agreed to service the development within 12 months of the certificate of occupancy of the 101st unit.
- (f) Right of Way. For purposes of the in-kind transportation proffers provided under this Section 2, the Applicant will diligently pursue any offsite right of way areas required for any said improvements; except the Applicant shall not be required to acquire such right of way. In the event the Applicant is unable to obtain such right of way, the Applicant will request the County to exercise its condemnation authority to obtain said necessary right of way for public purposes. Notwithstanding anything to the contrary under this proffer statement, in no event shall the condemnation or acquisition of any right of way delay or hinder the Applicant from continuing and completing the Project, including beyond any applicable time periods to construct the improvements expressed under this Section 2.
- (g) <u>Impact Fees</u>. The Applicant proffers that it will not request credits for any of the above offsite transportation proffers for purposes of the County Transportation Impact Fee program.
- 3. <u>Community Center</u>. The Community Center, constructed for the sole benefit of the Sycamore Grove residents and businesses, will include all or some the following amenities: one to two story building (approximately 2,500 square feet of floor area) consisting of a meeting room, indoor exercise room, reception area, rest rooms, pool dressing areas, swimming pool, children's pool and tot lot. The pool and lounging deck will be fenced and lighted. The Community Center will be constructed prior to the issuance of a certificate of occupancy permit for the 101st residential unit, all as generally shown on the GDP.

- 4. Walking and Bike Trails. The Applicant shall construct pedestrian and shared-use trails and/or sidewalks in the residential, commercial and open space areas. The trails and/or sidewalks will be phased and constructed concurrently with the construction of the applicable sections (as subdivided) of the Project in which the trail and/or sidewalk is located. The shared-use trails and/or sidewalks shall be designed to meet applicable VDOT and Stafford County regulations. The said trails will be open to the public and privately maintained by the Applicant or homeowner's association described here.
- 5. <u>Cash Contribution</u>. For purposes of the Residential Project, and in addition to other proffers described hereunder, the Applicant agrees to pay cash proffers in the aggregate sum of \$2,321,595.00, all as described in more detail below. These cash proffers are also subject to annual increases or decreases to be calculated on a yearly basis commencing two (2) years after the date of final County approval of this proffer statement. Such increases or decreases shall be calculated by multiplication of the Marshall-Swift Index and not the Consumer Price Index of the Department of Labor Statistics for the current year by the original per unit cash proffer amount, but in no event shall any annual adjustment increase by more than 2% annually. All cash proffers shall be paid per residential unit prior to the issuance of a final certificate of occupancy by the County for each said unit.

The cash proffer contributions proffered herein shall be applied to all units equally and will include an aggregate payment of \$13,656.44 per unit, which payment shall be made upon issuance of a final County certificate of occupancy for each residential unit, and allocated on a per unit basis as follows:

- (a) Fire & Rescue: \$1,000.00 per unit
- (b) Parks & Recreation: \$1,000.00 per unit
- (c) <u>Transportation</u>: \$0.00 per unit [Applicant notes that it may be subject to the County's Transportation Impact Fee]
- (d) <u>Libraries</u>: \$0.00 per unit
- (e) <u>Schools</u>: \$11,656.44 per unit
- (f) General Government: \$0.00 per unit

In addition to the above-described per unit cash proffers, the Applicant also agrees to pay the following cash proffers:

The Applicant shall contribute \$50,000.00 to establish a McCarty "Mack" Moncure endowed scholarship fund. This scholarship fund shall be administered by the Stafford County School Board ("School Board"). These funds shall be paid to the School Board prior to recordation of the first residential subdivision plat for the Residential Project.

- 6. <u>Covenants</u>. The Applicant, prior to developing the Property, shall encumber the Property with a declaration of conditions, covenants, restrictions, and easements for the purpose of (a) protecting the value and desirability of the property; (b) facilitating the planning and development of the development in a unified and consistent manner; and (c) providing for the installation, maintenance, and repair for all landscaping, on-site amenities, open space, and other common areas. The Applicant will also create a property owner's association as a non-stock corporation under the laws of Virginia (collectively "Homeowners Association") that will provide and ensure oversight and structure for services provided, quality standards, and common area maintenance.
- 7. <u>Cultural Resources</u>. The Applicant has conducted an Addendum to the Phase 1 Archaeological Survey for the Property as particularly provided in a report prepared by Circa~Cultural Resource Management, LLC, titled "ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT" and dated June 2016, which is attached hereto and marked as <u>Exhibit B</u> (the "Report"). Pursuant to the Report and prior to construction of the Project, the Applicant agrees to undertake the following measures:
 - (a) **Stabilization of Oakenwold House**: (i) limit unauthorized access to the Oakenwold House and outbuildings, including such measures as fencing and earthen berms; and (ii) stabilize the Oakenwold House to the prevent further deterioration, to the extent practicable.
 - (b) **Site 44ST1148 (Oakenwold Farm)**: conduct a Phase II Archaeological study in accordance with the standards promulgated by the Virginia Department of Historic Resources prior to any site disturbance only in the area recommended for a Phase II analysis.

8. Environmental Protection/Open Space.

- (a) Open Space, the Applicant proffers the following:
- 1. All open space within the Property shall either be owned and maintained by the Homeowners Association for the sole benefit of the residents and businesses of the Project or a portion of which may be dedicated, all as described in more detail below.
- 2. The open space area south of Potomac Creek as shown and designated on the GDP ("South Open Space") shall not be developed or disturbed except for any ongoing obligations for the existing billboard uses, and for purposes of developing the Project, including without limitation the following actions: extension of utilities, construction of roads for purposes of providing access to and from Mountain View Road, community gardening by residents of the Project, wetland mitigation, undertaking stormwater and LID measures, maintenance of existing and subsequent obligations of the Project, permit access and maintenance of existing billboards, providing Project amenities including without limitation trails, temporary grading and ingress/egress regarding all of the foregoing, and miscellaneous temporary impacts typical in developing property within the County (collectively all of the foregoing known as "Permitted Actions"). The Permitted Actions shall run with and encumber the South Open Space and benefit the

Applicant, including for purpose of any subsequent assignment or conveyance of the South Open Space to any other owners, assignees, successors, trustees, and lessees.

- 3. As an alternative to ownership and maintenance by the Applicant or Homeowners Association, the South Open Space, upon request by the County, will be preserved via a conservation easement whereby the said area will be conveyed to a qualified third party easement holder to the extent the Applicant is able to obtain approval of said easement holder to accept the South Open Space. In the event the Applicant is unable to obtain the approval of a qualified third party easement holder to accept the easement, the Applicant will encumber the South Open Space with restrictive covenants that will preserve the area and prohibit any development of the South Open Space into perpetuity, except as otherwise provided under this proffer statement. The County shall make the aforesaid request prior to the issuance of the 101st residential unit building permit for the Residential Project. Any transfer of rights regarding the South Open Space shall be subject to the Permitted Actions.
- (b) Stafford County Regional Airport. All marketing literature and handouts to any potential residential purchaser will include notification of the Stafford Regional Airport's proximity to the Property. In addition, the Applicant agrees that a provision will be included in the deeds of all new homes sold within the Project advising of the proximity of the airport. At closing on any new home within the Project, the buyer shall be required to acknowledge in writing the receipt of such notice. The Applicant further agrees to include a statement regarding the proximity of the airport in any covenants recorded for the Project.

All residential units for the Project shall include design specifications for the exterior walls, roofs and windows which reduce internal noise levels within the residential unit, from ambient exterior noise levels to 45dBa Ldn (Average Daily Noise Level) or less. This shall be determined at the time building permits are issued.

- (c) Eagles' Nests. A statement shall be provided on each final site plan indicating whether the portion of the property that is subject of the site plan is in proximity of an occupied bald eagle nest, or within a bald eagle nest protection zone as defined by the Virginia Department of Game and Inland Fisheries (VDGIF) and/or U.S. Fish & Wildlife Service (USFWS). If so occupied, the Applicant shall identify and show the protection zone on the site plan and shall comply with all applicable state and federal laws governing the protection of active bald eagle nests as they may impact the property.
- 9. Architecture & Materials. For purposes of this rezoning, the architectural design of the units shall be in general accordance with the renderings attached hereto and marked as Exhibit C (the "Renderings"). The Renderings are illustrative only and do not depict the final elevations for this project. In this regard, the Renderings depict (i) a commitment to a general type, character, and quality of architectural design, details and materials; and (ii) the general types of architectural and decorative elements and features.

10. <u>Emergency Access</u>. The Project includes 2 inter-parcel connections in addition to the primary access from Centerport Parkway. If neither inter-parcel connection is constructed to access existing Centerport Parkway thru offsite properties, before the 120th building permit, the applicant will provide an emergency access generally along the existing alignment of Oakenwold Lane. The emergency access road, constructed with a gated entrance, will be designed for emergency vehicles only, with the exception of doubling as a pedestrian trail.

[AUTHORIZED SIGNATURES TO FOLLOW]

APPLICANT ACKNOWLEDGMENT & CONSENT

IVI Strategies, LLC, a Virginia limited liability company

John S. Groupe V, Member

COMMONWEALTH OF VIRGINIA, CITY/COUNTY OF Trince With to-wit:

The foregoing instrument was acknowledged before me this 23 day of May, 2017, by John S. Groupe V, Member of IVI Strategies, LLC, a Virginia limited liability company, on behalf of said company.

My Commission expires: 01-31

01-31-202

Notary Registration Number: 340

REGISTRATION # 340293 MY COMM. EXP.

My Commission Expires September 29, 2026

OWNER ACKNOWLEDGMENT & CONSENT

M27M
Michelle Moncure
South Condina
COMMONWEALTH OF VIRGINIA ,
CITY/COUNTY OF Charleston to wit:
The foregoing instrument was acknowledged before me this 23 ¹ day of May, 2017, by
Michelle Moncure.
Victaum Holmes
Notary Public
My Commission expires: 09129 12026 Notary Registration number:
•
1111111111

EXHIBIT A

Generalized Development Plan

"Generalized Development Plan, Sycamore Grove, B-2, R-2 Rezoning", dated June 27, 2016, as last revised and prepared by The Engineering Groupe, Inc..

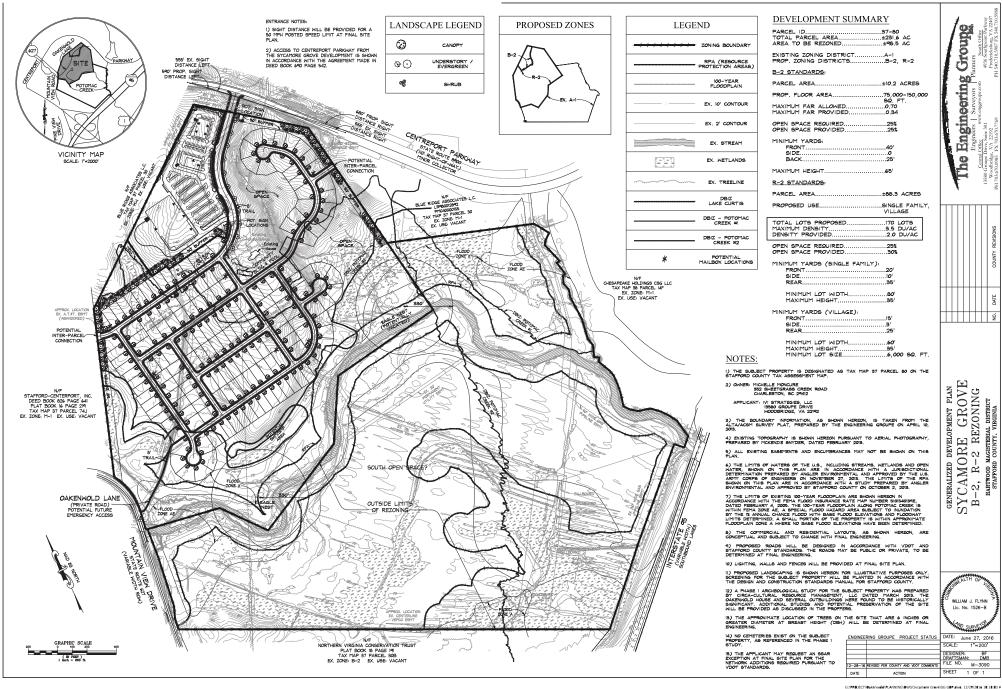
EXHIBIT B

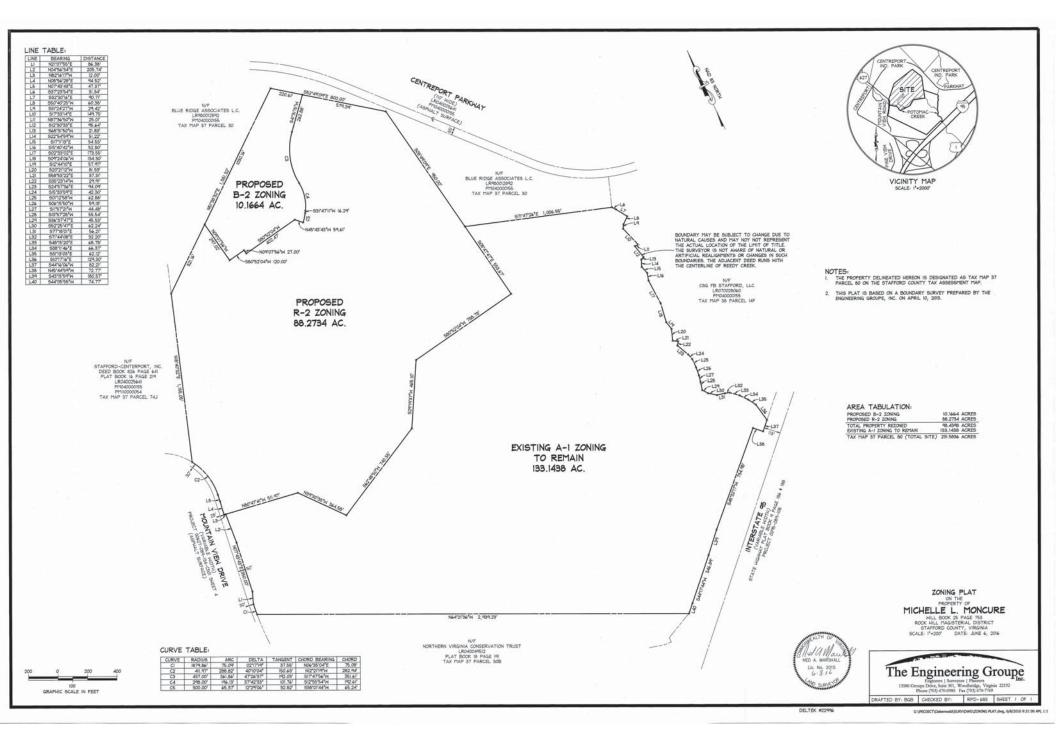
ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT

EXHIBIT C

Renderings

8813120-1 041239,00001









Note:

The layout, as shown hereon, is for illustrative purposes only, subject to modifications based on final engineering.

Sycamore Gr¥ve

Conceptual Plan November 21, 2016

The Engineering Groupe













General Single Family Guidelines

Cohesive architecture design shall be achieved by incorporating the following elements:

- All sides of buildings will be aesthetically pleasing with attention given to exposed end wall and rear elevations.
- The maximum building height, as measures on the uphill side of the lot, will not exceed 35' or 3 stories above the entry parking area.
- · House styles will reflect a diverse theme with unity, imbued with a sense of tradition.
- Building design will be harmonious with the character of adjacent buildings through form, scale, color, materials and proportions.
- Unit size will be appropriately scaled to fit lot size for all homes with minimum and maximum sizes specified.
- No house will be sited on a corner lot at an angle at any major intersection. Corner lot sitings at secondary intersections may be angled if consistent with good land planning.
 Two adjacent, diagonal or opposite buildings may be similar but not of the same elevation and/or color scheme.

Special care must be taken at the entrances, since the first impressions sets the tone for the entire development. A lot which shares a property line with, or is visible from, any through road or the main entrance road, must follow these guidelines:

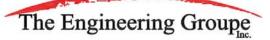
- · Exposed foundations will be brick or stone, or siding to within 8" of grade.
- · Brick or stone front elevations will feature at least a 12" return on all sides.
- Exterior chimneys must have the appropriate masonry (stone, stucco or brick) on outside
 walls. Masonry will not be required through interior walls or through the roof in the rear
 of buildings, or where wood or simulated wood would be traditionally the preferred
 material.
- All visible elevations must be landscaped with the same care as of the front elevations.
- Where architecturally appropriate, shutters shall be used.

Exterior facade elements will be designed in accordance with the following:

- Wood, clapboard, brick, natural or cultured stone, smooth finish stucco, or other various
 appropriate synthetic sidings and wall coverings may all be used for exterior walls.
- The exterior color palette must be in accordance with approved development plans or site plans.
- All siding, whether wood, aluminum, vinyl or composition, must have a minimum 6" lap
 or course; twin 4" siding and twin 5" siding are not acceptable.
- · Front windows will have a minimum 1"- 4" trim or shutters.
- Columns at front porches or porticos will be a minimum of 8" in diameter for round columns or 8" square for box columns with mouldings at top and bottom.
- Awnings will be permitted in the rear of houses.
- Architectural features, such as windows, sills, chimneys, cornices, eaves and gutters may project up to 3' into any required yard, setback or buffer.



General Architectural Guidelines: Single Family Detached Lots















General Commercial Guidelines

Guiding principles for building architecture:

- Civic and public buildings are not restricted to any specific architectural style. A
 variety of architectural expressions is encouraged as means of enhancing the diverse
 mixed use character of the community. Each building will, be use of massing,
 articulation, materials and detail, contribute to a coherent form and structure within
 the community.
- Building skin will avoid exterior reflective materials and mirrored glass.
- · Building massing and landscaping will relate to adjacent development.
- Building facades will be varied and articulated for pedestrian visual interest with one or two additional materials as accents. Appropriate exterior building materials will provide architectural detailing and variation to avoid a flat façade.
- All exterior materials will be durable and of high quality. Acceptable materials
 include brick, stone, siding and asphalt shingles for roofs. Flat roofs will have a
 parapet or cornice.
- Buildings will create a cohesive color palette, based on regional landscapes, which
 take into consideration the finish of all exterior elements and complements the
 architectural character and composition of the building. Colors for manufactured
 items such as brick, siding and asphalt shingles for roofs will be chosen from the
 manufacturers standard color selections. Accent colors are recommended to
 highlight window and door features. The use of fluorescent or garish colors is
 prohibited.
- Mechanical and electrical equipment will be located on the rear or side facing elevation and screened from view.
- Service areas, including dumpsters and loading dock areas will be oriented to minimize visual impact on the site.
- Architectural features, such as windows, sills, chimneys, cornices, eaves and gutters may project up to 3' into any required yard, setback or buffer.

Sycamore Gryve

General Architectural Guidelines: Commercial Development



LAND USE ACTION REQUEST

BOARD OF SUPERVISORS

Date: June 20, 2017

[X] New		[] Re	evised		[] Unfin	ished	
REQUEST:			_	_		the R-2, Urban Resion n of Tax Map Parcel N	
Conforms with	the Comprehe	nsive Plan?	[] Yes	[X] No		[] N/A	
CONDITIONS :	See proposed (Ordinance 017	-25				
APPLICANT:							
Name:	John S. Groupe IVI Strategies,						
Address:	13580 Groupe Woodbridge, V						
Agent:	Charles W. Pay Hirschler Fleis						
TAX STATUS:	Paid through J	une 4, 2017					
PLANNING CO	MMISSION RE	COMMENDAT	<u>ION</u> :	Approv	ve []	Deny [X]	
At its meeting RC16151347.	g on April 26,	2017, the Pla	anning Co	ommission vot	ted 7-0 to	recommend denial	of Application
TIMING:							
Application Da	te	June 28, 2016	(submitt	ed); June 30, 2	016 (comp	leted)	
Advertisement	Date/s	June 6, 2017 a	and June 1	.3, 2017		_	
Plan. Comm. Ad	ction Date	April 26, 2017	7	_(Required)	June 2, 20	17	
Proposed Boar	d Action Date	June 20, 2017	,	_(Required)	July 31, 20)17	

STAFFORD COUNTY, VIRGINIA

ZONING RECLASSIFICATION APPLICATION

IMPACT STATEMENT

Applicant: IVI Strategies, LLC, a Virginia limited liability company

<u>Property:</u> Tax Map Parcel 37-80, known as 68 Oakenwold Lane, containing a total

of 231.6 acres, 98.5 acres of which are subject to the rezoning (the

"Property")

Owner: Michelle Moncure

<u>Project Name</u>: "Sycamore Grove"

Rezoning Request: Bifurcated Rezoning request From A-1 to R-2, ±88.3 acres ("Residential

Project") & B-2, ± 10.2 acres ("Commercial Project"); collectively the Residential Project and Commercial Project is known as the "Project"

Date: June 27, 2016, revised as of December 28, 2016

File No.: RC 16151348

Rezoning Application Request

The Applicant hereby requests a bifurcated rezoning of the following parcel from Agricultural (A-1) to Urban Residential - Medium Density (R-2) (the "Residential Project") and from Agricultural (A-1) to Urban Commercial (B-2) (the "Commercial Project") in accordance with the Stafford County, Virginia (the "County") zoning ordinance, including without limitation Article III, Section 28-35, Article X, Section 28-161, et seq., and Article XII Section 28-201, et seq.:

Tax Parcel 37-80 (of record by Instrument No. WB25, page 753) (the "Property"), known as 68 Oakenwold Lane, consisting of approximately 231.6 acres total, of which 98.5 acres are subject to the rezoning, and generally located along Oakenwold Lane, South of Centreport Parkway and East of Mountain View Drive, within the Hartwood Magisterial District, all as more particularly described on the generalized development plan entitled "Generalized Development Plan, Sycamore Grove, B-2, R-2 Rezoning", dated June 27, 2016, as last revised, and attached hereto as Exhibit A (the "GDP"), which plan is incorporated as a material part of this application by this reference (the "Property").

¹The GDP is a general overview of the proposed development and improvements to the Property in accordance with Article XIII, Section 28-221, et seq., of the County zoning ordinance. The Applicant reserves the right to make modifications or amendments to the GDP in order to address final site engineering, architectural, and design issues internal road placements and entry areas, RPA requirements, and to ensure compliance with applicable federal, state and county regulations, laws and ordinances. A final site plan for the Property will supersede the GDP.

This application provides the following key development features:

- (1) For purposes of the Residential Project, no more than 170 single family and village style detached dwelling units.
- (2) For purposes of the Residential Project, density of 2.0 dwelling units per acre as compared to 3.5 units to the acre allowed under the County zoning ordinance.
- (3) For purposes of the Residential Project, open space of ± 26.5 acres or 30% of the Residential Project acreage, exceeding the R-2 district's minimum requirement of 25%.
- (4) ± 133.1 acres of the Project are not proposed for the rezoning and will remain A-1 zoning and planned to be undisturbed and dedicated for conservation purposes.
- (5) For purposes of the Commercial Project, the Applicant shall construct no more than 101 dwelling units before issuance of a building permit for at least 20,000 square feet of commercial space (e.g. a minimum 12,000 square feet of retail and 8,000 square of non-retail) and the Applicant shall lease approximately forty percent (40%) of the commercial space within the initial 20,000 square feet as non-retail.
- (6) For purposes of the Commercial Project, a maximum FAR of 0.34 compared to the maximum FAR allowed of 0.70.
- (7) For purposes of the Commercial Project, open space of ± 2.5 acres or 25% of the commercial development, meeting the B-2 district's minimum requirement of 25%.
- (8) Significant in-kind transportation improvements as provided more particularly in the attached proffer statement.
- (9) Total of \$2,246,595.00 in monetary cash proffers or \$13,215.26 per unit, all as provided more particularly in the attached proffer statement.
- (10) The project also includes cash proffers totaling \$325,000 for transportation, cultural and community purposes.
- (11) Proffered architectural and design features as generally provided herein and in the attached proffer statement.
- (12) The Project is located within Stafford County's (the "County") Urban Service Area, and will connect to public water and sewer.
- (13) The Project is consistent with County's Comprehensive Plan, as described below.
- (14) The Project also includes a community center, pool, and other active and passive recreational amenities.

Overview

As noted above, the Property is currently zoned A-1. The Applicant proposes for purposes of the Residential Project to reclassify 88.3 acres of the Property from A-1 to R-2 to allow for 170 single family detached units; and for purposes of the Commercial Project, to reclassify 10.2 acres

of the Property from A-1 to B-2 to allow for a minimum of 75,000 square feet and a maximum of 150,000 square feet of commercial space.

Section 28-34 of the County's Zoning Ordinance states the following concerning the R-2 district:

The purpose of the R-2 district is to provide areas of medium-intensity residential uses designed and intended to be primarily characterized by townhouses, duplexes and single-family homes. Such districts are to be located near centers of urban concentrations, only where approved water and sewerage are available and where transportation systems are adequate.

Section 28-34 of the County's Zoning Ordinance states the following concerning the B-2 district:

The purpose of the B-2 district is to designate appropriate areas for high intensity commercial uses intended to serve retail sales and service and business and professional service needs, at a regional or countywide scale. These areas should be located at strategic nodes along arterial and major collector roads where there are adequate utilities and facilities to serve intense development.

The GDP reflects ± 26.5 acres of open space accounting for approximately 30% of the acreage for the Residential Project. This exceeds the 25 percent minimum required by the R-2 district. The GDP reflects ± 2.5 acres of open space accounting for approximately 25% of the acreage for the Commercial Project. This meets the 25 percent minimum required by the B-2 district. The open space will be used for stormwater management facilities, passive recreation, and natural areas. Additionally, approximately 133 acres, the remainder of the tax map parcel, will not be disturbed and will remain A-1 zoned property, and eventually dedicated for conservation purposes.

For purposes of the Project's positive fiscal impact to the County, the Applicant retained Dr. Dean Bellas, with Urban Analytics, Inc. ("Bellas"), to review the Project and prepare a fiscal impact analysis ("FIA"). The FIA is enclosed herewith (marked as Exhibit C) and is entitled "The Economic, Fiscal and Capital Infrastructure Impacts of the Proposed Sycamore Grove Project on Stafford County, Virginia", date June 29, 2016. The FIA concludes that at full build-out the Project will generate \$730,000.00 annually in net beneficial revenues for the County, which includes for purposes of the proposed housing units a generation of \$1.38 per unit for every \$1.00 in county services cost, exceeding the current county average per unit (e.g. \$0.89 for every \$1.00 in county cost) by \$0.49 per unit (in essence subsidizing a portion of the per unit loss), all as provided more particularly in the enclosed FIA.

For purposes of historical features, the Applicant will limit unauthorized access to the Oakenwold House and outbuildings, including such measures as fencing and earthen berms and will stabilize the Oakenwold House to the prevent further deterioration, to the extent practicable, all as provided more particularly in the Applicant's attached proffer statement.

We have also attached and marked as <u>Exhibit D</u> several illustrative renderings depicting the proposed architectural design and construction material features of the proposed units. The

renderings only depict general type, character, and quality of architectural design, details, and materials (collectively, the "Renderings").

Comprehensive Plan

Future Land Use Map

The County's amended 2016 Comprehensive Plan ("Comp Plan"), Future Land Use Map classifies the Property as being part of the "Central Stafford Business Area". In this regard, the Property is located within Planning Area Zone 3. This zone is also designated as the "Business and Industry Area" within the H-1 Horizontal airport compatibility zone. Typically, commercial uses are encouraged within this area, and dense, residential housing uses are discouraged.

As a reminder, the Comp Plan is merely a guide for future land use purposes and by no means does it have the effect of state code or county ordinance. For purposes of the Project, the Applicant proposes a mix of commercial and residential uses. As such, the project proposes a bifurcated rezoning of B-2 commercial and R-2 residential. We believe both the R-2 residential and B-2 commercial proposed zoning districts are consistent with the Comp Plan. Please also note that residential uses are allowed in the Central Stafford Business Planning Area (1750 total and of this amount 550 SFD), as this area is a targeted growth area and concentrations of residential uses are beneficial to commercial uses. In addition, since the Property is zoned A-1, by right, the Applicant could develop 105 single family detached units. The proposed R-2 rezoning will allow for 170 units, which will be located on smaller lots in a clustered setting at a less density of 2 units to the acre vs. 3.5 as allowed with a cluster under the R-2 zoning district.

The proposed project will also include a variety of uses that are recommended in the Business Planning Area, such as a community center, a pool and passive recreational facilities, and open space, including an undisturbed area of approximately 133 acres which will remain zoned A-1. As encouraged by the Comp Plan, the commercial portion of the project will also include a minimum of 75,000 SF or maximum of 150,000 SF of commercial space. The Applicant envisions approximately 30,000 to 60,000 SF of commercial office space and 45,000 to 90,000 SF of restaurants, general retail and services commercial uses, all of which are encouraged under the current Comp Plan.

For purposes of the airport compatibility standards, the Property is located within the H-1 Horizontal zone, which is described as the inside flight pattern for smaller planes. Proposed single family detached units are discouraged in this area and recommended for additional review under the current Comp Plan, but are not deemed incompatible in accordance with the Consolidated Land Use Compatibility Matrix.

In addition and in accordance with the Population Concentration Thresholds chart in the Stafford Regional Airport Land Use Compatibility Study, the H-1 zone allows for the following population concentration:

(H-1; H-2 Zones) Site-wide Intensity: Single-Acre Intensity:

Low to Mid: 200 - 250 Low to Mid: 800 - 1000

people per acre Mid to High: 251 - 300 people per acre people per acre Mid to High: 1001 - 1200 people per acre

Given a projection of approximately 1,599 people total at full build-out of the Project (474 residential, 1,125 people using the maximum commercial floor area), the Sycamore Grove rezoning yields approximately 6.9 people per acre in accordance with the site-wide intensity standards, and 16.2 people per acre in accordance with the single-acre intensity. Thus, the very low density of this Project should not have any adverse impact on airport operations, and is compatible, in our opinion, with the Comp Plan.

Further, the proposed residential units are clustered and proposed on small lots under an R-2 designated zoning district. Further, given the extensive amount of open space being preserved in its current form immediately adjacent to the proposed rezoning sites, there is adequate open space nearby the site to address any need for airport emergency exercise. Also, the Applicant has proffered several airport operation mitigation measures, including construction techniques and materials to reduce airport noise. The Applicant has also proffered disclosures for purposes of providing adequate prior notice to future buyers about the airport operations and distance near the site. Finally, the closest residential unit is more than 3,300' from the centerline of the airport runway, exceeding the minimum standard requested under the compatibility standards.

We believe all of the aforesaid measures and other mitigation efforts will reduce the noise impacts and potential public safety hazards generated by general aviation activity at the airport. Further, since the Applicant could develop 105 units by right, the proposed 170 residential unit development along with the proposed 75,000 to 150,000 Sf in commercial space, plus the preservation of 133 acres of open space, in our opinion, rises to the level of compatibility and consistency with the county's Comp Plan.

Please also note that the success of the Stafford Central Business District depends on investment of infrastructure and activity in this area. The proposed project will provide both with proffered offsite improvements to the immediate transportation impact area within the district and the proposed commercial and residential uses (e.g. rooftops in the immediate area) will generate interest and activity in this area. In addition, the Applicant will be extending utilities, which will be more accessible to other surrounding properties than said utilities are today; thus reducing cost and perhaps providing new development opportunities to said properties.

<u>Urban Service Area</u>

The Comp Plan includes the Property in the Urban Service Area ("USA"). The goal under the Comp Plan is to locate 80% of future cumulative residential growth within the County's USA. This designation attempts to funnel new development in the County to the land around I-95 and other major transportation corridors in order to take advantage of existing public utilities in the area. The Urban Service Area supports any new development which is compatible with the Property's Future Land Use Map designation.

The Project is within the USA and will utilize existing public utilities. In this regard, the Applicant will extend water and sewer lines from nearby rights of way as necessary in order to serve the Property, which will support the goals of the USA and concentrate growth within the same.

Transportation

This site will be accessed by one main and multiple secondary entrances to the property. The main entrance will be on Centreport Parkway and provide direct access to and from I-95. Sycamore Grove may also be accessed from several inter-parcel connections.

The Applicant has performed a transportation impact analysis, prepared by VETTRA, dated June 24, 2016, as amended, entitled "Traffic Impact Analysis for Sycamore Grove", which is enclosed herewith and is a material part of this application and marked as Exhibit E (the "TIA"). In summary, concludes that based upon the assumed "scoped" parameters, the analytical evaluations and comparisons in the TIA, it is our opinion that the proposed development will have a modest impact on the subject transportation network area, which can be fully mitigated with the recommended mitigation measures (improvements), all as provided more particularly in the attached TIA.

The Applicant has also proffered traffic improvements, all as detailed more particular in the attached proffer statement.

Impact Analysis

1. <u>Current capacity of and anticipated demands on highways, utilities, storm</u> drainage, schools and recreational facilities.

A. Roads.

Based on the analysis results presented in the TIA, impacts expected as a result of the proposed site, primarily attributable to vehicle trips associated with the proposed commercial development, would impact the offsite study intersections. Based on a comparative analysis between background (2023) and buildout (2023) traffic conditions, offsite intersections are expected to maintain acceptable levels of service with minor modifications.

With ambient traffic growth and programmed regional improvements, Yr. 2023 "Background" (without site traffic) intersection capacity analyses indicate degraded (to "failing" Levels Of Service) for one (1) of the five (5) analyzed intersections, thus indicating the need for public improvements even without the proposed Sycamore Grove "site" development. These degradations are due to significant background traffic growth.

Future Year 2023 "Total" conditions were analyzed with site traffic added to the road network. Intersection analyses reveal that with the addition of the expected "site" traffic, some LOS impact will occur during the PM and/or SAT peak hours at four (4) intersections along Centreport Parkway, thus indicating "site" traffic impact at these intersections. With the "site" traffic added to the future Yr.2023 network, LOS's will change from an "acceptable" LOS=C/D to a "failing" LOS=F at the unsignalized (all-way stop) Centreport Pkwy./Mountain View Rd. intersection. The Centreport Pkwy./I-95 SB & NB Ramp signalized intersections will change from LOS=B/C to LOS=F (SAT) and the Centreport Pkwy./U.S. Rt.1 signalized intersection will change from LOS=D to LOS=E (PM only). The new, proposed unsignalized site entrance along Centreport Pkwy. will operate at "acceptable" (LOS=A) Levels Of Service during the PM & SAT peak hours.

The Applicant agrees to provide intersection improvements at Centreport Parkway and the spine road, intersection improvements at Centreport Parkway and Mountain View Road, and turn lane improvements at the intersection of Centreport Parkway and I-95 southbound. The Applicant agrees to construct a bus stop for FRED service, at the Applicant's choice of location, at such time FRED agrees to service the development. These improvements, as recommended in the TIA and further described in the attached Voluntary Proffer Statement, have an in kind proffer value of \$650,000.

By Right Impacts: The subject parcel is currently zoned A-1, which in relevant part permits a yield of 105 lots by right with a cluster. Thus, the by-right use would generate 1,000 daily trips (105 lots x 9.52 vpd).

B. <u>Utilities</u>. As noted above, the proposed rezoning is located within the County's Urban Service Area and has access to public water and sewer. The proposed project will have minimal impact on utility demands. Existing 18" water and 12" sewer mains are available along Centreport Parkway/Potomac Creek and appear to have available capacity, or the reasonable ability to be upgraded by the developer to provide adequate capacity. The Applicant will extend utility lines to serve the development.

<u>Public Water</u>: Public water will be provided to the site from the County's Central and Falmouth pressure zones through an 18 inch waterline on Centreport Parkway. Onsite water lines will generally be constructed along the proposed roads within the development creating loops and networks throughout the Property. The anticipated daily residential demand for water is as follows: 170 lots x 240 gpd/lot = 40,800 gpd. The anticipated daily commercial demand for water is as follows: 10.2 acres X 750 gpd/acre = 7,650 gpd.

<u>Sewer</u>: The subject site will be served by public sewer through gravity lines to the Potomac Creek pump station. Downstream improvements to the gravity lines and existing pump station will be determined at subdivision approval and offset against required availability and tap fees. Onsite sewer lines will generally be constructed along the proposed roads within the development creating loops and networks throughout the Property. The anticipated daily residential demand for sewer is as follows: 170 lots x 300 gpd/lot = 51,000 gpd. The anticipated daily commercial demand for sewer is as follows: 10.2 acres X 600 gpd/acre = 6,120 gpd.

By-Right Impact: If developed by right as a cluster subdivision under the existing A-1 zoning, the applicant would have to connect to public water and sewer on and adjacent to the Sycamore Grove property. Under this scenario, the anticipated daily demand for water and sewer follows:

Water - 105 lots x 240 gpd/lot = 25,200 gpd Sewer - 105 lots x 300 gpd/lot = 31,500 gpd

C. Storm Drainage. The limits of the Sycamore Grove project consist of an area which is less than 1% of the total Potomac Creek watershed west of I-95. A complementary set of integrated management practices will be provided to the most practicable extent as part of the County's stormwater management requirements. The stormwater runoff from this site will be controlled for quality, while a quantity exception will be requested to reduce the impact on Potomac Creek. Stormwater Management and Best Management Practices will be provided in accordance with the latest Virginia and Stafford County requirements. Approximately 24 acres of impervious surface area for the R-2 residential portion of the Sycamore Grove GDP.

By Right Impact: Same as above, with approximately 27 acres of impervious surface area for the by right plan showing 105 lots.

D. Schools. It is estimated that the project will generate approximately 112 to 163 new school aged children (e.g. school system county wide average per SFD unit is 0.66 and county planning new neighborhood school average per SFD unit is 0.96). The Applicant will provide cash proffers in the amount of \$1,906,594.20 (\$11,215.26 per unit) to offset any school capital facility impacts in the relevant school attendance zone area of the Property. Please review additional details in the attached proffer statement.

By Right Impact: A by-right development would result in approximately 105 dwelling units or approximately 69 to 101 school aged students without the benefit of any proffers for school improvements.

E. Recreational Facilities. Sycamore Grove is a walkable, mixed use community which incorporates both active and passive recreational facilities. It provides a number of recreational amenities to its residents, including a community center with a pool, trails, walks, and common gathering and educational areas linking the natural environment to the community. Sycamore Grove proposes to set aside over 133 acres of land for open space use by the community, along with a number of community uses, open space areas, and preserved open space. A conceptual drawing showing potential layout of the passive and active recreation areas facilities is provided as part of the Generalized Development Plan (GDP).

In accordance with the Stafford County Comprehensive Plan, the average number of persons per household is 2.79, yielding 474 total generated by the 170 lots proposed for Sycamore Grove. Using the Comprehensive Plan recommended park demand of 20 acres per 1,000 residents, the Sycamore Grove project demands approximately 9.5 acres of park land.

By-Right Impact: A by-right development would generate approximately 105 dwelling units, yielding 293 people without the benefit of any proffers for park improvements as provided in the attached proffer statement. Using the Comprehensive Plan recommended park demand of 20 acres per 1,000 residents, the by right project demands approximately 5.9 acres of park land.

F. <u>Fire and Rescue</u>. The station nearest to the Sycamore Grove property is the Mountain View Volunteer Fire Department, approximately 3.5 miles northwest of the site.

By-Right Impact: Same as above.

- 2. **Fiscal Impact**. The FIA concludes that at full build-out the project will generate \$730,000 annually in net beneficial revenues for the County, and further the proposed housing units will generate \$1.38 per unit for every \$1.00 in county services cost, which exceeds the current county average per unit (e.g. \$0.89 for every \$1.00 in county cost) by \$0.49 per unit (in essence subsidizing a portion of the per unit loss), all as provided more particularly in the enclosed FIA. Please see enclosed FIA.
- 3. **Environmental Impact.** Wetlands and Critical Resource Protection Areas (CRPA) have been identified on the site from a field investigation performed by Angler Environmental and preliminarily reviewed by Stafford County. Development has been avoided or ameliorated in these areas, except for limited development of homes, roads, and utility crossings. These areas are fully delineated on the GDP. Also, soil types, topography, and land within the 100-year flood plain were identified and considered in our preliminary effort.

Appropriate Storm Water Management and Erosion Control measures will be provided; therefore, reducing the impact on Potomac Creek and ultimately the Potomac River and the Chesapeake Bay.

The applicant has attempted to be sensitive to existing environmental features and protect natural resources. The proposed development impacts approximately 1.7 acres of wetlands (9% of the wetlands area on the parcel), 1,000 linear feet of streams (5% of the streams on the parcel) and half an acre of open water, i.e. existing farm ponds.

By-Right Impact: Any development utilizing the same developable area will have the same impacts on environmentally sensitive features.

- 4. <u>Impact on Adjacent Properties.</u> The Stafford Regional Airport is located near this property. All residential dwelling units are located more than 3,000 linear feet from the centerline of the runway. A proffer requiring notification of the Airport's proximity has been provided. In addition, noise attenuation measures have been proffered for the residential units in this development.
- Fistorical Sites. A Phase I Cultural Resource Survey by Circa~ Cultural Resource Management, LLC, dated March 2013 has been prepared, and a copy has been submitted and reviewed. An update, titled "ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT" and dated June 2016, is attached hereto and marked as **Exhibit B**. This study found only one site that may be eligible for the National Register. Further structural and archeological studies are recommended and are proffered to be undertaken.

Special evaluation measures are proposed to identify the potential need and measures to protect older structures on the Sycamore Grove property.

- 6. **Exhibits:** The following exhibits are enclosed herewith and are a material part of this application:
 - (a): "Generalized Development Plan, Sycamore Grove, B-2, R-2 Rezoning", dated June 27, 2016, as last revised.
 - (b) Phase I Update, titled "ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT" and dated June 2016.
 - (c) Fiscal Impact Statement, titled "The Economic, Fiscal and Capital Infrastructure Impacts of the Proposed Sycamore Grove Project on Stafford County, Virginia", date June 29, 2016.
 - (d) Renderings prepared by The Engineering Groupe, Inc., titled "Sycamore Grove General Architectural Guidelines".

(e) Transportation Impact Analysis, prepared by VETTRA, dated June 24, 2016, entitled "Traffic Impact Analysis for Sycamore Grove".

EXHIBIT A

GDP

See attached "Generalized Development Plan, Sycamore Grove, B-2, R-2 Rezoning", prepared by The Engineering Groupe, Inc., dated June 27, 2016, as last revised.

EXHIBIT B

Update to Phase I titled "ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT" and dated June 2016

EXHIBIT C

Fiscal Impact Statement

"The Economic, Fiscal and Capital Infrastructure Impacts of the Proposed Sycamore Grove Project on Stafford County, Virginia", date June 29, 2016.

EXHIBIT D

Renderings

EXHIBIT E

Transportation Impact Analysis

8303241-2 041239.00001



TRAFFIC IMPACT ANALYSIS

for

SYCAMORE GROVE

Rezoning

Stafford County, Virginia

prepared for:

IVI Strategies, LLC 13580 Groupe Drive Suite 300 Woodbridge, Virginia 22192 703/670-0985

prepared by:

Vernon E. Torney, M.ASCE
President
VETTRA Company
703/590-4932

June 24, 2016

TABLE OF CONTENTS

	<u>Page</u>
1) INTRODUCTION AND SUMMARY a) Purpose and Objectives	1
2) BACKGROUND INFORMATION a) "Background" (Non-Existent) Development and Transportation Improvements b) Proposed Site Development	2 2 5 9 9
3) ANALYSIS OF EXISTING CONDITIONS a) Existing 2016 Intersection Traffic Volumes	11 11
4) FUTURE "BACKGROUND" TRAFFIC CONDITIONS (without development) a) Methodology and Assumptions	15 17
5) PROPOSED SITE TRIP GENERATION a) Site Trip Generation	27 27
6) PROPOSED SITE TRIP DISTRIBUTION AND ASSIGNMENT a) Site Trip Distribution	27 27
7) FUTURE "TOTAL" TRAFFIC CONDITIONS (with development) a) Future "Total" Traffic Volumes	28 28 35
8) RECOMMENDED IMPROVEMENTS (Impact Mitigation Measures) a) Proposed Improvements (Mitigation Measures)	36 36 36
9) QUEUING ANALYSES	39
10) CONCLUSIONS	39
APPENDICES	42

LIST OF FIGURES

Figure Page		
1	Site Location	3
2	"Sycamore Grove" General Development Plan	4
3	Yr. 2023 & 2029 Generalized "Site" PM & SAT Peak Hour Directional Trip Distributions	7
4	Yr. 2023 & 2029 "Site" Daily and PM & SAT Peak Hour Traffic Volumes	8
5	Yr. 2023 & 2029 Programmed Transportation Improvements	10
6	Existing 2016 Roadway Network and Daily & PM/SAT Peak Hour Traffic Volumes	12
7	Existing 2016 PM/SAT Peak Hour Intersection Geometry & Levels Of Service	14
8a 8b	Yr. 2023 "Grown" Daily and PM/SAT Peak Hour Traffic Volumes Yr. 2029 "Grown" Daily and PM/SAT Peak Hour Traffic Volumes	
9	Yr. 2029 Generalized "Other" Development PM & SAT Pk. Hr. Directional Trip Distributions	21
10	Yr. 2029 "Other" Development Daily and PM & SAT Peak Hour Traffic Volumes	22
11a 11b	Yr. 2023 "Background" Daily and PM/SAT Peak Hour Traffic Volumes Yr. 2029 "Background" Daily and PM/SAT Peak Hour Traffic Volumes	
12	Yr. 2023 "Background" PM/SAT Peak Hour Intersection Geometry & Level Of Service	26
13a 13b	Yr. 2023 "Total" (with Site Traffic) Daily & PM/SAT Peak Hour Traffic Volumes Yr. 2029 "Total" (with Site Traffic) Daily & PM/SAT Peak Hour Traffic Volumes	
14a 14b	Yr. 2023 "Total" PM/SAT Peak Hour Intersection Geometry & LOS Yr. 2029 "Total" PM/SAT Peak Hour Intersection Geometry & LOS	
15	Yr. 2023 Recommended Impact Mitigation Measures	37

LIST OF TABLES

]	<u>Cable</u>		<u>Page</u>
	1	"Site" Development Densities & Trip Generation Data	6
	2	Existing 2016 Intersection Level Of Service Summary	13
	3	"Other" Development Densities & Trip Generation	20
	4	Yr. 2023 "Background" Intersection Level Of Service Summary	25
	5a 5b	Yr. 2023 "Total" Intersection Level Of Service Summary	
	6	Comparison of Yr. 2023 "Background" vs. "Total" Intersection Levels Of Service	35
	7	Yr. 2023 "Total" Intersection Level Of Service Summary – with Mitigation	38
	8a 8b	Intersection 95% Back-of-Queue Summary – PM Peak Hour	

LIST OF APPENDICES

Appendix

A	TIA Scoping Correspondence
В	Existing (2016) Traffic Counts; VDOT 2014 ADT Counts
C	Level Of Service (LOS) Information and Criteria
D	Existing 2016 PM/SAT Peak Hour Intersection Capacity Analysis (Synchro) Printouts
E	Yr. 2023 "Background" PM/SAT Peak Hour Intersection Capacity Analysis (Synchro) & SimTraffic Printouts
Fa	Yr. 2023 "Total" PM/SAT Peak Hour Intersection Capacity Analysis (Synchro) & SimTraffic Printouts
Fb	Yr. 2029 "Total" PM/SAT Peak Hour Intersection Capacity Analysis (Synchro) & SimTraffic Printouts
G	Yr. 2023 "Total" PM/SAT Peak Hour Intersection Capacity Analysis (Synchro) & SimTraffic Printouts with Mitigation

1) INTRODUCTION AND SUMMARY

a) Purpose and Objectives

The purpose of this Traffic Impact Analysis (TIA) is to examine the potential traffic impact of the proposed "Sycamore Grove" (site) mixed-use project upon the future area road network. Objectives will be to identify any transportation improvements to offset any potential site traffic impact.

b) Executive Summary

This Traffic Impact Analysis (TIA) examined the potential traffic impact of the proposed "Sycamore Grove" (site) mixed-use project upon the future area road network. The "site", located along the east side of Centreport Parkway (Rt. 8900) and north of Mountain View Road (Rt.627) in Stafford County, is under rezoning review for mixed-use (residential, office, and retail) uses.

This TIA analyzed "worst-case" future (Year 2023 & 2029) PM and SAT peak hour traffic conditions at six (6) intersections along Centreport Parkway. Proposed "worst-case" land uses and associated traffic for the Sycamore Grove "site", with ambient background traffic growth, were included within the analyses. Traffic impact was determined by comparing, via standard intersection capacity analyses, the future "background" (without site-generated traffic) and future "total" (with site traffic) intersection conditions. Daily traffic (VPD) volumes were also provided for the roadway sections adjacent to the proposed mixed-use site. All scope, methodology, and assumption parameters within this TIA are in strict adherence to those originally set by County & VDOT staff at a scoping meeting on May 25, 2016 and affirmed in a June 13, 2016 "final" scoping package.

Existing intersection analyses show that all five (5) analyzed *signalized* and *unsignalized* (stop-controlled) intersections along Centreport Pkwy. currently operate at "acceptable" (LOS=A-D) Levels Of Service in the PM and SAT peak hours.

With ambient traffic growth and programmed regional improvements, **Yr. 2023** "**Background**" (with<u>out</u> site traffic) intersection capacity analyses indicate degraded (to "failing" Levels Of Service) for one (1) of the five (5) analyzed intersections, thus indicating the need for public improvements even without the proposed Sycamore Grove "site" development. These degradations are due to significant background traffic growth. Only the recently-improved Centreport Pkwy./Ramoth Church Rd. intersection will retain "acceptable" LOS's (Levels Of Service) in the PM and SAT peak hours at Yr. 2023 conditions.

The Sycamore Grove "site" is proposed to utilize only one (1) access point — a primary site entrance on Centreport Parkway, located north of Mountain View Road. This sole site access point will be "full access" intersection. The "site" is expected to generate up to 9,796 one-way vehicle-trips (4,898 vehicles visiting the site) per day with 955 (PM peak hour) and 1,180 (SAT peak hour) vehicle-trips. In keeping with a "worst case" scenario, minimal internal capture and no (0) pass-by capture trip discounts have been assumed for this project.

Future Year 2023 "Total" conditions were analyzed with site traffic added to the road network. Intersection analyses reveal that with the addition of the expected "site" traffic, some LOS impact will occur during the PM and/or SAT peak hours at four (4) intersections along Centreport Parkway, thus indicating "site" traffic impact at these intersections. With the "site" traffic added to the future Yr.2023 network, LOS's will change from an "acceptable" LOS=C/D to a "failing" LOS=F at the unsignalized (all-way stop) Centreport Pkwy./Mountain View Rd. intersection. The Centreport Pkwy./I-95 SB & NB Ramp signalized intersections will change from LOS=B/C to LOS=F (SAT) and the Centreport Pkwy./U.S. Rt.1 signalized intersection will change from LOS=D to LOS=E (PM only). The new, proposed unsignalized site entrance along Centreport Pkwy. will operate at "acceptable" (LOS=A) Levels Of Service during the PM & SAT peak hours.

Six (6) years later, due to increased "background" traffic growth, **Year 2029 "Total"** conditions show further worsened LOS's and vehicular delay in both peak hours at all intersections with "very poor/failing" (LOS=F) Levels Of Service at all three (3) *signalized* intersections, plus the *unsignalized* (all-way stop) Centreport Pkwy./Mountain View Rd. intersection.

Mitigation investigation and analyses has determined that the following improvements will be necessary to completely mitigate all site impacts at the four (4) affected intersections, thus returning PM & SAT peak hour Levels Of Services to "background" levels or better.

nous news of services to outenground revers of cetter.											
			<u>Yr. 2</u>	<u> 2023</u>							
]	<u>s. LOS</u>	Post-Mi	tig LOS							
<u>Intersection</u>	Recommended Mitigation Measure	<u>PM</u>	<u>SAT</u>	<u>PM</u>	SAT						
#2) Centreport Pkwy/Mtn. View	Install Traffic Signal when warranted	F	F	В	C						
	Provide dedicated 150 ft. NB Left turn land	e									
	Re-configure EB approach for dedicated R	ight turn									
#3) Centrept.Pkwy/I-95 SB Ramps	Provide dedicated 275 ft. EB Right turn lar	ne F	F	F	В						
	Coordinate w/adjacent I-95 NB Ramps sign	nal									
	Optimize Signal phasings/timings										
#4) Centrept.Pkwy/I-95 NB Ramps	s Coordinate w/adjacent I-95 SB Ramps sigr	nal C	F	В	В						
	Optimize Signal phasings/timings										
#5) Centreport Pkwy./U.S. Rt.1	Optimize Signal Timings	E	C	D	\mathbf{C}						

Based upon the assumed "scoped" parameters, the analytical evaluations and comparisons in this TIA have shown that the proposed development of the "Sycamore Grove" mixed-use project will have some impact on the area network, which can be fully mitigated with the recommended mitigation measures (improvements).

2) BACKGROUND INFORMATION

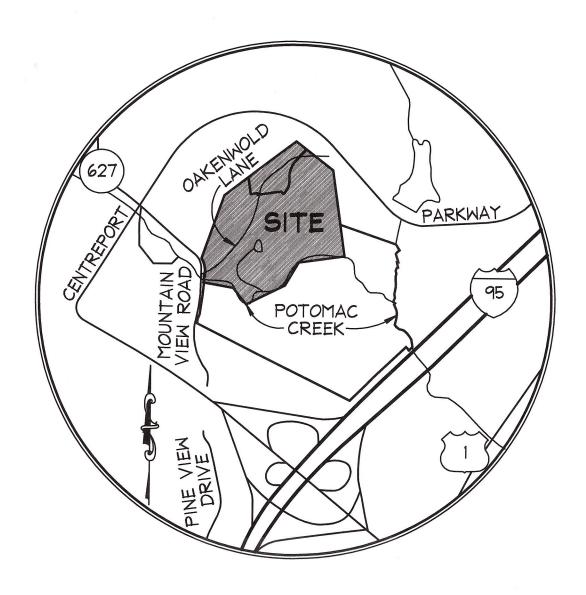
a) "Background" (Non-Existent) Development and Transportation Improvements

In accordance with the latest Stafford County Comprehensive Plan, Virginia Department of Transportation (VDOT) Six-Year Primary and Secondary Road Plans, and as directed by VDOT & County Planning staff, the future Year 2023 & 2029 area roadway network was assumed to be the same as the existing network, with the exception of one (1) public improvement project by Yr. 2023: the I-95/Rt.630 Interchange with Courthouse Rd. Widening. One (1) "other" development ("Centreport") is assumed to be in place by Yr.2029 (but not before). No other public or private improvements are expected or assumed within the study area.

b) Proposed "Sycamore Grove" Site Development

Site Development Plan/Access

The Sycamore Grove "site" (currently zoned A-1 -- on rolling terrain) is proposed to utilize only one (1) primary access point -- along Centreport Pkwy. Located north of Mountain View Road. This main site entrance will be a "full access" intersection. Future interparcel access points to the east and west are possible, but not assumed to be in use at the design years of this TIA. **Figure 1** shows the general location of the "site" within the vicinity and **Figure 2** presents the "Sycamore Grove" general development plan.

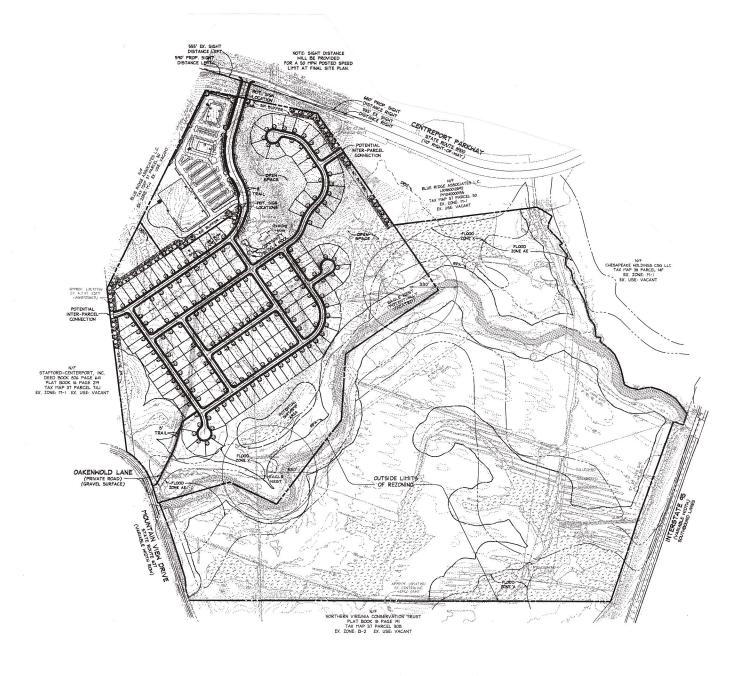


Source: The Engineering Groupe, Inc. -- June, 2016.





N		FIGURE
	Site Location	1
No Scale		



Source: The Engineering Groupe, Inc. -- June, 2016.



N No Scale

"Sycamore Grove"
General Development Plan

FIGURE

2

Development Densities

The "Sycamore Grove" mixed-use development is expected to be built out by Year 2023. **Table 1** provides an itemization of the site's proposed "worst-case" land use and development densities.

Site Trip Generation

Table 1 also presents the calculated buildout Daily and Peak Hour (PM/SAT) trip generations for the proposed "Sycamore Grove" development. These calculations are based on the <u>ITE Trip Generation Manual – 9th Edition (2012)</u> average and fitted-curve equation trip rates. The "site" is expected to generate up to 9,796 one-way vehicle-trips (4,898 vehicles visiting the site) per day with 955 (PM peak hour) and 1,180 (SAT peak hour) vehicle-trips. In keeping with a "worst case" scenario, minimal internal capture and no (0) pass-by capture trip discounts have been assumed for this project.

Site Trip Distributions

Year 2023 & 2029 site-generated trips were assigned to the road network based on pre-approved distributions by County and VDOT staff. Generalized "site" trip distributions for all residential, office and retail uses are shown in **Figure 3.**

Site Traffic Volumes

Based on the abovementioned site trip generation and distributions, site traffic volumes are assigned to the roadway network. **Figure 4** shows the Year 2023/2029 "site-related" Daily and PM & SAT Peak Hour Intersection Movement Volumes.

c) Scope & Study Area

This Traffic Impact Analysis (TIA) examines the potential traffic impact of the proposed "Sycamore Grove" (site) mixed-use project on the future area road network. The "site", located along the east side of Centreport Parkway (Rt. 8900) and north of Mountain View Road (Rt.627) in Stafford County, is under rezoning review for mixed-use (residential, office, and retail) uses -- see **Figure 1** for the site location.

This TIA analyzed "worst-case" future (Year 2023 & 2029) PM and SAT peak hour traffic conditions at six (6) intersections along Centreport Pkwy. and Mountain View Road. Proposed "worst-case" land uses and associated traffic for the Sycamore Grove "site", with ambient background traffic growth, were included within the analyses. Traffic impact was determined by comparing, via standard intersection capacity analyses, the future "background" (without sitegenerated traffic) and future "total" (with site traffic) intersection conditions.

Daily traffic (VPD) volumes were also provided for the roadway sections adjacent to the proposed mixed-use site. All scope, methodology, and assumption parameters within this TIA are in strict adherence to those originally set by County & VDOT staff at a scoping meeting on May 25, 2016 and affirmed in a June 13, 2016 "final" scoping package -- see **Appendix A** for the final scoping documentation.

VETTRA Co. VETTRA Co. **TABLE 1**

5/25/16

\sycgrv\sitegen1.wk4

"SITE" DEVELOPMENT DENSITIES & TRIP GENERATION

SYCAMORE GROVE

PROPOSED DENSITIES AND TRIP RATES

	:: ITE Avg. "Adj.St." Trip Rates							
Land Uses & Densities	Quantity	Unit	:: ::	ITE (Code)	AM Pk.Hr.	PM Pk.Hr.	SAT Pk.Hr.	Weekday : VPD :
SYCAMORE GROVE (prev. Oakenwold) Yr. 2023 Buildout			::					:
Residential			::					:
170 du Single-family, detached homes	170	du	::	(210)	0.75	1.00	0.93 *	9.52 :
<u>Office</u>			::					:
20,000 gsf Gen. Office bldg use fitted curve equations	20.00	Kgsf	::	(710)	2.64	5.04	0.43 *	19.32 :
Retail			::					:
130,000 gsf Gen. Retail/Shop.Ctr use fitted curve equations	130.00	Kgsf	::	(820)	1.41	5.49	7.98 *	61.95 :
			::					:

Notes: du = dwelling unit (Res.)

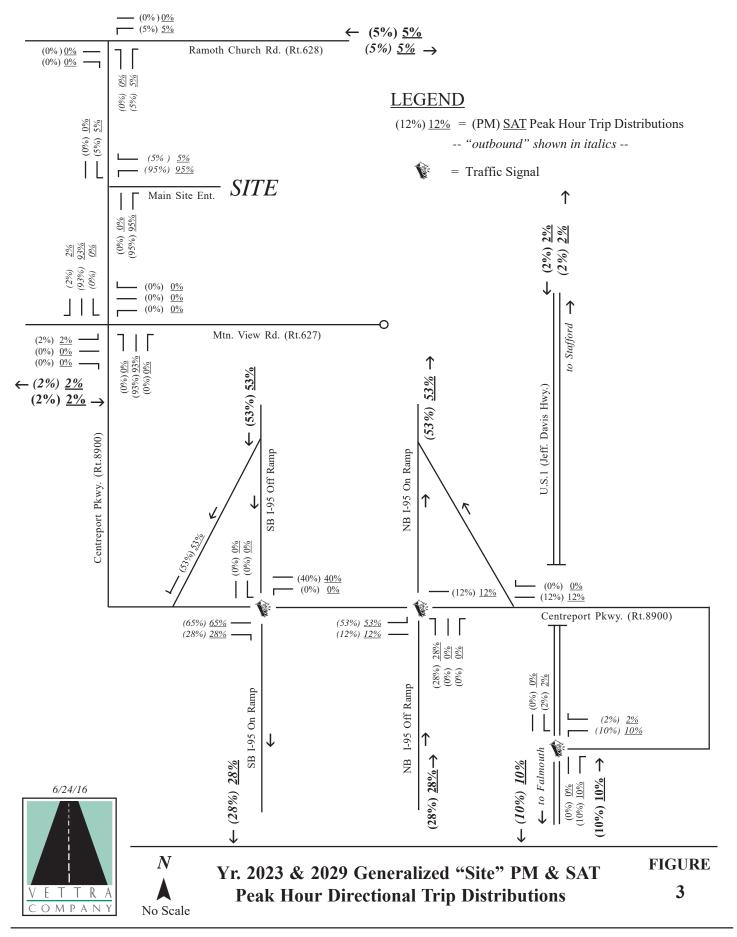
Kgsf = Thousand gross square feet

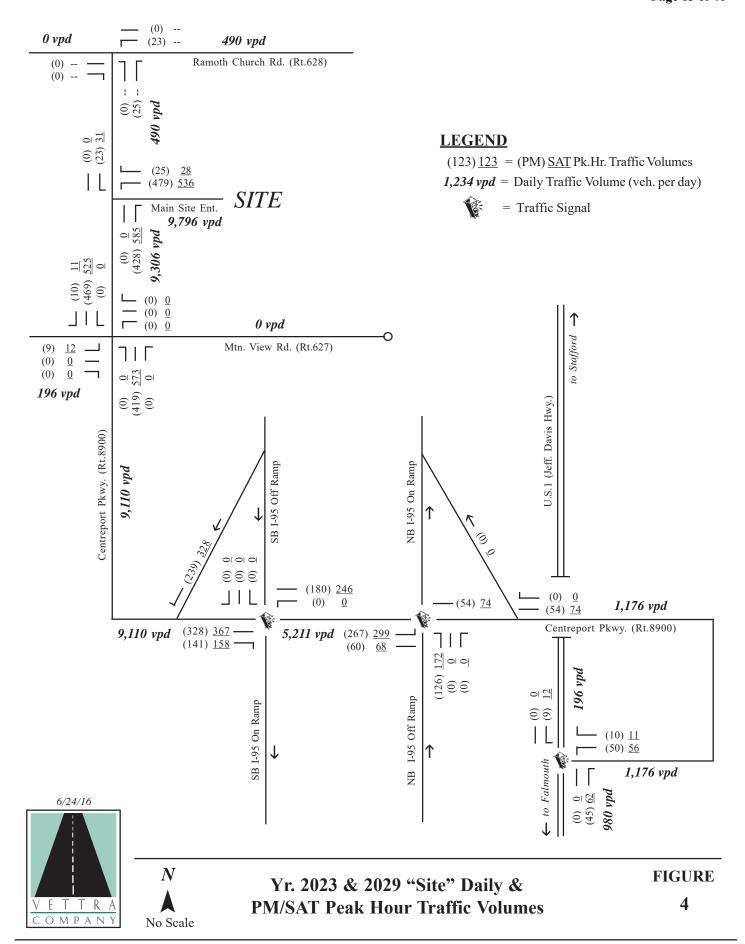
* = "Peak Hour of Gen." trip rate (avg. rate not available)

GENERATED TRIPS

Land Uses & Densities	::		AM Pk.H	∃r.	:	1	PM Pk.H	r.	:		SAT Pk.Hr.		:	
	::				:				:				:	Weekday
SYCAMORE GROVE (prev. Oakenwold) Yr. 2023 Buildout	::	In	Out	Total	:	In	Out	Total	:	In	Out	Total	:	VPD
Residential	::				:				:				:	
170 du Single-family, detached homes	::	32	96	128	:	107	63	170	:	85	73	158	:	1,618
minus 15% int. capture	discount =	<u>-5</u>	<u>-14</u>	<u>-19</u>	:	<u>-16</u>	<u>-9</u>	<u>-26</u>	:	<u>-13</u>	<u>-11</u>	<u>-24</u>	:	<u>-243</u>
	Res. (net) =	27	81	108	:	92	53	145	:	72	62	134	:	1,376
Office	::				:				:				:	
20,000 gsf Gen. Office bldg use fitted curve equations	::	46	6	53	:	17	84	101	:	5	4	9	:	386
minus 5% int. capture o	discount =	<u>-2</u>	<u>-0</u>	<u>-3</u>	:	<u>-1</u>	<u>-4</u>	<u>-5</u>	:	<u>-0</u>	<u>-0</u>	<u>-0</u>	:	<u>-19</u>
	Office (net) =	44	6	50	:	16	80	96	:	5	4	9	:	367
Retail	::				:				:				:	
130,000 gsf Gen. Retail/Shop.Ctr use fitted curve equations	::	113	70	183	:	343	371	714	:	539	498	1,037	:	8,054
	::	======	=====		:	=======	=====	=====	:	=====	=====		:	======
TOTAL	SITE =	185	157	341	:	451	504	955	:	616	564	1,180	:	9,796

Note: All computations are automatically rounded.





d) Plan of Proposed Site

Figure 2 presents the proposed "Sycamore Grove" general development plan.

e) Plan of Nearby Uses

Figure 2 presents the proposed "Sycamore Grove" development plan also showing the adjacent nearby parcels.

f) Existing Road Network and Roadways

Figures 1 & 2 show the existing roads in the vicinity.

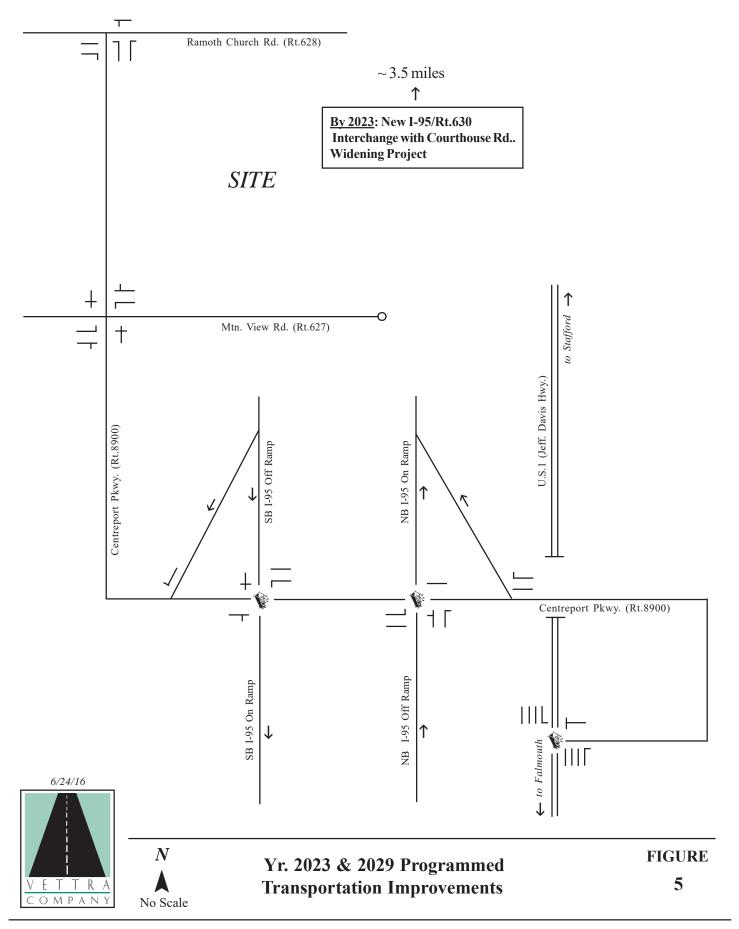
Area Roadway Network

The study area, as outlined by County & VDOT staff at the scoping meeting, includes Centreport Pkwy., Ramoth Church Rd., Mountain View Rd., and U.S. Rt.1. Descriptions of these roads follow:

- □ Centreport Pkwy. (Rt.8900): Centreport Parkway is a predominant north-south (but crosses I-95 eastwest) two (2) lane undivided secondary roadway traversing through the study area connecting Ramoth Church Rd. to the north and US. Rt.1 to the south. Centreport Pkwy. exhibits good-to-excellent geometrics with 12-foot wide travel lanes and 6-foot paved and gravel shoulders. The road has a posted speed limit of 50 mph in the immediate study area (45 mph east of I-95 SB Ramps).
- □ <u>U.S.1</u>: U.S.1 (Jefferson Davis Highway) is a north-south four (4) lane undivided major arterial roadway traversing through the study area connecting the City of Fredericksburg to the south and Prince William County to the north. U.S.1 exhibits fair-to-excellent geometrics with 12-foot wide travel lanes and 6-foot paved and gravel shoulders. The road has a posted speed limit of 55 mph in the immediate study area.
- Ramoth Church Road (Rt.628): Ramoth Church Road is a predominant east-west two (2)-lane roadway connecting Courthouse Rd. (Rt.630) to the northwest with U.S. Rt.1 to the east. Ramoth Church Rd. (named American Legion Rd. east of bridge over I-95) presently serves local residential and commercial uses and exhibits poor-to-fair geometrics with 10-foot wide travel lanes on a ditch section. This road currently has a 40 mph posted speed limit with lesser mph curve/geometric warning advisories.
- □ Mountain View Rd. (Rt.627): Mountain View Rd. is also a predominant east-west two (2)-lane roadway connecting residential areas and schools to the northwest with Centreport Pkwy. to the east. Mountain View Rd. continues southeast past Centreport Pkwy. to a dead-end. Mountain View Rd. presently serves local residential and educational uses and exhibits poor-to-fair geometrics with 10-foot wide travel lanes on a ditch section. This road currently has a 45 mph posted speed limit with lesser mph curve/geometric warning advisories.

g) Programmed Improvements

As identified by staff, the future Year 2023 & 2029 area roadway network was assumed to be the same as the existing network, with the exception of one (1) public improvement project by Year 2023: the I-95/Rt.630 Interchange with Courthouse Rd. Widening by Yr. 2023. One (1) "other" development ("Centreport") is assumed to be in place by Yr. 2029 (but not Yr. 2023). No other public or private improvements are expected or assumed within the study area -- Figure 5 illustrates the programmed public improvement at the I-95/Rt.630 Interchange several miles north of Centreport Parkway by Year 2023.



3) ANALYSIS OF EXISTING CONDITIONS

a) Existing 2016 Intersection Traffic Volumes

Existing PM peak hour "intersection turn movement" volumes for the analyzed intersections were obtained from the Oakenwold TIA and mathematically factored (4% per annum) to Year 2016 levels. VETTRA Company personnel conducted recent May 2015 SAT turn movement counts for all key intersections (except for Centreport Pkwy./Ramoth Church Rd. intersection). These SAT peak hour volumes were obtained from the "Stafford Retail Center" (now called "Centerpoint Gateway") TIA and mathematically factored (4% per annum) to Year 2016 levels -- see **Appendix B** for the PM/SAT "intersection turn movement" count data. The Centreport Pkwy. corridor PM peak hour was measured at 4:30-5:30pm and the SAT peak hour at noon-1:00pm. **Figure 6** presents the Existing 2016 Daily and PM & SAT Peak Hour Turn Movement Volumes, respectively. The latest (2014) VDOT 24-hour counts along Centreport Pkwy. vary greatly -- from 450 vehicles per day (vpd) at Ramoth Church Rd. to 14,000 vpd near U.S. Rt.1. Mountain View Rd. (west of Centreport Pkwy.) had 4,800 vpd and Ramoth Church Rd. had 2,000 vpd in 2011. See **Appendix B** for the 2014 VDOT daily count data.

b) Existing 2016 Intersection Capacity Analysis

Based on the above intersection volumes, existing intersection geometric conditions and observed operations, the five (5) existing intersections along Centreport Pkwy. were analyzed via the Synchro v.9 modeling package. **Table 2** and **Figure 7** present the results of the capacity analyses, showing the computed Levels Of Service (LOS) and vehicular delays for the PM and SAT peak hours, respectively. **Appendix C** provides general LOS information and criteria while **Appendix D** includes the Synchro v.9 summary printouts for these intersections.

Existing intersection analyses show that all five (5) analyzed *signalized* and *unsignalized* (stop-controlled) intersections along Centreport Pkwy. currently operate at "acceptable" (LOS=A-D) Levels Of Service in the PM and SAT peak hours.

- c) Modal Considerations N/A, not requested/scoped
- d) Speed Study N/A, not requested/scoped
- e) Crash History -- N/A, not requested/scoped

f) Sight Distance Analysis

Existing and proposed sight distances at the Site Entrance on Centreport Parkway (50 posted mph) are shown on the GDP – see **Figure 2**.

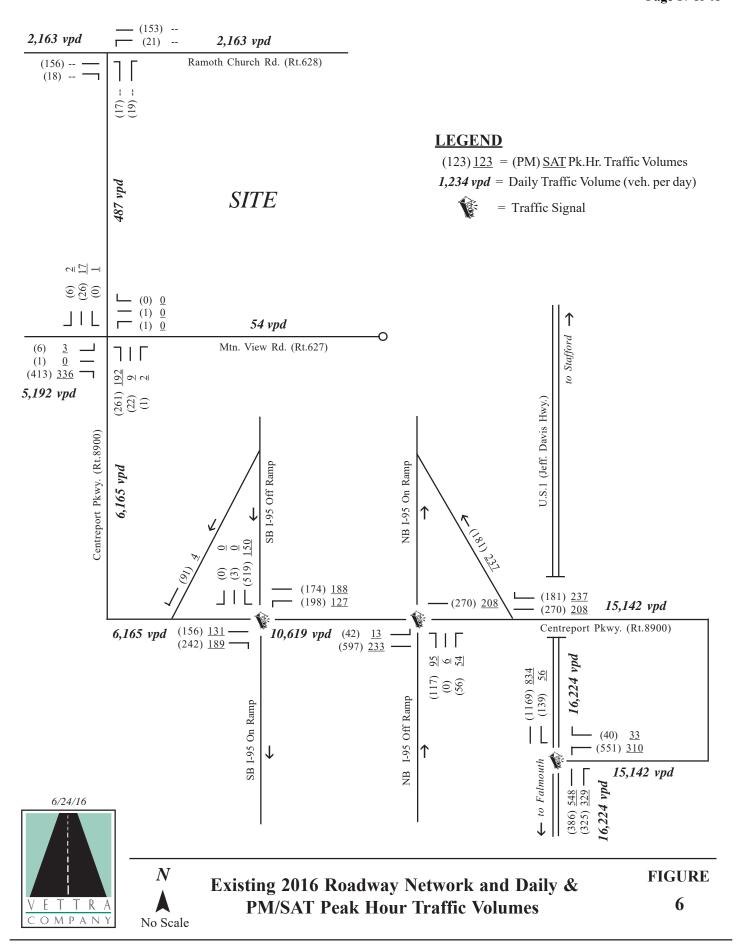


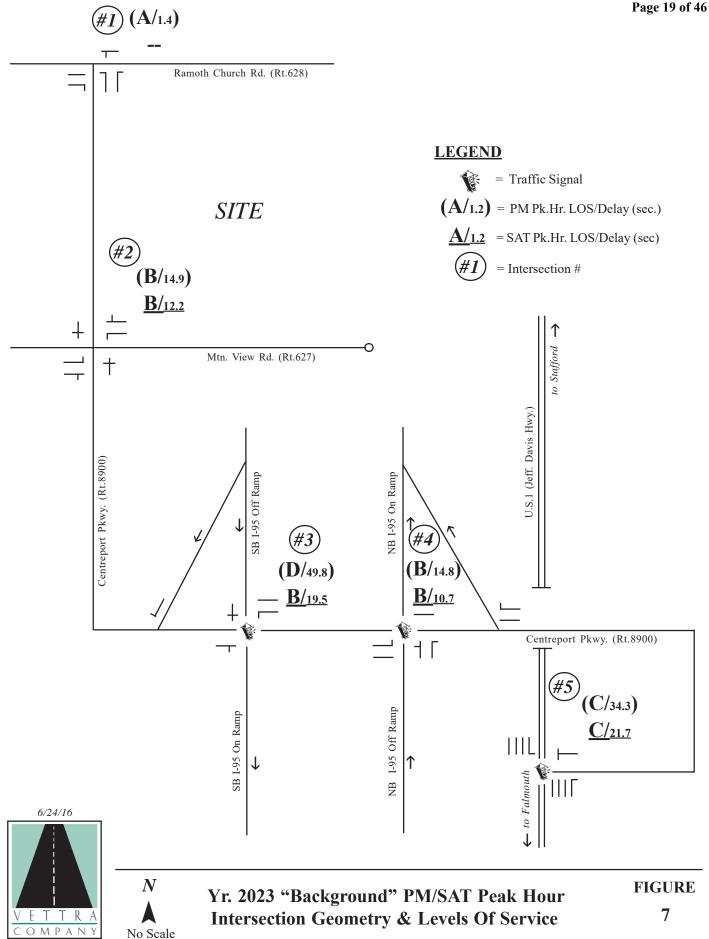
TABLE 2
Existing 2016 Intersection Level Of Service Summary

PM PEA	K HOUR	SAT PEA	AK HOUR
Intersection	Lane Group	Intersection	Lane Group
#) Intersection <u>LOS/Delay</u>	Mvmt. LOS/Dly.	LOS/Delay	Mvmt. LOS/Dly.
(Rd.Name - Synchro Dir.)			
<u>Unsignalized</u>			
1) Centreport Pkwy/Ramoth Ch.*	(overall)		(overall)
(Centreport PkwyNE)	NBL B/11.8		NBL
(Centreport PkwyNE)	NBR $A/9.5$		NBR
(Ramoth Church RdEB)	EBT $A/0.0$		EBT
(Ramoth Church RdEB)	EBR $A/0.0$		EBR
(Ramoth Church RdWB)	WBLT A/7.7		WBLT
2) Centreport Pkwy/Mtn. View ** B/14.9	(overall)	B /12.2	(overall)
(Centreport PkwyNB)	NBLTR B/14.3		NBLTR B/10.8
(Mountain View RdNW)	WBL A/9.5		WBL A/8.4
(Mountain View RdNW)	WBTR A/9.0		WBTR A/8.4
(Mountain View RdSE)	EBL $A/9.0$		EBL A/8.5
(Mountain View RdSE)	EBTR C/15.9		EBTR B/13.1
(Centreport PkwySB)	SBLTR A/9.1		SBLTR A/8.7
<u>Signalized</u>			
3) Centreport Pkwy/I-95 SB Ramps D/49.8	(overall)	B /19.5	(overall)
(Centreport PkwyEB)	EBTR D/41.8		EBTR C/22.5
(Centreport PkwyWB)	WBL B/19.7		WBL A/8.6
(Centreport PkwyWB)	WBT B/13.5		WBT A/7.6
(I-95 SB Ramps-SB)	SBLTR E/79.8		SBLTR C/33.3
4) Centreport Pkwy/I-95 NB Ramps B /14.8	(overall)	$\mathbf{B}/10.7$	(overall)
(Centreport PkwyEB)	EBL $A/6.7$		EBL B/19.2
(Centreport PkwyEB)	EBT B/12.9		EBT A/8.9
(Centreport PkwyWB)	WBT B/17.2		WBT $B/12.1$
(I-95 NB Ramps-NB)	NBLT C/24.9		NBLT B/16.6
(I-95 NB Ramps-NB)	NBR $A/4.8$		NBR A/1.5
5) Centreport Pkwy/U.S. Rt.1 C/34.3	(overall)	C/21.7	(overall)
(Centreport PkwyWB)	WBLR D/43.2		WBLR E/62.7
(U.S. Rt.1-NB)	NBT D/36.3		NBT B/20.0
(U.S. Rt.1-NB)	NBR $A/6.2$		NBR A/7.9
(U.S. Rt.1-SB)	SBL C/32.0		SBL B/11.4
(U.S. Rt.1-SB)	SBT D/36.5		SBT B/11.7
Legend:			
* = Two-way stop controlled			
** = All-way stop controlled			
TOG T 1000 ' 0 A 1'	C		

LOS = Level Of Service -- See Appendix C

LOS/Delay = Level Of Service & Avg. Vehicular Delay (seconds) - for "Overall Intersection" LOS/Dly. = Level Of Service & Avg. Vehicular Delay (seconds) - for "Lane Group"

Mvmt. = Movement (e.g. SBR = SouthBound Right)



4) FUTURE "BACKGROUND" TRAFFIC CONDITIONS (without development)

a) Methodology and Assumptions

The PM & SAT peak hour analyses and evaluations of all *signalized* and <u>unsignalized</u> (stop-controlled) intersections are in accordance with <u>2010 Highway Capacity Manual (HCM)</u> methodology (acceptable @ LOS "D") utilizing the Synchro (version 9) software package. All weekday trip generation rates are based on the <u>ITE Trip Generation Manual (9th Edition) -- 2012</u>. Future trip distributions are based on pre-approved traffic patterns/distributions -- also utilized for reflecting any distributional adjustments/diversions due to changes in network or market conditions.

The following general assumptions, agreed by County & VDOT staff at the pre-analysis scoping meeting, are incorporated within this study (see **Appendix A** for more detail).

- Non-phased "Chapter 527" TIA for mixed-use development (Yr.2023 buildout)
- One (1) site access scenario to be assumed:
 - -- New "full access" point of Site Spine Road @ Centreport Pkwy. (Rt.8900)
- Assume no (0) functional interparcel connections to adjacent properties.
- No 24-hour traffic counts required use latest published VDOT ADT's
- No (0) PM & SAT peak period intersection counts required -- use counts from Oakenwold & Stafford Retail Center TIA's factor up to 2016 levels @ 4% per annum
- Existing (2016) PM & SAT pk.hr. intersection capacity analysis required at following intersections
 - 1) Centreport Pkwy./Ramoth Ch. Rd.(Rt.628) (unsignalized) PM only recently improved
 - 2) Centreport Pkwy./Mountain View Rd.(Rt.627) (unsignalized, all-way stop)
 - 3) Centreport Pkwy./SB I-95 ramps (Signalized)
 - 4) Centreport Pkwy./NB I-95 ramps (Signalized)
 - 5) Centreport Pkwy./U.S.1 (Signalized) include in model coord. w/Enon Rd. signal
- Use 4% annual "growth" rate for all roads in study area
- One (1) "other" area development to be included in buildout year "background" traffic conditions -- none at Yr. 2023; only at Yr. 2029 (in 2029 analysis only):
 - By Year 2023 (site buildout):
 - -- none

By Year 2029 (buildout + 6 years):

- 1) "Centreport" 600 residential apartments sole access to Centreport Pkwy. use trip distributions from June 12, 2013 Oakenwold TIA (Figure 9)
- One (1) public transportation improvement project assumed by buildout years in study area: By Year 2023 (site buildout):
 - 1) I-95/Courthouse Rd.(Rt.630) Interchange w/Courthouse Rd. widening project By Year 2029 (buildout + 6 years):
 - -- No additional
- No (0) private transportation improvement projects assumed by buildout years in study area
- Use "site" trip distributions per June 12, 2013 Oakenwold TIA by VETTRA Co.
- Utilize 9th Ed. ITE "avg." Adj.St. Daily & PM/SAT trip rates, with adjustments/discounts:
 - -- use ITE avg. rates for residential; use ITE "fitted curve equations" for commercial uses Internal Capture:
 - -- 15% trip rate discount for Residential (#200's) site trips
 - -- 5% trip rate discount for Office (#710) "site" trips

Pass-by Capture:

- -- 0% trip rate discounts for any uses
- One (1) "site" trip generation scenario with following proposed uses (by 2023 buildout):
 - 1) Single-family, detached Res. 170 du (ITE #210 avg. rates)
 - 2) Gen. Office 20,000 gsf bldg. -- (ITE #710 fitted curve equations)
 - 3) Gen. Retail (Shop. Ctr.) 130,000 gsf (ITE #820 fitted curve equations)

- One (1) PM/SAT <u>Yr.2023</u> "background" network scenario to be analyzed:
 - -- With above-noted public transportation improvement
 - -- No (0) "other" developments
- Five (5) intersections to be analyzed for buildout (Yr.2023) PM/SAT "background" conditions:
 - 1) Centreport Pkwy./Ramoth Church Rd.(Rt.628) (unsig.) PM only recently improved
 - 2) Centreport Pkwy./Mountain View Rd.(Rt.627) (unsignalized, all-way stop)
 - 3) Centreport Pkwy./SB I-95 ramps (*Signalized*)
 - 4) Centreport Pkwy./NB I-95 ramps (Signalized)
 - 5) Centreport Pkwy./U.S.1 (Signalized)
- One (1) PM/SAT Yr.2026 "background" network scenario to be analyzed:
 - -- With above-noted public transportation improvements
 - -- With two (2) "other" developments (as noted above)
- Five (5) intersections to be analyzed for buildout +6 (Yr.2029) PM/SAT "background" conditions:
 - 1) Centreport Pkwy./Ramoth Church Rd.(Rt.628) (unsig.) PM only recently improved
 - 2) Centreport Pkwy./Mountain View Rd.(Rt.627) (unsignalized, all-way stop)
 - 3) Centreport Pkwy./SB I-95 ramps (Signalized)
 - 4) Centreport Pkwy./NB I-95 ramps (Signalized)
 - 5) Centreport Pkwy./U.S.1 (Signalized)
- One (1) PM/SAT Yr.2023 "Total" (w/site) network scenario to be analyzed:
 - -- With above-noted public transportation improvements
 - -- No (0) "other" developments
- Six (6) intersections to be analyzed for buildout (Yr.2023) PM/SAT "Total" (w/site) conditions:
 - 1) Centreport Pkwy./Ramoth Church Rd.(Rt.628) (unsig.) PM only recently improved
 - 2) Centreport Pkwy./Mountain View Rd.(Rt.627) (unsignalized, all-way stop) -- test
 - 3) Centreport Pkwy./SB I-95 ramps (Signalized)
 - 4) Centreport Pkwy./NB I-95 ramps (Signalized)
 - 5) Centreport Pkwy./U.S.1 (Signalized)
 - 6) Centreport Pkwy./Site Entrance (unsignalized) test
- One (1) PM/SAT Yr.2029 "Total" (w/site) network scenario to be analyzed:
 - -- With above-noted public transportation improvements
 - -- With two (2) "other" developments (as noted above)
- Six (6) intersections to be analyzed for buildout +6 (Yr.2029) PM/SAT "Total" (w/site) conds:
 - 1) Centreport Pkwy./Ramoth Ch. Rd.(Rt.628) (unsignalized) PM only recently improved
 - 2) Centreport Pkwy./Mountain View Rd.(Rt.627) (unsignalized, all-way stop) -- test
 - 3) Centreport Pkwy./SB I-95 ramps (Signalized)
 - 4) Centreport Pkwy./NB I-95 ramps (Signalized)
 - 5) Centreport Pkwy./U.S.1 (Signalized)
 - 6) Centreport Pkwy./Site Entrance (unsignalized) test
- Mitigation Investigation/Solving for all intersections at Yr.2023 only -- "isolated" intersections, except for existing coordination of Rt.1/Centreport Pkwy. & Rt.1/Enon Rd. signals; possible future coordination of Centreport Pkwy./SB I-95 Ramps & Centreport/NB I-95 Ramps signals.
- Maintain "acceptable" LOS=D Level Of Service for overall intersection (per VDOT std.)
- Utilize latest Synchro (v.9) w/defaults per TOSAM (future 0.92 phf, min. 2% Hvy.Veh, -2 sec. lost time, 60-240 sec. cycle)
- Perform 10 runs of SimTraffic (v.9) for Queuing Analysis at all intersections
- No link, weave, or any other extra analyses required
- VPD's to be shown on adjacent external roadways (per 24-hr. VPD counts) & major internal roads
- Provide GDP and vicinity map
- Provide narrative on Bike/Ped opportunities & accommodations
- Provide narrative on TDM Measures (shuttle bus, etc.) opportunities & accommodations
- Provide 5 copies of TIA to County (3 of 5 go to VDOT) -- all with computer disks (data files)

Traffic Growth Trends/"Grown" Traffic Volumes

In order to project future traffic volumes, the existing volumes must first be "grown" (or factored) to the future year. This is performed prior to adding (to the network) the traffic associated with the "other" planned developments. As calculated from VDOT historic counts and concurred with County & VDOT staff, a 4.0 percent per annum increase was utilized for all ambient background traffic. **Figures 8a & 8b** show the "grown" 2023 & 2029 traffic volumes, respectively.

"Other" Area Planned Developments

As identified and directed by staff, only one (1) "other" planned/approved development project ("Centreport") is assumed to be built out within the immediate vicinity by Yr. 2029 (but not by Yr. 2023). The purpose of identifying and analyzing "other" developments is to add the traffic associated with each of these development projects to the future "grown" traffic volumes. The addition of the "grown" and "other" traffic to the road network comprises the future "background" traffic. **Table 3** provides the trip generation information for this one (1) other development. **Figure 9** presents the generalized Yr. 2029 "other" development trip distributions and the assigned traffic volumes are shown on **Figure 10**.

Future "Background" Traffic Volumes

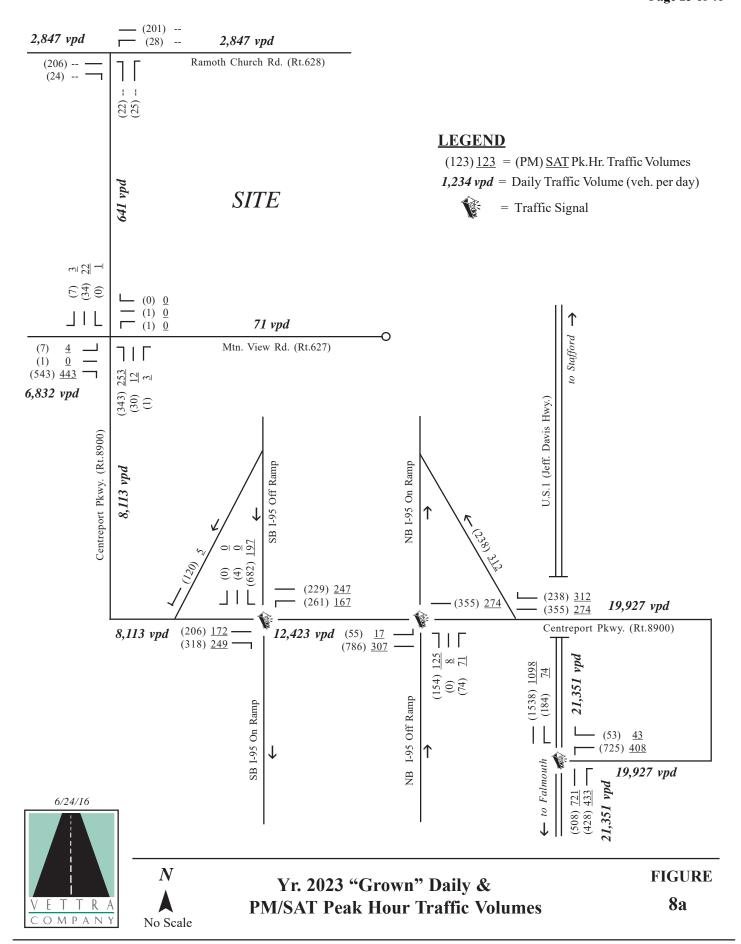
The summation of the Yr. 2023 & 2029 "grown" plus "other" development traffic comprises the future PM/SAT "background" traffic volumes for Year 2023 & 2029. Year 2023 & 2029 "background" traffic volumes are shown in **Figures 11a & 11b**, respectively. Two-way, daily traffic projections for the adjacent roadways are also provided.

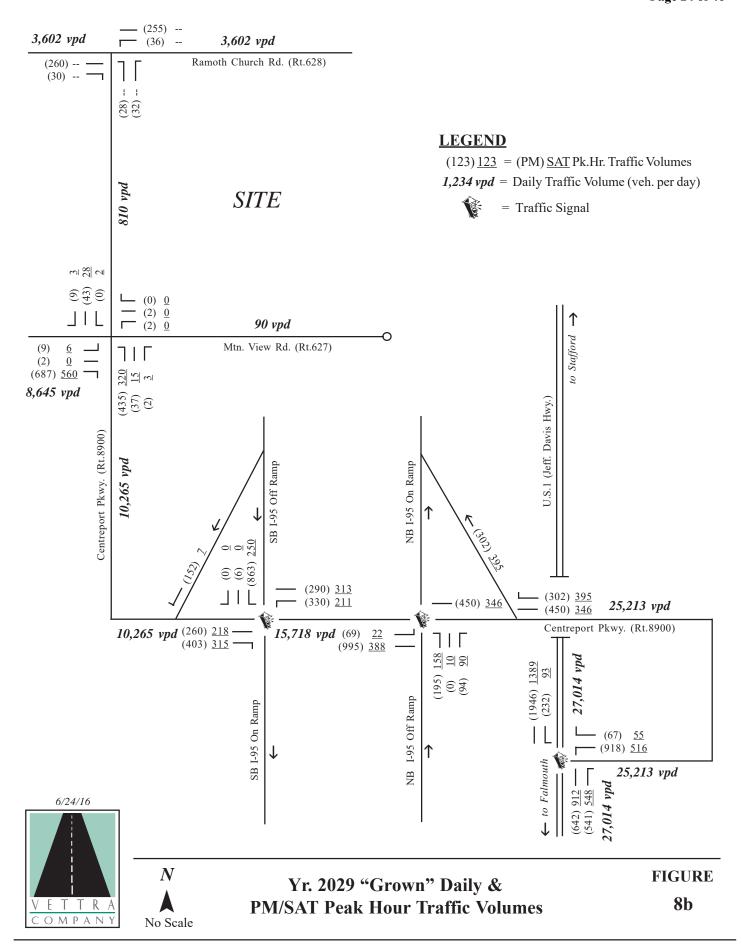
b) Future "Background" Intersection Capacity Analysis

The calculated "background" traffic volumes, with assumed geometrics, were subjected to the Synchro v.9 intersection capacity analyses. **Table 4** and **Figure 12** present the results of the Yr.2023 "background" capacity analyses, showing the computed Levels Of Service (LOS) and vehicular delays at the five (5) "background" intersections for PM/SAT peak hours, respectively. **Appendix E** includes the Synchro v.9 printouts for both peak hours at the analyzed intersections for Yr. 2023 "background" conditions. All Synchro v.9 analyses in this TIA utilize default variables where appropriate.

With ambient traffic growth and programmed regional improvements, **Yr. 2023** "Background" (without site traffic) intersection capacity analyses indicate degraded (to "failing" Levels Of Service) for one (1) of the five (5) analyzed intersections, thus indicating the need for public improvements even without the proposed Sycamore Grove "site" development. These degradations are due to significant background traffic growth. Only the recently-improved Centreport Pkwy./Ramoth Church Rd. intersection will retain "acceptable" LOS's (Levels Of Service) in the PM and SAT peak hours at Yr. 2023 conditions.

c) Mode – N/A, not requested/scoped





VETTRA Co. VETTRA Co. **TABLE 3**

6/10/16

\sygrv\othgen1.wk4

"OTHER" DEVELOPMENT DENSITIES & TRIP GENERATION

PROPOSED DENSITIES AND TRIP RATES

		ii .	ITE Avg. "Adj.St." Trip Rates (9th Edition 2012	::
Land Uses & Densities		::	ITE PM SAT Weekday	. ::
	Quantity Unit	::	(Code) Pk.Hr. Pk.Hr. VPD	::
CENTREPORT @ Yr. 2029		::		::
<u>Residential</u>		::		::
600 du Apartments	600 du	::	(220) 0.62 0.52 * 6.65	::
		::		::
		::		::
		::		::
Notes:		::		::

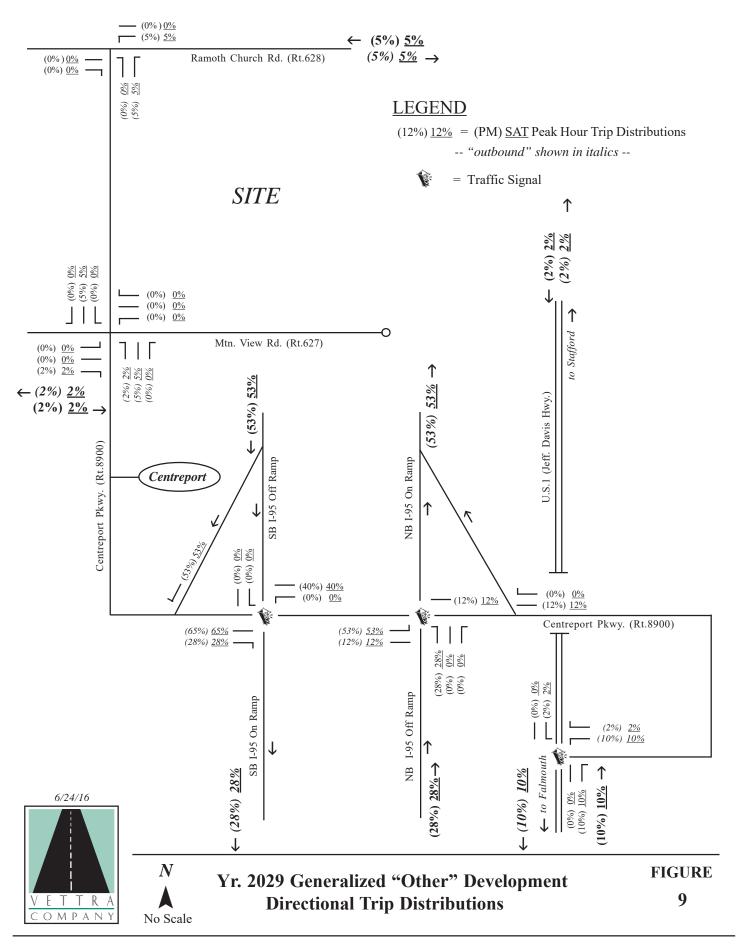
GENERATED TRIPS

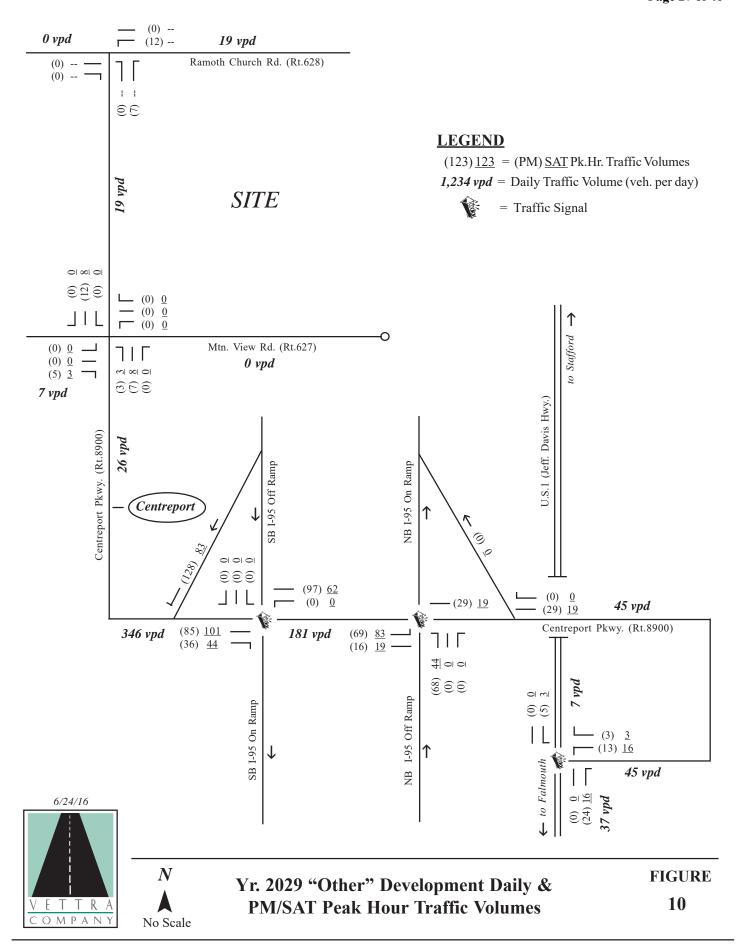
Land Uses & Densities	::		PM Pk.H	łr.	:		SAT Pk.H	lr.	:		::
	::				:				:	Weekday	::
CENTREPORT @ Yr. 2029	::	In	Out	Total	:	In	Out	Total	:	VPD	::
Residential	::				:				:		::
600 du Apartments	::	242	130	372	:	156	156	312	:	3,990	::
	::				:				:		::
	::				:				:		::
	::				:				:		::

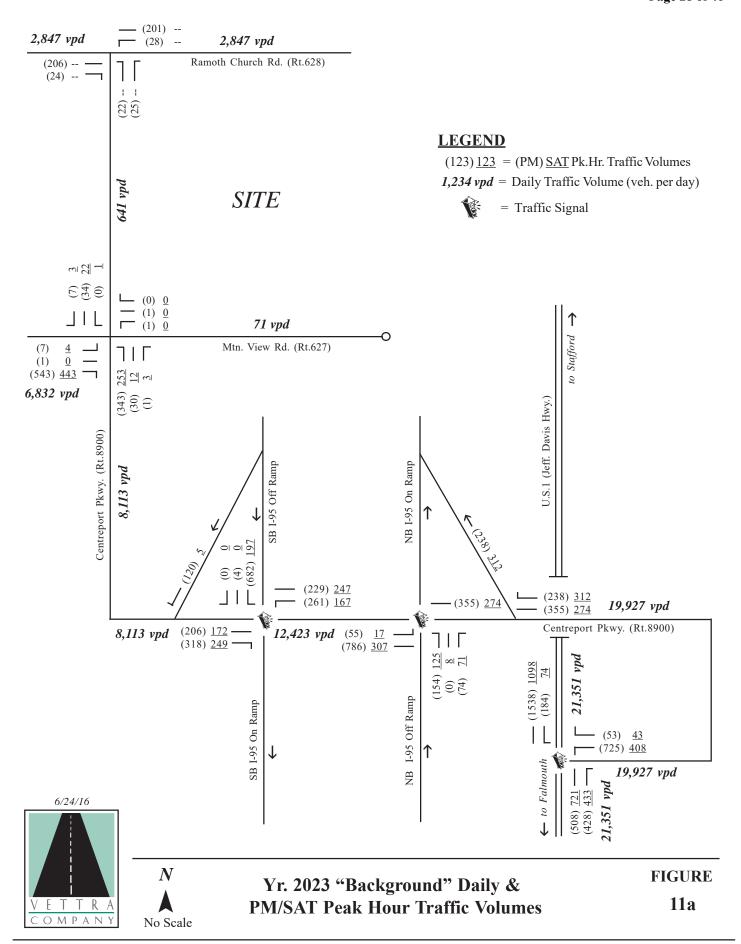
Note: All computations are automatically rounded.

du = dwelling unit (Res.)

* = "Peak Hour of Generator" trip rate -- (avg. rate not available)







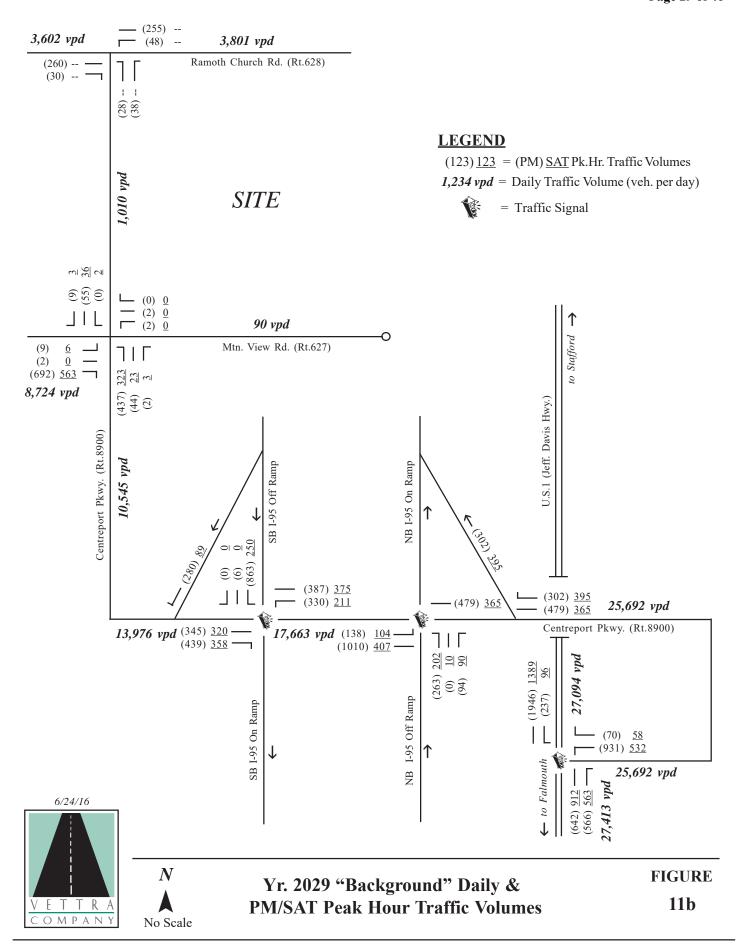
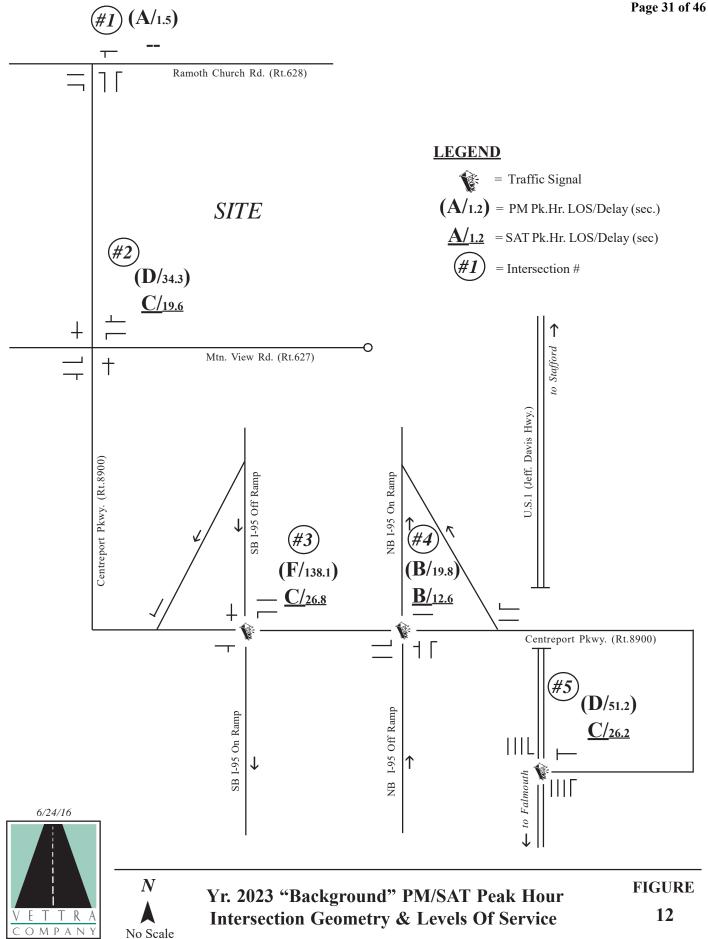


TABLE 4
Year 2023 "Background" Intersection Level Of Service Summary

	PM PEA	K HOUR Lane C		SAT PEA	AK HOUR <u>Lane Group</u>	
#) Intersection	LOS/Delay		LOS/Dly.	LOS/Delay	Mvmt. LOS/D1	y.
(Rd.Name - Synchro I						_
<u>Unsignalized</u>						
1) Centreport Pkwy/Ramoth Ch.*		(overall))		(overall)	
(Centreport PkwyNE	E)	NBL	B/13.5		NBL	
(Centreport PkwyNE	E)	NBR	A /9.9		NBR	
(Ramoth Church Rd	EB)	EBT	A/0.0		EBT	
(Ramoth Church Rd	EB)	EBR	A/0.0		EBR	
(Ramoth Church Rd	WB)	WBLT	A/7.8		WBLT	
2) Centreport Pkwy/Mtn. View **	D/34.3	(overall))	C /19.6	(overall)	
(Centreport PkwyNE	3)	NBLTR	D/26.7		NBLTR B/13.7	
(Mountain View RdN	VW)	WBL	B/10.6		WBL A/9.0	
(Mountain View RdN	VW)	WBTR	A/10.0		WBTR A/9.0	
(Mountain View RdS	EE)	EBL	A /9.5		EBL $A/8.9$	
(Mountain View Rd	SE)	EBTR	E/42.3		EBTR C/23.3	
(Centreport PkwySB	")	SBLTR	B/10.3		SBLTR A/9.5	
<u>Signalized</u>						
3) Centreport Pkwy/I-95 SB Ramps	$\mathbf{F}/138.1$	(overall))	C/26.8	(overall)	
(Centreport PkwyEB	?)	EBTR	D/47.3		EBTR C/33.0	
(Centreport PkwyWI	3)	WBL	D/41.9		WBL B/11.9	
(Centreport PkwyWI	3)	WBT	B/12.6		WBT A/8.4	
(I-95 SB Ramps-SB)		SBLTR	F/282.8		SBLTR D/43.3	
4) Centreport Pkwy/I-95 NB Ramp	$\mathbf{B}/19.8$	(overall))	B/12.6	(overall)	
(Centreport PkwyEB	3)	EBL	A/7.3		EBL C/22.8	
(Centreport PkwyEB	3)	EBT	B/18.5		EBT B/10.9	
(Centreport PkwyWI	3)	WBT	B/19.9		WBT B/13.3	
(I-95 NB Ramps-NB)		NBLT	C/34.5		NBLT B/19.4	
(I-95 NB Ramps-NB)		NBR	A/8.6		NBR $A/3.0$	
5) Centreport Pkwy/U.S. Rt.1	D/51.2	(overall))	$\mathbb{C}/26.2$	(overall)	
(Centreport PkwyWI	3)	WBLR	E/61.7		WBLR E/57.1	
(U.S. Rt.1-NB)		NBT	D/44.4		NBT C/28.9	
(U.S. Rt.1-NB)		NBR	A/7.0		NBR B/10.9	
(U.S. Rt.1-SB)		SBL	D/45.8		SBL B/16.9	
(U.S. Rt.1-SB)		SBT	E/59.6		SBT B/18.2	
Legend:						
* = Two-way stop controlled						
** = All-way stop controlled						
LOS = Level Of Service	See Appendix	C				
LOS/Delay = Level Of Service	-	• .				
LOS/Dly. = Level Of Service	& Avg. Vehicular	r Delay (sec	onds) - for "Lane	Group"		

= Movement (e.g. SBR = SouthBound Right)

Mvmt.



5) PROPOSED SITE TRIP GENERATION

a) Site Trip Generation

The "Sycamore Grove" mixed-use development is expected to be built out by Year 2023. **Table 1** provides an itemization of the site's proposed "worst-case" land use and development densities.

Table 1 also presents the calculated buildout Daily and Peak Hour (PM/SAT) trip generations for the proposed "Sycamore Grove" development. These calculations are based on the <u>ITE Trip</u> Generation Manual – 9th Edition (2012) average and fitted curve equation trip rates.

The "site" is expected to generate up to 9,796 one-way vehicle-trips (4,898 vehicles visiting the site) per day with 955 (PM peak hour) and 1,180 (SAT peak hour) vehicle-trips.

b) Trip Discounts and Reductions

In keeping with a "worst case" scenario, minimal (15% residential, 5% office) internal capture trip discounts for specific land uses have been assumed for this project. No (0) pass-by trip discounts are taken or assumed. See **Table 1** for details.

6) PROPOSED SITE TRIP DISTRIBUTION AND ASSIGNMENT

a) Site Trip Distributions

Year 2023 & 2029 site-generated trips were assigned to the road network based on pre-approved distributions from staff. Generalized "site" trip distributions for residential, office, & retail uses are shown in **Figure 3** and provided in **Appendix A**.

b) Site Trip Assignment

Based on the abovementioned site trip generation and distributions, site traffic volumes are assigned to the roadway network. **Figure 4** shows the Year 2023/2029 "site-related" PM & SAT Peak Hour Intersection Movement Volumes.

7) FUTURE "TOTAL" TRAFFIC CONDITIONS (with site development)

a) Future "Total" Traffic Volumes

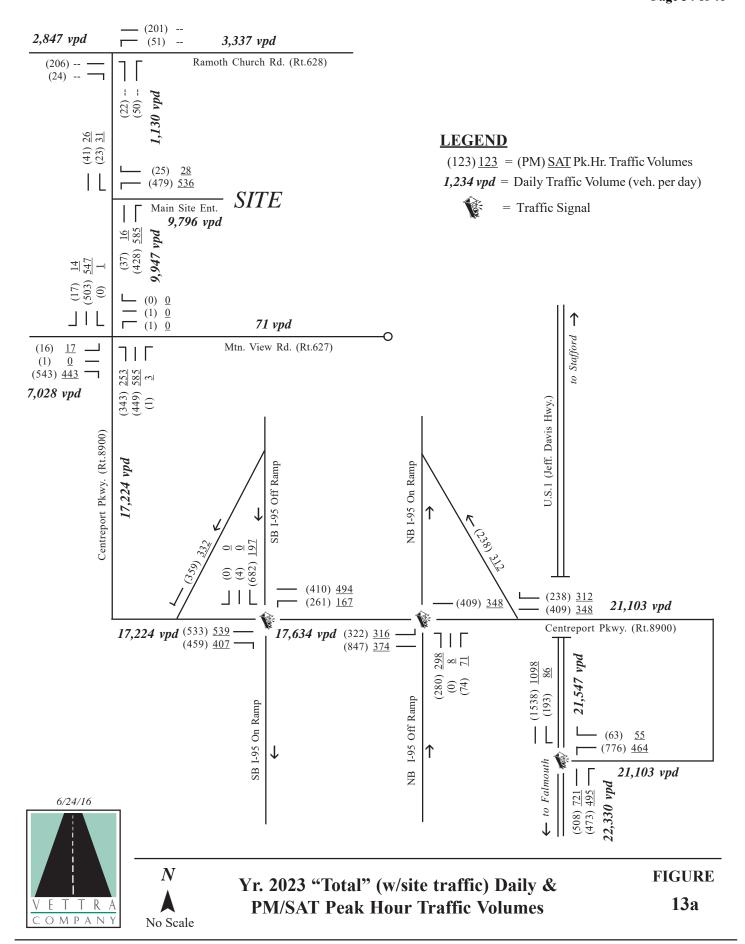
By totaling the future "background" (Figures 11a & 11b) and "site" (Figure 4) traffic volumes, future "total" volumes are developed. Figure 13a shows the Yr. 2023 "Total" PM/SAT peak hour volumes, as well as two-way, daily traffic estimates for the adjacent roadways, respectively. Figure 13b shows the Yr. 2029 "Total" PM & SAT peak hour volumes, respectively.

b) Future "Total" Intersection Capacity Analysis

These "total" traffic volumes, with assumed geometrics, were again subjected to the Synchro v.9 signalized and <u>unsignalized</u> (stop-controlled) intersection capacity analysis procedures (same as conducted for "background" conditions). **Table 5a** presents the results of the **Year 2023** analyses showing the computed Levels Of Service (LOS) and vehicular delays for the PM/SAT peak hours at the analyzed intersections. **Table 5b** presents the same information for **Year 2029**. **Figure 14a** presents the **Year 2023** PM & SAT peak hour LOS information in graphic format, and **Figure 14b** present the **Year 2029** PM & SAT peak hour LOS information in graphic format. **Appendices Fa** & **Fb** includes the Year 2023 & 2029 PM/SAT Peak Hour Synchro v.9 printouts, respectively.

Future **Year 2023 "Total"** conditions were analyzed with site traffic added to the road network. Intersection analyses reveal that with the addition of the expected "site" traffic, some LOS impact will occur during the PM and/or SAT peak hours at four (4) intersections along Centreport Parkway, thus indicating "site" traffic impact at these intersections. With the "site" traffic added to the future Yr.2023 network, LOS's will change from an "acceptable" LOS=C/D to a "failing" LOS=F at the unsignalized (all-way stop) Centreport Pkwy./Mountain View Rd. intersection. The Centreport Pkwy./I-95 SB & NB Ramp signalized intersections will change from LOS=B/C to LOS=F (SAT) and the Centreport Pkwy./U.S. Rt.1 signalized intersection will change from LOS=D to LOS=E (PM only). The new, proposed unsignalized site entrance along Centreport Pkwy. will operate at "acceptable" (LOS=A) Levels Of Service during the PM & SAT peak hours.

Six (6) years later, due to increased "background" traffic growth, **Year 2029 "Total"** conditions show further worsened LOS's and vehicular delay in both peak hours at all intersections with "very poor/failing" (LOS=F) Levels Of Service at all three (3) *signalized* intersections, plus the *unsignalized* (all-way stop) Centreport Pkwy./Mountain View Rd. intersection.



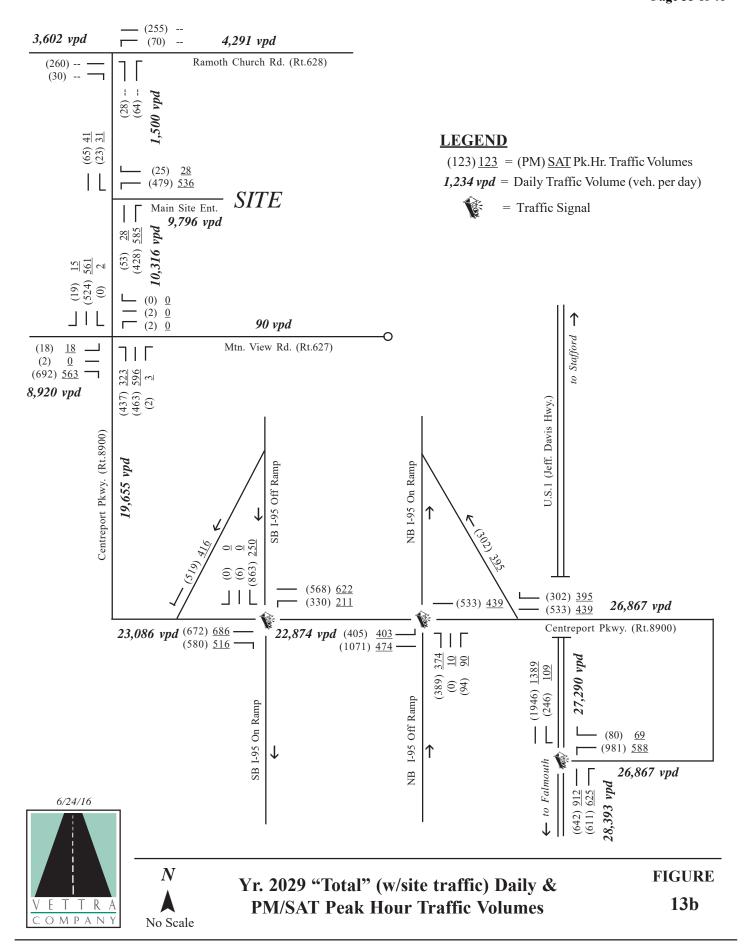


TABLE 5a

Year 2023 "Total" Intersection Level Of Service Summary

		PM PEAF	K HOUR		SAT PEA	K HOUI	R
]	<u>Intersection</u>	Lane G	roup	<u>Intersection</u>	Lane Gi	roup
	n (Rd Synchro Dir.)			LOS/Dly.	LOS/Delay		LOS/Dly.
<u>Unsignalized</u>							
1) Centreport Pk	xwy/Ramoth Ch.*		(overall)			(overall)	
	(Centreport PkwyNE))	NBL	B/14.5		NBL	
	(Centreport PkwyNE))	NBR	B/10.1		NBR	
	(Ramoth Church RdE	(B)	EBT	A/0.0		EBT	
	(Ramoth Church RdE	(B)	EBR	A/0.0		EBR	
	(Ramoth Church RdW	/B)	WBLT	A/7.9		WBLT	
2) Centreport Pk	xwy/Mtn. View **	F/275.9	(overall))	F/310.9	(overall)	
	(Centreport PkwyNB)	1	NBLTR	F /459.4		NBLTR	$\mathbf{F}/387.0$
	(Mountain View RdN	W)	WBL	C/16.3		WBL	C/16.3
	(Mountain View RdN	W)	WBTR	C/15.7		WBTR	C/16.3
	(Mountain View RdSI	E)	EBL	B/12.9		EBL	B/13.2
	(Mountain View RdS	E)	EBTR	F/129.9		EBTR	$\mathbf{F}/118.7$
	(Centreport PkwySB)		SBLTR	F /129.0		SBLTR	F /368.6
6) Centreport Pk	xwy/Main Site Ent.*		(overall)	ı		(overall)	
	(Main Site Entrance-N	E)	WBL	C/17.0		WBL	C/17.4
	(Main Site Entrance-N	E)	WBR	A/8.6		WBR	A/8.5
	(Centreport PkwyNW	·)	SBL	A/7.4		SBL	A/7.3
	(Centreport PkwyNW	·)	SBT	A/0.0		SBT	A/0.0
	(Centreport PkwySE)		NBT	A/0.0		NBT	A/0.0
	(Centreport PkwySE)		NBR	A/0.0		NBR	A/0.0
<u>Signalized</u>							
3) Centreport Pk	xwy/I-95 SB Ramps	F/193.5	(overall)	1	F/188.5	(overall)	
	(Centreport PkwyEB)		EBTR	$\mathbf{F}/210.3$		EBTR	$\mathbf{F}/312.5$
	(Centreport PkwyWB)	WBL	$\mathbf{E}/66.1$		WBL	C/22.8
	(Centreport PkwyWB)	WBT	B/12.9		WBT	A/9.4
	(I-95 SB Ramps-SB)		SBLTR	F/333.3		SBLTR	D/42.2
4) Centreport Pk	xwy/I-95 NB Ramps	C/27.5	(overall))	F/84.9	(overall)	
	(Centreport PkwyEB)		EBL	C/20.5		EBL	$\mathbf{F}/284.5$
	(Centreport PkwyEB)		EBT	C/22.2		EBT	B/12.0
	(Centreport PkwyWB)	WBT	C/34.1		WBT	C/25.2
	(I-95 NB Ramps-NB)		NBLT	D/44.8		NBLT	C/29.5
	(I-95 NB Ramps-NB)		NBR	A/7.9		NBR	A/2.4
5) Centreport Pk	wy/U.S. Rt.1	E/56.5	(overall)	ı	$\mathbb{C}/28.9$	(overall)	
, -	(Centreport PkwyWB)	WBLR	F/84.3		WBLR	D/54.7
	(U.S. Rt.1-NB)		NBT	D/44.3		NBT	C/32.8
	(U.S. Rt.1-NB)		NBR	A/6.8		NBR	B/12.4
	(U.S. Rt.1-SB)		SBL	D/47.9		SBL	C/20.5
	(U.S. Rt.1-SB)		SBT	E/59.6		SBT	C/21.9
<u>Legend</u> : * = Two-y	way stop controlled						
	ay stop controlled						
LOS	= Level Of Service -	- See Appendix (
LOS/Delay	= Level Of Service &			onds) - for "Ove	rall Intersection"		
LOS/Dly.	= Level Of Service &	-	• .	*			
Mvmt.	= Movement (e.g. Sl	-	• .	,	•		
	` `		- /				

TABLE 5b

Year 2029 "Total" Intersection Level Of Service Summary

	PM PEA	K HOUR		SAT PEA	K HOU	R
	<u>Intersection</u>	Lane C	<u>Group</u>	<u>Intersection</u>	Lane G	<u>roup</u>
#) Intersection (Rd Synchro Dir.)	LOS/Delay	Mvmt.	LOS/Dly.	LOS/Delay	Mvmt.	LOS/Dly.
<u>Unsignalized</u>	•		•	•		•
1) Centreport Pkwy/Ramoth Ch.*		(overall)		(overall))
(Centreport PkwyN	E)	NBL	C/18.2		NBL	
(Centreport PkwyN		NBR	B/10.8		NBR	
(Ramoth Church Rd.		EBT	A/0.0		EBT	
(Ramoth Church Rd.		EBR	A/0.0		EBR	
(Ramoth Church Rd.	,	WBLT	A/8.2		WBLT	
2) Centreport Pkwy/Mtn. View **	F/376.2	(overall))	F/374.6	(overall))
(Centreport PkwyN	(B)	NBLTR	F/587.8		NBLTR	F/466.7
(Mountain View Rd		WBL	C/18.1		WBL	C/17.9
(Mountain View Rd	NW)	WBTR	C/17.6		WBTR	C/17.9
(Mountain View Rd	,	EBL	B/13.3		EBL	B/13.4
(Mountain View Rd.		EBTR	F/255.8		EBTR	F/241.8
(Centreport PkwySi		SBLTR			SBLTR	
6) Centreport Pkwy/Main Site Ent.		(overall			(overall)	
(Main Site Entrance-		WBL	C/18.3		WBL	C/18.7
(Main Site Entrance-	<i>'</i>	WBR	A/8.7		WBR	A/8.6
(Centreport PkwyN	<i>'</i>	SBL	A/7.4		SBL	A/7.4
(Centreport PkwyN		SBT	A/0.0		SBT	A/0.0
(Centreport PkwySi		NBT	A/0.0		NBT	A/0.0
(Centreport PkwySi		NBR	A/0.0		NBR	A/0.0
Signalized		NDIC	110.0		TUDIC	110.0
3) Centreport Pkwy/I-95 SB Ramp	F/315.0	(overall))	F/321.3	(overall))
(Centreport PkwyE.		EBTR	F/366.7		EBTR	F/537.9
(Centreport PkwyW		WBL	F/128.4		WBL	C/33.1
(Centreport PkwyW		WBT	B/16.0		WBT	B/12.3
(I-95 SB Ramps-SB)	2)		F/523.2		SBLTR	
4) Centreport Pkwy/I-95 NB Ramp	os E/73.7	(overall)		F/167.2	(overall)	
,		EBL	F/110.5	17/10/.2	EBL	F/601.1
(Centreport PkwyE.		EBT	D/50.5		EBT	B/15.0
(Centreport PkwyE.	,	WBT	D/30.3 D/43.7		WBT	C/28.3
(Centreport PkwyW		NBLT	F/136.4		NBLT	D/38.3
(I-95 NB Ramps-NB)		NBR	A/7.4		NBR	A/4.5
(<i>I-95 NB Ramps-NB</i>) 5) Centreport Pkwy/U.S. Rt.1	F/123.8	(overall)		D/36.6	(overall)	
, 1		WBLR		D/30.0	WBLR	
(Centreport PkwyW	(B)	NBT	D/45.9		NBT	D/45.1
(U.S. Rt.1-NB)			D/45.9 A/7.4		NBR	B/16.3
(U.S. Rt.1-NB)		NBR SBL	F/99.1		SBL	C/28.3
(U.S. Rt.1-SB)		SBT	F/142.1		SBT	C/28.3 C/30.1
(U.S. Rt.1-SB)		201	Γ/142.1		201	C/30.1
<u>Legend</u> : * = Two-way stop controlled						
** = All-way stop controlled						
LOS = Level Of Service	e See Annendix	C				
LOS/Delay = Level Of Service			onds) - for "Over	all Intersection"		
1.00/D1 1.1000	0 A 37.1. 1	. D-1 (, ,	C"		

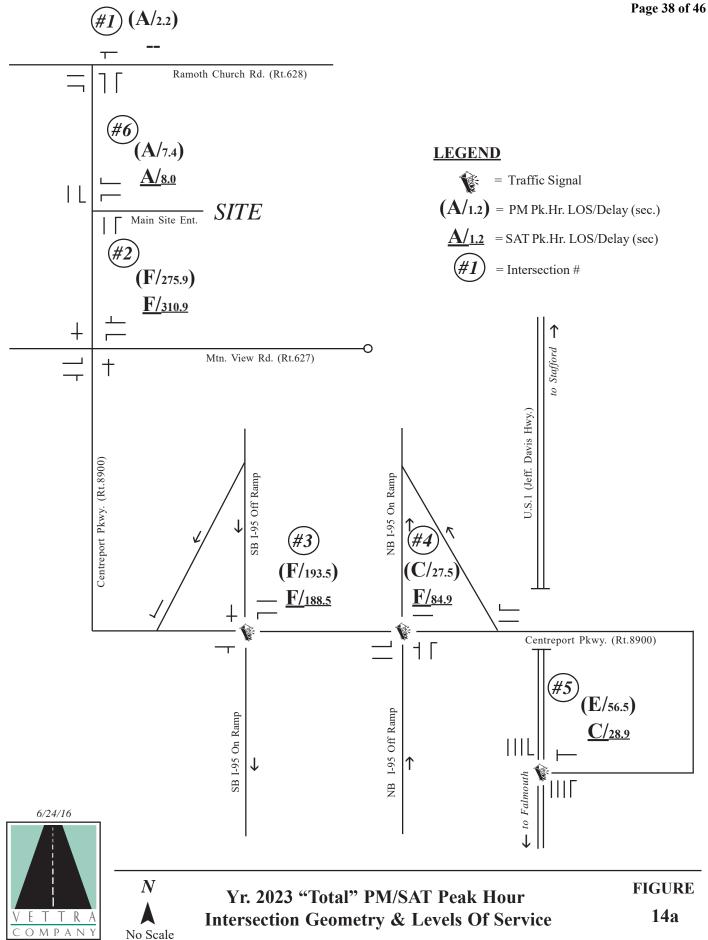
32

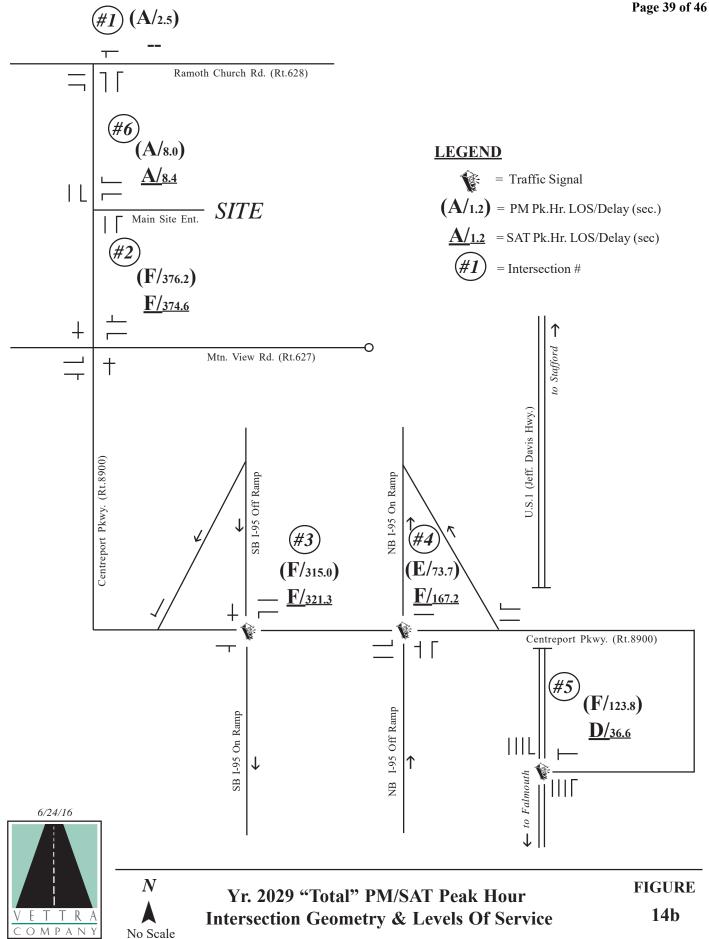
= Level Of Service & Avg. Vehicular Delay (seconds) - for "Lane Group"

= Movement (e.g. SBR = SouthBound Right)

LOS/Dly.

Mvmt.





c) Modal Opportunities (Bike/Ped)

The "site" development proposes a shared use path along the main internal spine roadway. The shared use path will meet VDOT requirements and will permit bicyclists, inline skaters, roller skaters, wheelchair users, walkers, runners, and people with baby strollers to travel from one end of the development to the other. Because of the development's traditional neighborhood design an extensive system of five-foot sidewalks will also be utilized to make the community as walkable as possible. VDOT's Neotraditional Neighborhood Design elements will be used to accomplish a pedestrian-first design which includes a myriad traffic calming measures (e.g. roundabout, raised medians, raised crosswalks, narrower roads, and street parking). Additionally, a system of off-road trails, consisting of natural materials, will meander through the open spaces and will allow pedestrian connectivity within these areas.

Bike racks will be provided at certain areas within the development. The racks will be placed at all bus shelters, the recreation center, athletic fields, and any other location that is deemed appropriate by the developer.

Incremental Impact Analysis

By comparing the Yr. 2023 "Background" intersection LOS's (**Table 4**) against the "Total" intersection LOS's (**Tables 5a & 5b**), any changes in Levels Of Service at the analyzed intersections can be seen (shown in bold) in **Tables 5a & 5b**.

Comparisons of the site buildout Yr. 2023 "Background" (with<u>out</u> "site" traffic) and "Total" (with "site" traffic) conditions show some changes in LOS, indicating that traffic impact (resulting from the proposed development of the "site") will be realized during the peak hours at the analyzed intersections along Centreport Parkway – *see following table*.

TABLE 6
Comparison of Yr. 2023 "Background" vs. "Total" Intersection LOS's

Yr. 2023 Buildout	PM Peak Hour			SAT Peak Hour		
	Bkgrd	<u>Total</u>	Impact?	Bkgrd	<u>Total</u>	Impact?
Unsignalized Intersection						
#1) Centreport Pkwy./Ramoth Church Rd.			no			no
#2) Centreport Pkwy./Mountain View Rd.	D	F	yes	C	\mathbf{F}	yes
#6) Centreport Pkwy./Main Site Entrance		A	no		A	no
Signalized Intersection						
#3) Centreport Pkwy./I-95 SB Ramps	F	F	no	C	\mathbf{F}	yes
#4) Centreport Pkwy./I-95 NB Ramps	В	\mathbf{C}	no	В	F	yes
#5) Centreport Pkwy./U.S. Rt.1	D	${f E}$	ves	C	\mathbf{C}	no

Year 2023 incremental impact analysis (comparing "background" vs. "total" LOS's) reveals that with the addition of the expected "site" traffic, some LOS impact will occur during the PM and/or SAT peak hours at four (4) intersections along Centreport Parkway, thus indicating "site" traffic impact at these intersections. With the "site" traffic added to the future Yr.2023 network, LOS's will change from an "acceptable" LOS=C/D to a "failing" LOS=F at the unsignalized (all-way stop) Centreport Pkwy./Mountain View Rd. intersection. The Centreport Pkwy./I-95 SB & NB Ramp signalized intersections will change from LOS=B/C to LOS=F (SAT) and the Centreport Pkwy./U.S. Rt.1 signalized intersection will change from LOS=D to LOS=E (PM only).

The new, proposed <u>unsignalized</u> site entrance along Centreport Pkwy. will operate at "acceptable" (LOS=A) Levels Of Service during the PM & SAT peak hours.

Six (6) years later, due to increased "background" traffic growth, **Year 2029 "Total"** conditions show further worsened LOS's and vehicular delay in both peak hours at all intersections with "very poor/failing" (LOS=F) Levels Of Service at all three (3) *signalized* intersections, plus the *unsignalized* (all-way stop) Centreport Pkwy./Mountain View Rd. intersection.

8) RECOMMENDED IMPROVEMENTS (Impact Mitigation Measures)

a) Proposed Improvements (Mitigation Measures)

Since some traffic impact is indicated at four (4) of the six (6) intersections analyzed, mitigation measures (improvements) are recommended – as listed below and shown on **Figure 15** for Yr. 2023 site buildout conditions. With these improvements (mitigation measures) in place, the impacted intersections will be completely mitigated, thus returning PM & SAT peak hour Levels Of Services to "background" levels or better.

			<u>Yr. 2</u>	2023	
		Pre-Mitig	g. LOS	Post-Mi	tig LOS
Intersection	Recommended Mitigation Measure	<u>PM</u>	<u>SAT</u>	<u>PM</u>	SAT
#2) Centreport Pkwy/Mtn. View	Install Traffic Signal when warranted	F	F	В	C
	Provide dedicated 150 ft. NB Left turn lan	e			
	Re-configure EB approach for dedicated R	ight turn			
#3) Centrept.Pkwy/I-95 SB Ramps	Provide dedicated 275 ft. EB Right turn la	ne F	F	F	В
	Coordinate w/adjacent I-95 NB Ramps sig	nal			
	Optimize Signal phasings/timings				
#4) Centrept.Pkwy/I-95 NB Ramp	s Coordinate w/adjacent I-95 SB Ramps sig	nal C	F	В	В
	Optimize Signal phasings/timings				
#5) Centreport Pkwy./U.S. Rt.1	Optimize Signal Timings	E	C	D	\mathbf{C}

b) Travel Demand Management (TDM)

If FRED (Fredericksburg Regional Transit) bus service is extended to Sycamore Grove the developer will allow for bus shelters at strategic points on the site. The points are to be chosen to minimize walking distance from homes and to link the various amenities within the development.

c) Intersection Capacity Analyses with Improvements (Mitigation Measures)

Year 2023 LOS results with mitigation in place are shown in Table 7 – resulting in better than "background" conditions – printouts are provided in Appendix G.

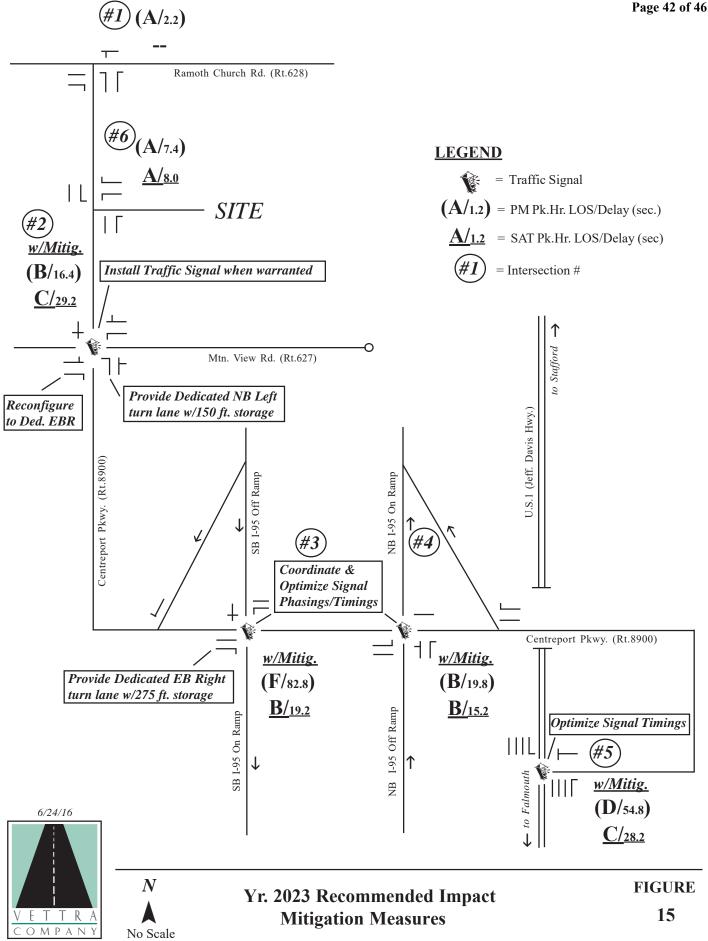


TABLE 7
Year 2023 "Total" Intersection Level Of Service Summary -- with Mitigation

		, <u>——</u>	8
PM PEAL	K HOUR	SAT PEA	AK HOUR
<u>Intersection</u>	Lane Group	<u>Intersection</u>	Lane Group
#) Intersection (Rd Synchro Dir.) LOS/Delay	Mvmt. LOS/D	ly. LOS/Delay	Mvmt. LOS/Dly.
Unsignalized			
1) Centreport Pkwy/Ramoth Ch.*	(overall)		(overall)
(Centreport PkwyNE)	NBL B/14.5		NBL
(Centreport PkwyNE)	NBR B/10.1		NBR
(Ramoth Church RdEB)	EBT $A/0.0$		EBT
	EBI $A/0.0$		EBR
(Ramoth Church RdEB)			IIIDI T
(Ramoth Church RdWB)			
6) Centreport Pkwy/Main Site Ent.*	(overall)		(overall)
(Main Site Entrance-NE)	WBL C/16.3		WBL C/17.4
(Main Site Entrance-NE)	WBR A/8.6		WBR A/8.5
(Centreport PkwyNW)	SBL $A/7.4$		SBL $A/7.3$
(Centreport PkwyNW)	SBT $A/0.0$		SBT $A/0.0$
(Centreport PkwySE)	NBT $A/0.0$		NBT $A/0.0$
(Centreport PkwySE)	NBR $A/0.0$		NBR $A/0.0$
<u>Signalized</u>			
2) Centreport Pkwy/Mtn. View B/16.4	(overall)	C/29.2	(overall)
(new) (Centreport PkwyNB)	NBL A/8.2		NBL A/4.0
(Centreport PkwyNB)	NBTR A/1.7		NBTR $A/2.5$
(Mountain View RdNW)	WBL C/22.0		WBL A/0.0
(Mountain View RdNW)	WBTR C/22.0		WBTR A/0.0
(Mountain View RdSE)	EBLT C/22.5		EBLT C/32.8
(Mountain View RdSE)	EBR C/33.5		EBR D/44.4
(Centreport PkwySB)	SBLTR B/18.3		SBLTR D/45.7
		D/40.0	
3) Centreport Pkwy/I-95 SB Ramps $\mathbf{F}/82.8$	(overall)	B /19.2	(overall)
(Centreport PkwyEB)	EBT F/122.4	1	EBT C/30.6
(new) (Centreport PkwyEB)	EBR $A/6.4$		EBR $A/3.4$
(Centreport PkwyWB)	WBL D/52.8		WBL B/19.0
(Centreport PkwyWB)	WBT $B/13.0$		WBT A/7.2
(I-95 SB Ramps-SB)	SBLTR F/156.5	5	SBLTR D/47.2
4) Centreport Pkwy/I-95 NB Ramps B/19.8	(overall)	B/15.2	(overall)
(Centreport PkwyEB)	EBL B/13.4		EBL B/10.4
(Centreport PkwyEB)	EBT B/15.4		EBT A/4.8
(Centreport PkwyWB)	WBT C/21.1		WBT C/22.2
(I-95 NB Ramps-NB)	NBLT D/41.5		NBLT C/31.8
(I-95 NB Ramps-NB)	NBR A/0.7		NBR A/2.4
		C/28.2	
5) Centreport Pkwy/U.S. Rt.1 D/54.8	(overall)	C/28.2	(overall)
(Centreport PkwyWB)	WBLR F/90.5		WBLR D/53.7
(U.S. Rt.1-NB)	NBT D/36.5		NBT C/30.5
(U.S. Rt.1-NB)	NBR B/10.3		NBR B/11.9
(U.S. Rt.1-SB)	SBL D/51.9		SBL C/21.2
(U.S. Rt.1-SB)	SBT D/52.9		SBT C/22.3
<u>Legend</u> :			
* = Two-way stop controlled			
** = All-way stop controlled			
LOS = Level Of Service See Appendix O			

LOS = Level Of Service -- See Appendix C

LOS/Delay = Level Of Service & Avg. Vehicular Delay (seconds) - for "Overall Intersection"

LOS/Dly. = Level Of Service & Avg. Vehicular Delay (seconds) - for "Lane Group"

d) Mode – N/A, not requested/scoped

9) QUEUING ANALYSES

Expected Year 2023 & 2029 SimTraffic 95% Back-Of-Queue (BOQ) lengths are shown for each movement (lane) in **Tables 8a & 8b** for PM and SAT peak hours, respectively. Also provided are the available and proposed turn lane storage lengths. Results show that nearly all 95% Queues impacted by "site" development will be within available storage space, or within available storage lengths after mitigation. Only the NB Right turn movement at the Centreport Pkwy./I-95 NB Ramps intersection will slightly exceed available storage space, but does not create any operational problems at this intersection.

Queuing analyses dictates the length of the new turn lanes as part of mitigation. The NB Left turn lane at the Centreport Pkwy./Mountain View Rd. intersection will require 150 ft. storage length and the EB Right turn lane at the Centreport Pkwy./I-95 SB Ramps intersection will require 275 ft. of storage length. **Figure 15** reflects these additional mitigation measures as a result of the queuing analyses.

10) CONCLUSIONS

Traffic impact via intersection capacity analysis has been analyzed for existing and future year conditions - "Background" (w/o site traffic) and "Total" (with site traffic). Based upon the assumed "scoped" parameters, the analytical evaluations and comparisons in this TIA have shown that the proposed development of the "Sycamore Grove" mixed-use project will have some impact on the area network which can be fully mitigated with the recommended mitigation measures (improvements).

TABLE 8a
Intersection SimTraffic 95% Back-of-Queue Summary
PM Peak Hour

#) Intersection (north-to-south)				2023		2029
(Rd Synchro Dir.)	(Avail.)	Mvmt.	Bkgrd.	<u>Total</u>	Total w/Mitig.	Total
1) Centreport Pkwy./Ramoth Chur	ch (22)					
(Centreport PkwyNE)	(inf.')	NBL	(0')	(0')	(0')	(0')
(Centreport PkwyNE)	(200')	NBR	(0')	(0')	(0')	(0')
(Ramoth Church RdEB)	(inf.')	EBT	(0')	(0')	(0')	(0')
(Ramoth Church RdEB)	(200')	EBR	(0')	(2')	(0')	(2')
(Ramoth Church RdWB)	(inf.')	WBLT	(28')	(44')	(44')	(52')
6) Centreport Pkwy./Main Site En	t. (6)					
(Main Site Entrance-NE)	(inf.')	WBL		(116')	(112')	(116')
(Main Site Entrance-NE)	(inf.')	WBR		(36')	(35')	(35')
(Centreport PkwyNW)	(200')	SBL		(0')	(0')	(0')
(Centreport PkwyNW)	(inf.')	SBT		(0')	(0')	(0')
(Centreport PkwySE)	(inf.')	NBT		(0')	(0')	(0')
(Centreport PkwySE)	(200')	NBR		(0')	(0')	(0')
2) Centreport Pkwy./Mtn. View R	d. (24)			. ,	,	,
(Centreport PkwyNB)- new	(150')	NBL			(129')*	
(Centreport PkwyNB)	(inf.')	NBTR	(104')	(1466')	(62')*	(2100')
(Centreport PkwySB)	(inf.')	SBLTR	(0')	(946')	(227')*	(1158')
(Mountain View RdNW)	(125')	WBL	(5')	(5')	(8')*	(10')
(Mountain View RdNW)	(inf. ')	WBTR	(11')	(9')	(11')*	(12')
(Mountain View RdSE)	(200')	EBL	(20')	(<u>240</u> ')	(74')*	(243')
(Mountain View RdSE)	(inf.')	EBTR	(96')	(986')	(352')*	(870')
3) Centreport Pkwy/I-95 SB Ramp	os (19)					
(Centreport PkwyEB)	(inf.')	EBT	(368')	(1015')	(1174')	(1012')
(Centreport PkwyEB) <u>new</u>	(275')	EBR			(259')	
(Centreport PkwyWB)	(300')	WBL	(207')	(253')	(178')	(325')
(Centreport PkwyWB)	(inf.')	WBT	(137')	(249')	(173')	(385')
(I-95 SB Ramps-SB)	(inf.')	SBLTR	(421')	(419')	(431')	(417')
4) Centreport Pkwy/I-95 NB Ram	ps (18)					
(Centreport PkwyEB)	(365')	EBL	(49')	(146')	(127')	(168')
(Centreport PkwyEB)	(inf.')	EBT	(262')	(233')	(142')	(294')
(Centreport PkwyWB)	(inf.')	WBT	(159')	(273')	(194')	(359')
(I-95 NB Ramps-NB)	(inf.')	NBLT	(118')	(251')	(262')	(514')
(I-95 NB Ramps-NB)	(100')	NBR	(100')	(<u>132</u> ')	(<u>144</u> ')	(<u>146</u> ')
5) Centreport Pkwy/U.S. Rt.1 (15)						
(Centreport PkwyWB)	(inf.')	WBLR	(635')	(606')	(614')	(611')
(U.S. Rt.1-NB)	(inf.')	NBT	(183')	(181')	(196')	(225')
(U.S. Rt.1-NB)	(300')	NBR	(165')	(186')	(214')	(269')
(U.S. Rt.1-SB)	(600')	SBL	(226')	(242')	(281')	(<u>695</u> ')
(U.S. Rt.1-SB)	(inf.')	SBT	(441')	(427')	(461')	(1182')

Legend:

Avail. = Available lane stacking space (ft.) -- inf. = infinite

(xxx') = 95% BOQ as reported by SimTraffic (avg. of 10 one-hour runs)

 (\underline{xxx}') = 95% BOQ beyond available stacking space (spillback)

* = w/Signal as mitigation ** Synchro does not report queues for all-way stop intersections

TABLE 8b
Intersection SimTraffic 95% Back-of-Queue Summary
SAT Peak Hour

#) Intersection (north-to-south)				2023		2029
(Rd Synchro Dir.)	(Avail.)	Mvmt.	Bkgrd.		Total w/Mitig.	Total
1) Centreport Pkwy./Ramoth Chu	rch (22)			' <u></u> '		
(Centreport PkwyNE)	(inf.')	NBL				
(Centreport PkwyNE)	(200')	NBR				
(Ramoth Church RdEB)	(inf.')	EBT				
(Ramoth Church RdEB)	(200')	EBR				
(Ramoth Church RdWB)	(inf.')	WBLT				
6) Centreport Pkwy./Main Site En						
(Main Site Entrance-NE)	(inf.')	WBL		(111')	(137')	(172')
(Main Site Entrance-NE)	(inf.')	WBR		(33')	(34')	(32')
(Centreport PkwyNW)	(200')	SBL		(0')	(0')	(0')
(Centreport PkwyNW)	(inf.')	SBT		(0')	(0')	(0')
(Centreport PkwySE)	(inf.')	NBT		(0')	(0')	(0')
(Centreport PkwySE)	(200')	NBR		(0')	(0')	(0')
2) Centreport Pkwy./Mtn. View R		1,21		(0)	(0)	(*)
(Centreport PkwyNB)- new	(150')	NBL			(122')*	
(Centreport PkwyNB)	(inf.')	NBTR	(86')	(2611')	(82')*	(2536')
(Centreport PkwySB)	(inf.')	SBLTR	(0')	(1091')	(250')*	(1271')
(Mountain View RdNW)	(125')	WBL	(0')	(0')	(0')*	(0')
(Mountain View RdNW)	(inf.')	WBTR	(0')	(0')	(0')*	(0')
(Mountain View RdSE)	(200')	EBL	(17')	(157')	(54')*	(232')
(Mountain View RdSE)	(inf.')	EBTR	(86')	(474')	(222')*	(874')
3) Centreport Pkwy/I-95 SB Ram	ps (19)					
(Centreport PkwyEB)	(inf.')	EBT	(198')	(1126')	(227')	(983')
(Centreport PkwyEB) <u>new</u>	(275')	EBR			(149')	
(Centreport PkwyWB)	(300')	WBL	(103')	(136')	(102')	(167')
(Centreport PkwyWB)	(inf.')	WBT	(109')	(195')	(115')	(237')
(I-95 SB Ramps-SB)	(inf.')	SBLTR	(165')	(198')	(201')	(427')
4) Centreport Pkwy/I-95 NB Ram	ps (18)					
(Centreport PkwyEB)	(365')	EBL	(37')	(473')	(144')	(404')
(Centreport PkwyEB)	(inf.')	EBT	(123')	(2273')	(127')	(3084')
(Centreport PkwyWB)	(inf.')	WBT	(100')	(202')	(183')	(265')
(I-95 NB Ramps-NB)	(inf.')	NBLT	(96')	(251')	(246')	(401')
(I-95 NB Ramps-NB)	(100')	NBR	(66')	(<u>134</u> ')	(<u>135</u> ')	(<u>144</u> ')
5) Centreport Pkwy/U.S. Rt.1 (15)						
(Centreport PkwyWB)	(inf.')	WBLR	(455')	(493')	(522')	(648')
(U.S. Rt.1-NB)	(inf.')	NBT	(201')	(192')	(189')	(284')
(U.S. Rt.1-NB)	(300')	NBR	(157')	(184')	(179')	(289')
(U.S. Rt.1-SB)	(600')	SBL	(87')	(100')	(93')	(304')
(U.S. Rt.1-SB)	(inf.')	SBT	(262')	(284')	(305')	(647')

Legend:

Avail. = Available lane stacking space (ft.) -- inf. = infinite

(xxx') = 95% BOQ as reported by SimTraffic (avg. of 10 one-hour runs)

 (\underline{xxx}') = 95% BOQ beyond available stacking space (spillback)

^{* =} w/Signal as mitigation ** Synchro does not report queues for all-way stop intersections



Charles A. Kilpatrick, P.E. COMMISSIONER

DEPARTMENT OF TRANSPORTATION

87 Deacon Road Fredericksburg, VA 22405

October 17, 2016

County of Stafford P. O. Box 339 Stafford, VA 22555-0339

RE: Sycamore Grove TIA & GDP Review #1 REC #16151347, Stafford County

Dear Mr. Zuraf and Mr. Hess:

As requested by Stafford County, VDOT has completed a review of the Traffic Impact Analysis (TIA), dated June 24, 2016, prepared by VETTRA Company on behalf of IVI Strategies, LLC and the GDP, prepared by The Engineering Groupe, Inc. and sealed 06/27/16, in support of the Sycamore Grove mixed-use (commercial/residential) development rezoning application. The proposed site is generally located along the east side of Centreport Parkway (Route 8900) and north of Mountain View Road (Route 627) in Stafford County. Access to the site is proposed via one (1) full movement intersection, a primary access point on Centreport Parkway.

The TIA indicates the assumed uses for the development include 170 single family detached homes, a 20,000 gsf general office building and 130,000 gsf of general retail space generating a net VPD of 9,796.

The TIA is subject to the Virginia Traffic Impact Analysis Regulations 24 VAC 30-155 in regard to the methodology and assumptions. VDOT offers the following comments to Stafford County for its comprehensive use. It should be noted that addressing these comments may change the results of the operational analyses.

Although certain design features may be referenced in the comments, this review does not cover engineering details. These details, including but not limited to, signalization, site plan, retaining walls, turn-lane storage length, crossover spacing and entrance spacing issues, sight distance and access management will be addressed at a later stage of development review.

Page 2

RE: Sycamore Grove

TIA & GDP Review #1

REC #16151347, Stafford County

Traffic Engineering Comments:

- Page 35, Table 6: For the Centreport Parkway/I-95 SB Ramps, Impact for the PM peak hour should be indicated as "yes". The total intersection average delay increases from 138 to 193 seconds. Just because the LOS scale ends at "F" does not mean there is no operational impact to the intersection in the post development condition. VETTRA needs to present this table as "LOS/Delay" in the future to provide the full picture of the project impact; to continue presenting results in this manner is misleading.
- 2. Page 36, Recommended Improvements:
 - a. For Centreport Parkway/Mountain View, installation of a traffic signal "when warranted" is indicated. Are warrants met for the 2023 conditions? Who will install the signal and when?
 - b. For Centreport Parkway/I-95 SB Ramps, the total intersection average delay is reduced in the mitigated condition from 138 to 83 seconds. However, the EB through delay is increased from 47 to 122 seconds. See further discussion in comments on queuing.
 - c. For Centreport Parkway/US 1, as discussed for a previous project, optimizing signal timings to heavily favor green time on the minor street approach to Route 1 is not acceptable. The analysis needs to be revised to reflect signal timing closely matching existing timing. The analyst may consider the addition of a 200 foot right turn lane with 100 foot taper on Centreport. This improvement will be done by VDOT this fall.
- 3. Page 40, Table 8a:
 - a. Centreport Parkway/Mountain View Road shows unacceptable queuing for the unsignalized conditions for 2023 and 2029 post development conditions. What is the commitment to install a signal here or make additional improvements to address this problem?
 - b. Centreport Parkway/I-95 SB Ramps reported queuing is inaccurate. The analyst has failed to add the "B" (bend) queuing to the results. With SimTraffic, roadway segments are defined by nodes and nodes are added for simple bends in the road. Queuing indicated at these bends is simply a continuation of the queue from the intersection. Similarly, on the SB off ramp, there is a node where the left turn lane breaks off from the right turn ramp. Queuing reported for this intersection needs to be added to the intersection queue for 95/Centreport. This increases the queue for EB traffic to over 4,000 feet and the SB 95 off ramp to over 2,000 feet. This is not acceptable.

Page 3

RE: Sycamore Grove TIA & GDP Review #1 REC #16151347, Stafford County

In summary, the applicant needs to reanalyze the Centreport/US-1 intersection with more appropriate green splits and consideration of the VDOT proposed turn lane, and reanalyze the Centreport/95 SB intersection with additional mitigation to address the extensive queuing.

Also, a signal warrant analysis for Centreport/Mountain View is needed along with commitment to install the signal if warranted.

GDP Comments:

Detailed construction / site plan has not been submitted or reviewed. These comments are general and additional comments may be rendered when an official site plan has been submitted for review by Stafford County.

- 4. Although only horizontal sight distance is labeled and appears acceptable both vertical and horizontal sight distance will required with the detailed plan review. It is our understanding the developer of the site has the ability to obtain off-site sight distance easements as necessary to meet the minimum required.
- 5. A portion of the entrance road (street) is located on property not owned by the developer. For the internal streets to become state maintained the developer will be required to dedicate the streets to public use. Again, it is our understanding the developer has the ability to obtain the right-of-way. Additional easements may be required.
- 6. The site does not appear to meet SSAR regulations in terms of the number of connections required based on the traffic numbers.
 - a. With relation to the number of connections this development will need to be consistent with the SSAR regulation, the answer will depend upon a few facts & the way the developer plans & builds the project. This requirement is found in Section 30-92-60 of the SSAR.
 - b. The developer will need to decide:
- The number of required connections is based upon the number of dwelling units & trip generation for an individual "network addition."
- If a network addition has more than 200 dwelling units or lots whose trip generation is expected to be over 2,000 VPD it must provide an additional external connection for each addition over the initial 200 dwelling units or 2,000 VPD.
- The regulation also includes four circumstances when the District Administrator's designee may waive or modify this "additional connection" requirement.

Page 4

RE: Sycamore Grove TIA & GDP Review #1 REC #16151347, Stafford County

justified.

• To grant this waiver or modification, it is the responsibility of the developer to (1.) determine the project's network addition boundaries (if it will include more than one network addition), (2.) the timing or phasing of when each network addition will be constructed, and (3.) if he requests a waiver or modification of this requirement, it is his responsibility to justify & present VDOT with evidence that the reason for the waiver is

You may contact Margaret Niemann at (540) 899-4106 if there are any questions.

Sincerely,

David L. Beale, P.E.

Area Land Use Engineer-Fredericksburg

ABele

Cc: VETTRA

The Engineering Groupe, Inc.

Transportation Planning & Engineering Services

11535 Gunner Court Woodbridge, Virginia 22192

Tel: 703/590-4932 Email: vettraco@gmail.com

December 27, 2016

Mr. David L. Beale, P.E. Land Development Section VA. Dept. of Transportation 87 Deacon Road Fredericksburg, Virginia 22405

RE: Sycamore Grove – REC #16151347

Stafford County, Virginia

SUBJ: Responses to VDOT Review Comments – TIA

Dear Mr. Beale,

Following are my responses to the VDOT review comments dated October 17, 2016 regarding the subject Traffic Impact Analysis (TIA) dated June 24, 2016:

<u>Comment 1</u> – Re: Page 35, Table 6 showing Centreport Pkwy./I-95 SB Ramps intersection PM peak hour delay increase from 138 to 193 seconds with no impact noted.

<u>Response</u> – Recognizing the 40% increase in average intersection delay, this intersection has been re-analyzed for both PM and SAT peak hours and Table 6 has been revised (see attached Table 6).

Comment 2a – Re: Centreport Pkwy./Mountain View Rd. intersection signal installation.

<u>Response</u> – It is unknown when a signal will be warranted. Cost of a Signal Warrant Study and Signal is being proffered.

Comment 2b – Re: Centreport Pkwy./I-95 SB Ramps EB Thru delay.

<u>Response</u> – Recognizing the increased delay for this movement, this intersection has been reanalyzed for both PM and SAT peak hours. As a result, added mitigation (2nd EB Thru lane) is now being proffered along with a 300-foot storage dedicated EB Right turn lane. With these improvements, overall intersection LOS's will be better than "background" (without site traffic) peak hour conditions and most movements will have better LOS, less delays, and shorter queues. (See attached Tables and Appendices with Synchro & SimTraffic printouts).

Comment 2c – Re: Centreport Pkwy./U.S. Rt.1 intersection timings and new WB Right turn lane.

<u>Response</u> – As requested, this intersection has been re-analyzed for both PM and SAT peak hours maintaining existing signal timings and including the new WB turn lane. (<u>See attached Tables and Appendices with Synchro & SimTraffic printouts</u>).

Mr. David L. Beale, P.E. December 27, 2016 Page 2 of 2

<u>Comment 3a</u> – Re: Page 40, Table 8a: Centreport Pkwy./Mountain View Rd. unacceptable queuing for unsignalized 2023 and 2029 post-development ("total") conditions.

<u>Response</u> – It is unknown when a signal will be warranted. Cost of a Signal Warrant Study and Signal is being proffered.

Comment 3b – Re: Page 40, Table 8a: Centreport Pkwy./I-95 SB Ramps SB Queuing Report.

<u>Response</u> – The revised queuing reports for this, as well as all, re-analyzed intersections are presented in the <u>attached Tables 8a and 8b</u>. As requested, queues for the subject intersection include additional queues from "B" bends Node #79 (EB) and Node #82 (SB).

Revised Proposed Mitigation Measures:

revised i reposed winigation w	reasures.				
			Yr. 202	<u>23</u>	
		Pre-Mitig	g. LOS	Post-Mit	ig LOS
<u>Intersection</u>	Recommended Mitigation Measure	<u>PM</u>	<u>SAT</u>	PM	SAT
#2) Centreport Pkwy/Mtn. View	Install Traffic Signal when warranted	F	F	В	\mathbf{C}
	Provide dedicated 150 ft. NB Left turn lane				
	Re-configure EB approach for dedicated Righ	t turn			
#3) Centrept.Pkwy/I-95 SB Ramps	Provide 2 nd EB Thru lane	F	F	D	В
	Provide dedicated 300 ft. EB Right turn lane				
	Modify Traffic Signal				
	Coordinate w/adjacent I-95 NB Ramps signal				
	Optimize Signal phasings/timings				
#4) Centrept.Pky/I-95 NB Ramps	Coordinate w/adj. I-95 SB Ramps signal	C	F	В	В
	Optimize Signal phasings/timings				
#5) Centreport Pkwy./U.S. Rt.1	Optimize Signal Timings	E	C	D	\mathbf{C}

I trust that the above provides the information requested. If you have any further comments, please advise as soon as possible.

Sincerely,

VETTRA Company

Vernon E. Forney

Vernon E. Torney, M.ASCE

President/Owner

cc: Mr. Billy Flynn – Eng. Groupe

attachments: Revised Tables 2, 4, 5, 6, 7, 8; Revised Appendices D, E, Fa, Fb, Ga, Gb; Computer Disk

\sygrv\responses1_vdot_1.doc

TABLE 2 **Existing 2016 Intersection Level Of Service Summary**

	PM PEAK	HOUR		SAT PEA	к нош	R
	rsection	Lane G	roup	Intersection	Lane G	
	S/Delay		LOS/Dly.	LOS/Delay		LOS/Dly.
(Rd.Name - Synchro Dir.)	<u> Si Delay</u>	171 71110.	200/Diy.	<u> Eos/Belay</u>	ivi viiit.	EOS/Diy.
<u>Unsignalized</u>						
1) Centreport Pkwy/Ramoth Ch.*	-	(overall)			(overall)	
(Centreport PkwyNE)		NBL	B/11.8		NBL	
(Centreport PkwyNE)		NBR	A/9.5		NBR	
(Ramoth Church RdEB)		EBT	A/0.0		EBT	
(Ramoth Church RdEB)		EBR	A/0.0		EBR	
(Ramoth Church RdWB)		WBLT	A /7.7		WBLT	
2) Centreport Pkwy/Mtn. View ** B	6/14.9	(overall)		B/12.2	(overall)	
(Centreport PkwyNB)		NBLTR	B/14.3		NBLTR	B/10.8
(Mountain View RdNW)		WBL	A/9.5		WBL	A/8.4
(Mountain View RdNW)		WBTR	A/9.0		WBTR	A/8.4
(Mountain View RdSE)		EBL	A/9.0		EBL	A/8.5
(Mountain View RdSE)		EBTR	C/15.9		EBTR	B/13.1
(Centreport PkwySB)		SBLTR	A/9.1		SBLTR	A/8.7
<u>Signalized</u>						
3) Centreport Pkwy/I-95 SB Ramps D	/49.8	(overall)		B /19.5	(overall)	
(Centreport PkwyEB)		EBTR	D/41.8		EBTR	C/22.5
(Centreport PkwyWB)		WBL	B/19.7		WBL	A/8.6
(Centreport PkwyWB)		WBT	B/13.5		WBT	A/7.6
(I-95 SB Ramps-SB)		SBLTR	E/79.8		SBLTR	C/33.3
4) Centreport Pkwy/I-95 NB Ramps B	3 /14.8	(overall)		$\mathbf{B}/10.7$	(overall)	
(Centreport PkwyEB)		EBL	A/6.7		EBL	B/19.2
(Centreport PkwyEB)		EBT	B/12.9		EBT	A/8.9
(Centreport PkwyWB)		WBT	B/17.2		WBT	B/12.1
(I-95 NB Ramps-NB)		NBLT	C/24.9		NBLT	B/16.6
(I-95 NB Ramps-NB)		NBR	A/4.8		NBR	A/1.5
5) Centreport Pkwy/U.S. Rt.1	2/31.0	(overall)		B /19.9	(overall)	
(Centreport PkwyWB)		WBL	E/59.6		WBL	E/65.4
(Centreport PkwyWB)		WBR	B/13.2		WBR	B/11.2
(U.S. Rt.1-NB)		NBT	C/24.3		NBT	B/17.6
(U.S. Rt.1-NB)		NBR	A/4.0		NBR	A/7.2
(U.S. Rt.1-SB)		SBL	C/24.1		SBL	B/10.0
(U.S. Rt.1-SB)		SBT	C/27.4		SBT	B/10.3
Legend:						
* = Two-way stop controlled						
** = All-way stop controlled						

= Level Of Service -- See Appendix C LOS

= Level Of Service & Avg. Vehicular Delay (seconds) - for "Overall Intersection" LOS/Delay

LOS/Dly. = Level Of Service & Avg. Vehicular Delay (seconds) - for "Lane Group"

= Movement (e.g. SBR = SouthBound Right) Mvmt.

TABLE 4 Year 2023 "Background" Intersection Level Of Service Summary

#) Intersection	•	PM PEAR Intersection LOS/Delay	Lane G		SAT PEA Intersection LOS/Delay	AK HOUR <u>Lane Group</u> <u>Mvmt. LOS/Dly.</u>
	Rd.Name - Synchro D	<u>ir.)</u>				
<u>Unsignalized</u>	/D .1 .01 .1.		, III			(11)
1) Centreport Pkw			(overall)			(overall)
	Centreport PkwyNE		NBL	B/13.5		NBL
	Centreport PkwyNE		NBR	A/9.9		NBR
	Ramoth Church RdE		EBT	A/0.0		EBT
,	Ramoth Church RdE	,	EBR	A/0.0		EBR
(.	Ramoth Church RdV	VB)	WBLT	A/7.8		WBLT
2) Centreport Pkw	y/Mtn. View **	D/34.3	(overall)		C /19.6	(overall)
(Centreport PkwyNB)	NBLTR			NBLTR B/13.7
(.	Mountain View RdN	W)	WBL	B/10.6		WBL A/9.0
(.	Mountain View RdN	W)	WBTR	A/10.0		WBTR A/9.0
(.	Mountain View RdS.	E)	EBL	A/9.5		EBL A/8.9
(Mountain View RdS	E)	EBTR	E/42.3		EBTR C/23.3
(Centreport PkwySB)		SBLTR	B/10.3		SBLTR A/9.5
<u>Signalized</u>						
3) Centreport Pkw	y/I-95 SB Ramps	F /138.1	(overall)	1	$\mathbb{C}/26.8$	(overall)
(Centreport PkwyEB)	EBTR	D/47.3		EBTR C/33.0
(Centreport PkwyWB)	WBL	D/41.9		WBL B/11.9
(Centreport PkwyWB)	WBT	B/12.6		WBT A/8.4
(.	I-95 SB Ramps-SB)		SBLTR	F/282.8		SBLTR D/43.3
4) Centreport Pkw	y/I-95 NB Ramps	B /19.8	(overall))	B/12.6	(overall)
(Centreport PkwyEB)	EBL	A/7.3		EBL C/22.8
(Centreport PkwyEB)	EBT	B/18.5		EBT B/10.9
(Centreport PkwyWB)	WBT	B/19.9		WBT B/13.3
(.	I-95 NB Ramps-NB)		NBLT	C/34.5		NBLT B/19.4
(.	I-95 NB Ramps-NB)		NBR	A/8.6		NBR A/3.0
5) Centreport Pkw	v/U.S. Rt.1	D/48.0	(overall))	C/23.8	(overall)
	Centreport PkwyWB)	WBL	F/116.0		WBL E/60.1
	Centreport PkwyWB		WBR	B/15.1		WBR B/11.0
	U.S. Rt.1-NB)	,	NBT	C/27.2		NBT C/25.1
	U.S. Rt.1-NB)		NBR	A/4.4		NBR B/10.1
	U.S. Rt.1-SB)		SBL	C/31.4		SBL B/14.8
	U.S. Rt.1-SB)		SBT	D/35.0		SBT B/15.8
	0.5. III.1 5D)		551	2733.0		551 5.0
<u>Legend</u> : * = Two-way	y stop controlled					
	stop controlled					
-	= Level Of Service -	See Appendix (7			
	= Level Of Service			onds) - for "Over	all Intersection"	
	= Level Of Service	•	• •	<i>'</i>		
•	Movement (e.g. S	-		•	•	

TABLE 5a
Year 2023 "Total" Intersection Level Of Service Summary

		PM PEA	K HOUR		SAT PEA		
	<u>I</u>	ntersection	Lane C	<u> Broup</u>	<u>Intersection</u>	Lane G	<u>roup</u>
#) Intersection	<u>1 (Rd Synchro Dir.)</u> <u>I</u>	LOS/Delay	Mvmt.	LOS/Dly.	LOS/Delay	Mvmt.	LOS/Dly.
Unsignalized							
1) Centreport Pk	wy/Ramoth Ch.*		(overall))		(overall))
, -	(Centreport PkwyNE)		NBL	B/14.5		NBL	
	(Centreport PkwyNE)		NBR	B/10.1		NBR	
	(Ramoth Church RdE	B)	EBT	A/0.0		EBT	
	(Ramoth Church RdE		EBR	A/0.0		EBR	
	(Ramoth Church RdW	(B)	WBLT	A /7.9		WBLT	
2) Centreport Pk	wy/Mtn. View **	F/275.9	(overall))	F/310.9	(overall))
	(Centreport PkwyNB)		NBLTR	F /459.4		NBLTR	$\mathbf{F}/387.0$
	(Mountain View RdNV	W)	WBL	C/16.3		WBL	C/16.3
	(Mountain View RdNV	V)	WBTR	C/15.7		WBTR	C/16.3
	(Mountain View RdSE	5)	EBL	B/12.9		EBL	B/13.2
	(Mountain View RdSl		EBTR	F/129.9		EBTR	F /118.7
	(Centreport PkwySB)		SBLTR	$\mathbf{F}/129.0$		SBLTR	F /368.6
6) Centreport Pk	wy/Main Site Ent.*		(overall)			(overall)	
1	(Main Site Entrance-NI	₹)	WBL	C/16.3		WBL	C/17.4
	(Main Site Entrance-NI	*	WBR	A/8.6		WBR	A/8.5
	(Centreport PkwyNW)		SBL	A/7.4		SBL	A/7.3
	(Centreport PkwyNW)		SBT	A/0.0		SBT	A/0.0
	(Centreport PkwySE)		NBT	A/0.0		NBT	A/0.0
	(Centreport PkwySE)		NBR	A/0.0		NBR	A/0.0
<u>Signalized</u>	(
	wy/I-95 SB Ramps	F/193.5	(overall))	F/188.5	(overall))
	(Centreport PkwyEB)		EBTR	$\mathbf{F}/210.3$		EBTR	$\mathbf{F}/312.5$
	(Centreport PkwyWB)		WBL	$\mathbf{E}/66.1$		WBL	C/22.8
	(Centreport PkwyWB)		WBT	B/12.9		WBT	A/9.4
	(I-95 SB Ramps-SB)		SBLTR	F/333.3		SBLTR	D/42.2
4) Centreport Pk	wy/I-95 NB Ramps	C/27.5	(overall))	F/84.9	(overall))
	(Centreport PkwyEB)		EBL	C/20.5		EBL	F /284.5
	(Centreport PkwyEB)		EBT	C/22.2		EBT	B/12.0
	(Centreport PkwyWB)		WBT	C/34.1		WBT	C/25.2
	(I-95 NB Ramps-NB)		NBLT	D/44.8		NBLT	C/29.5
	(I-95 NB Ramps-NB)		NBR	A /7.9		NBR	A/2.4
5) Centreport Pk	wy/U.S. Rt.1	E/55.5	(overall))	C/25.9	(overall))
, .	(Centreport PkwyWB)		WBL	F/146.7		WBL	E/57.6
	(Centreport PkwyWB)		WBR	B/15.6		WBR	B/11.1
	(U.S. Rt.1-NB)		NBT	C/27.2		NBT	C/28.1
	(U.S. Rt.1-NB)		NBR	A/4.3		NBR	B/11.4
	(U.S. Rt.1-SB)		SBL	C/32.7		SBL	B/17.8
	(U.S. Rt.1-SB)		SBT	D/35.0		SBT	B/18.8
Legend:	•						
	vay stop controlled						
	ay stop controlled						
LOS	= Level Of Service						
LOS/Delay	= Level Of Service &						
LOS/Dly.	= Level Of Service &	Avg. Vehicular	Delay (sec	onds) - for "Lane	e Group"		

TABLE 5b
Year 2029 "Total" Intersection Level Of Service Summary

		PM PEAR	K HOUR		SAT PEA	K HOU	R
	<u>I</u>	ntersection	Lane C	<u> Group</u>	<u>Intersection</u>	Lane G	<u>roup</u>
#) Intersection (Rd.	Synchro Dir.) I	.OS/Delay	Mvmt.	LOS/Dly.	LOS/Delay	Mvmt.	LOS/Dly.
<u>Unsignalized</u>							
1) Centreport Pkwy/R	amoth Ch.*		(overall))		(overall))
, .	treport PkwyNE)		NBL	C/18.2		NBL	
	treport PkwyNE)		NBR	B/10.8		NBR	
	oth Church RdEl	3)	EBT	A/0.0		EBT	
(Ran	oth Church RdEl	3)	EBR	A/0.0		EBR	
	oth Church RdW		WBLT	A/8.2		WBLT	
2) Centreport Pkwy/M	Itn. View **	F/376.2	(overall))	F/374.6	(overall))
(Cen	treport PkwyNB)		NBLTR	F/587.8		NBLTR	F/466.7
(Moi	ıntain View RdNV	V)	WBL	C/18.1		WBL	C/17.9
(Moi	ıntain View RdNV	V)	WBTR	C/17.6		WBTR	C/17.9
(Moi	ıntain View RdSE	")	EBL	B/13.3		EBL	B/13.4
(Mou	untain View RdSI	Ε)	EBTR	F/255.8		EBTR	F/241.8
(Cen	treport PkwySB)		SBLTR	F/154.4		SBLTR	F/393.3
6) Centreport Pkwy/M	Main Site Ent.*		(overall))		(overall))
(Mai	n Site Entrance-NE	E)	WBL	C/18.3		WBL	C/18.7
(Mai	n Site Entrance-NE	Ξ)	WBR	A/8.7		WBR	A/8.6
(Cen	treport PkwyNW)		SBL	A/7.4		SBL	A/7.4
(Cen	treport PkwyNW)		SBT	A/0.0		SBT	A/0.0
(Cen	treport PkwySE)		NBT	A/0.0		NBT	A/0.0
(Cen	treport PkwySE)		NBR	A/0.0		NBR	A/0.0
<u>Signalized</u>							
3) Centreport Pkwy/I-	-95 SB Ramps	F/315.0	(overall))	F/321.3	(overall))
(Cen	treport PkwyEB)		EBTR	F/366.7		EBTR	F/537.9
(Cen	treport PkwyWB)		WBL	F/128.4		WBL	C/33.1
(Cen	treport PkwyWB)		WBT	B/16.0		WBT	B/12.3
(I-95	SB Ramps-SB)		SBLTR	F/523.2		SBLTR	D/48.1
4) Centreport Pkwy/I-	95 NB Ramps	$\mathbf{E}/73.7$	(overall))	F/167.2	(overall))
(Cen	treport PkwyEB)		EBL	F/110.5		EBL	F/601.1
(Cen	treport PkwyEB)		EBT	D/50.5		EBT	B/15.0
(Cen	treport PkwyWB)		WBT	D/43.7		WBT	C/28.3
(I-95	NB Ramps-NB)		NBLT	F/136.4		NBLT	D/38.3
(I-95	NB Ramps-NB)		NBR	A/7.4		NBR	A/4.5
5) Centreport Pkwy/U	J.S. Rt.1	$\mathbf{F}/94.0$	(overall))	$\mathbb{C}/32.7$	(overall))
(Cen	treport PkwyWB)		WBL	F/280.4		WBL	E/57.5
(Cen	treport PkwyWB)		WBL	B/17.4		WBL	B/12.1
(U.S.	Rt.1-NB)		NBT	C/28.1		NBT	D/39.8
(U.S.	Rt.1-NB)		NBR	A/5.1		NBR	B/15.4
(U.S.	Rt.1-SB)		SBL	E/61.4		SBL	C/26.0
(U.S.	Rt.1-SB)		SBT	D/48.8		SBT	C/26.7
Legend:							
* = Two-way ste	op controlled						
** = All-way stop							
	evel Of Service						
· ·		-		onds) - for "Over			
LOS/Dly. $=$ Le	evel Of Service &	x Avg. Vehicular	Delay (sec	onds) - for "Lane	Group"		

Incremental Impact Analysis

By comparing the Yr. 2023 "Background" intersection LOS's (**Table 4**) against the "Total" intersection LOS's (**Tables 5a & 5b**), any changes in Levels Of Service at the analyzed intersections can be seen (shown in bold) in **Tables 5a & 5b**.

Comparisons of the site buildout Yr. 2023 "Background" (with<u>out</u> "site" traffic) and "Total" (with "site" traffic) conditions show some changes in LOS, indicating that traffic impact (resulting from the proposed development of the "site") will be realized during the peak hours at the analyzed intersections along Centreport Parkway – *see following table*.

TABLE 6
Comparison of Yr. 2023 "Background" vs. "Total" Intersection LOS's

Yr. 2023 Buildout	PM	Peak 1	<u>Hour</u>	SAT	Γ Peak	Hour
	Bkgrd	<u>Total</u>	Impact?	Bkgrd	<u>Total</u>	Impact?
<u>Unsignalized Intersection</u>						
#1) Centreport Pkwy./Ramoth Church Rd.			no			no
#2) Centreport Pkwy./Mountain View Rd.	D	F	yes	\mathbf{C}	F	yes
#6) Centreport Pkwy./Main Site Entrance		A	no		A	no
Signalized Intersection						
#3) Centreport Pkwy./I-95 SB Ramps	F	F	yes	\mathbf{C}	F	yes
#4) Centreport Pkwy./I-95 NB Ramps	В	C	no	В	F	yes
#5) Centreport Pkwy./U.S. Rt.1	D	E	yes	C	\mathbf{C}	no

TABLE 7a Year 2023 "Total" Intersection Level Of Service Summary -- <u>with Mitigation</u>

Intersection Intersection Intersection Intersection Intersection Intersection Intersection Intersection Intersectio			PM PEAI	K HOUR		SAT PEA	K HOU	R
# Intersection Red - Symchro Dir. LOS/Delay LOS/Delay Unsignalized		I						
Dentreport Pkwy/Ramoth Ch.* -	#) Intersection	_			•			_
Centreport Pkwy/Ramoth Ch.* (overall) (overall)		(Ka Synchro Dir.) 1	205/Delay	IVI VIIIL.	LOS/DIy.	LOS/Delay	IVI VIIIL.	LOS/DIY.
NBL B/14.5 NBL	_	vv/Domoth Ch *		(overall	`		(overall)	
Centreport Pksyy.NE NBR B/10.1 NBR	1) Centreport I K	-		` ′			` /	1
CRamoth Church RdEB EBR A/0.0 EBR								
CRamoth Church RdKB (Ramoth Church RdKB)			D.)					
Camoth Church RdWB		1	<i>'</i>					
6) Centreport Pkwy/Main Site Ent.* (overall) (overall) (Main Site Entrance-NE) WBL C/16.3 WBL C/17.4 WBL C/17.4 WBR A/8.6 WBR A/8.5 WBR A/9.0 WBR A/9.0 WBT A/9		,	<i>'</i>					
WBL C/16.3 WBL C/17.4 (Main Site Entrance-NE) WBR A/8.6 WBR A/8.5 (Centreport PkwyNW) SBL A/7.4 SBL A/7.3 (Centreport PkwyNW) SBT A/0.0 SBT A/0.0 (Centreport PkwySE) NBT A/0.0 NBT A/0.0 (Centreport PkwySE) NBR A/0.0 NBR A/0.0 (Centreport PkwySE) NBR A/0.0 NBR A/0.0 (Centreport PkwySE) NBR A/0.0 NBR A/0.0 (Signalized	6) Cantrapart Pla		В)					
WBR A/8.6 WBR A/8.5	o) Centreport FK	-	7)	` '			` /	
Centreport PkwyNW SBL A/7.4 SBL A/7.3		•						
		•						
NBT A/0.0 NBT A/0.0 NBR A/0.0								
NBR A/0.0 NBR A/0.0 A/0.0			1					
Signalized Contreport Pkwy/Mtn. View B/16.4 (overall) C/29.2 (overall)								
C/29.2 Coverall C/29.2 Coverall	Ci om aliz ad	(Centreport PkwySE)		NBK	A/0.0		NBK	A/0.0
NBL A/8.2 NBL A/4.0		vy/Mtn Viou	R /16.4	(avarall	\	C/20.2	(oxonall)	
NBTR A/1.7 NBTR A/2.5	· •	-	D /10.4			C/29.2	, ,	
(Mountain View Rd-NW) WBL C/22.0 WBL A/0.0 (Mountain View Rd-NW) WBTR C/22.0 WBTR A/0.0 (Mountain View Rd-SE) EBLT C/22.5 EBLT C/32.8 (Mountain View Rd-SE) EBR C/33.5 EBR D/44.4 (Centreport PkwySB) SBLTR B/18.3 SBLTR D/45.7 3) Centreport Pkwy/I-95 SB Ramps D/37.0 (overall) B/13.4 (overall) (add 2nd)(Centreport PkwyEB) EBT D/43.2 EBT B/18.7 (new) (Centreport PkwyEB) EBR A/9.2 EBR A/4.8 (Centreport PkwyWB) WBL D/54.9 WBL A/9.6 (Centreport PkwyWB) WBT C/24.9 WBT A/9.9 (I-95 SB Ramps-SB) SBLTR D/50.1 SBLTR D/50.1 4) Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBL A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT D/31.8 (I-95 NB Ramps-NB) NBL D/54.6 (overall) C/25.9 (overall) 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)	(new)							
(Mountain View RdNW) WBTR C/22.0 WBTR A/0.0 (Mountain View RdSE) EBLT C/22.5 EBLT C/32.8 (Mountain View RdSE) EBR C/33.5 EBR D/44.4 (Centreport PkwySB) SBLTR B/18.3 SBLTR D/45.7 3) Centreport Pkwy/I-95 SB Ramps D/37.0 (overall) B/13.4 (overall) (add 2nd)(Centreport PkwyEB) EBT D/43.2 EBT B/18.7 (new) (Centreport PkwyEB) EBR A/9.2 EBR A/4.8 (Centreport PkwyWB) WBL D/54.9 WBL A/9.6 (Centreport PkwyWB) WBT C/24.9 WBT A/9.9 (I-95 SB Ramps-SB) SBLTR D/50.1 SBLTR C/27.3 4) Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)								
Contreport PkwyEB EBLT C/22.5 EBR C/33.5 EBR D/44.4								
EBR C/33.5 EBR D/44.4		•						
SBLTR B/18.3 SBLTR D/45.7		•	•					
3) Centreport Pkwy/I-95 SB Ramps			Ξ)					
(add 2nd)(Centreport PkwyEB) EBT D/43.2 EBT B/18.7 (new) (Centreport PkwyEB) EBR A/9.2 EBR A/4.8 (Centreport PkwyWB) WBL D/54.9 WBL A/9.6 (Centreport PkwyWB) WBT C/24.9 WBT A/9.9 (I-95 SB Ramps-SB) SBLTR D/50.1 SBLTR C/27.3 4) Centreport Pkwy/I-95 NB Ramps B/16.7 (overall) B/16.2 (overall) (Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)			D/2= 0			D/12 /		
Centreport PkwyBB EBR A/9.2 EBR A/4.8	· •	•	D/37.0	` '		B /13.4		
(Centreport PkwyWB) WBL D/54.9 WBL A/9.6 (Centreport PkwyWB) WBT C/24.9 WBT A/9.9 (I-95 SB Ramps-SB) SBLTR D/50.1 SBLTR C/27.3 4) Centreport Pkwy/I-95 NB Ramps B/16.7 (overall) B/16.2 (overall) (Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)	(add 2nd)	(Centreport PkwyEB)						
(Centreport PkwyWB) WBT C/24.9 WBT A/9.9 (I-95 SB Ramps-SB) SBLTR D/50.1 SBLTR C/27.3 4) Centreport Pkwy/I-95 NB Ramps B/16.7 (overall) B/16.2 (overall) (Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)	(new)	(Centreport PkwyEB)						
SBLTR D/50.1 SBLTR C/27.3								
4) Centreport Pkwy/I-95 NB Ramps B /16.7		(Centreport PkwyWB)						
(Centreport PkwyEB) EBL A/8.9 EBL B/13.7 (Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)		(I-95 SB Ramps-SB)		SBLTR	D/50.1		SBLTR	C/27.3
(Centreport PkwyEB) EBT A/8.1 EBT A/5.7 (Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)	4) Centreport Pky	wy/I-95 NB Ramps	B /16.7	(overall)		B /16.2	(overall)	
(Centreport PkwyWB) WBT C/21.7 WBT C/22.2 (I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)		(Centreport PkwyEB)		EBL	A/8.9		EBL	B/13.7
(I-95 NB Ramps-NB) NBLT D/44.9 NBLT C/31.8 (I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)		(Centreport PkwyEB)		EBT	A/8.1		EBT	A/5.7
(I-95 NB Ramps-NB) NBR A/1.9 NBR A/0.6 5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)		(Centreport PkwyWB)		WBT	C/21.7		WBT	C/22.2
5) Centreport Pkwy/U.S. Rt.1 D/54.6 (overall) C/25.9 (overall)		(I-95 NB Ramps-NB)		NBLT	D/44.9		NBLT	C/31.8
		(I-95 NB Ramps-NB)		NBR	A/1.9		NBR	A/0.6
(Centrenart Plwy -WR) WRI F/135 8 WRI F/57 6	5) Centreport Pkv	wy/U.S. Rt.1	D/54.6	(overall))	C/25.9	(overall))
(Conneporations, nD_1 $nDD = 1/155.0$ $nDD = D/5/.0$		(Centreport PkwyWB)		WBL	F/135.8		WBL	E/57.6
(Centreport PkwyWB) WBR B/14.8 WBR B/11.1		(Centreport PkwyWB)		WBR	B/14.8		WBR	B/11.1
(U.S. Rt.1-NB) NBT C/33.1 NBT C/28.1		(U.S. Rt.1-NB)		NBT	C/33.1		NBT	C/28.1
(U.S. Rt.1-NB) NBR A/4.9 NBR B/11.4		(U.S. Rt.1-NB)		NBR	A/4.9		NBR	B/11.4
(U.S. Rt.1-SB) SBL C/34.8 SBL B/17.8		(U.S. Rt.1-SB)		SBL	C/34.8		SBL	B/17.8
(U.S. Rt.1-SB) SBT D/36.5 SBT B/18.8		(U.S. Rt.1-SB)		SBT	D/36.5		SBT	B/18.8
<u>Legend</u> :	Legend:							
* = Two-way stop controlled	* = Two-w	ay stop controlled						

* = Two-way stop controlled ** = All-way stop controlled

LOS = Level Of Service -- See Appendix C

LOS/Delay = Level Of Service & Avg. Vehicular Delay (seconds) - for "Overall Intersection"

TABLE 7b Year 2029 "Total" Intersection Level Of Service Summary -- with Mitigation

		D) (DE A	Z HOLID		CATE DE	o de la com	D
		PM PEA			SAT PEA		
		tersection	Lane C	<u>Group</u>	<u>Intersection</u>	Lane G	<u>roup</u>
#) Intersection	<u>n</u> (Rd Synchro Dir.) <u>L</u> 0	OS/Delay	Mvmt.	LOS/Dly.	LOS/Delay	Mvmt.	LOS/Dly.
<u>Unsignalized</u>							
1) Centreport Pl	xwy/Ramoth Ch.*		(overall))		(overall))
	(Centreport PkwyNE)		NBL	C/18.2		NBL	
	(Centreport PkwyNE)		NBR	B/10.8		NBR	
	(Ramoth Church RdEB)		EBT	A/0.0		EBT	
	(Ramoth Church RdEB)		EBR	A/0.0		EBR	
	(Ramoth Church RdWB))	WBLT	A/8.2		WBLT	
6) Centreport Pl	xwy/Main Site Ent.*		(overall))		(overall))
, 1	(Main Site Entrance-NE)		WBL	C/18.3		WBL	C/18.7
	(Main Site Entrance-NE)		WBR	A/8.7		WBR	A/8.6
	(Centreport PkwyNW)		SBL	A/7.4		SBL	A/7.4
	(Centreport PkwyNW)		SBT	A/0.0		SBT	A/0.0
	(Centreport PkwySE)		NBT	A/0.0		NBT	A/0.0
	(Centreport PkwySE)		NBR	A/0.0		NBR	A/0.0
<u>Signalized</u>	(
2) Centreport Pl	ywy/Mtn View	C/23.6	(overall)	1	E/68.5	(overall)	\
· •	•	C/23.0	NBL	B/16.5	12/00.3	NBL	F/93.0
(new)	(Centreport PkwyNB)		NBTR	A/2.1		NBTR	B/19.2
	(Centreport PkwyNB)		WBL	C/31.5		WBL	A/0.0
	(Mountain View RdNW)		WBTR	C/31.0		WBTR	A/0.0 A/0.0
	(Mountain View RdNW)			C/31.0 C/32.2			C/31.7
	(Mountain View RdSE)		EBLT EBR	D/42.2		EBLT EBR	F/108.1
	(Mountain View RdSE)		SBLTR			SBLTR	
	(Centreport PkwySB)	I D (C.		
3) Centreport Pl	kwy/I-95 SB Ramps	E/73.9	(overall)		C/20.7	(overall)	
(add 2n	d)(Centreport PkwyEB)		EBT	F/97.8		EBT	C/21.7
(new)	(Centreport PkwyEB)		EBR	B/11.5		EBR	A/5.2
	(Centreport PkwyWB)		WBL	F/127.1		WBL	C/20.6
	(Centreport PkwyWB)		WBT	D/36.9		WBT	C/25.9
	(I-95 SB Ramps-SB)		SBLTR	F/99.3		SBLTR	D/41.8
4) Centreport Pl	cwy/I-95 NB Ramps	E/64.3	(overall))	D /45.8	(overall))
,	(Centreport PkwyEB)		EBL	E/67.6		EBL	E/55.6
	(Centreport PkwyEB)		EBT	D/43.0		EBT	B/14.9
	(Centreport PkwyWB)		WBT	E/78.3		WBT	E/58.7
	(I-95 NB Ramps-NB)		NBLT	F/97.2		NBLT	E/74.9
	(I-95 NB Ramps-NB)		NBR	A/8.1		NBR	A/3.8
5) Centreport Pl		F/94.0	(overall)		$\mathbb{C}/32.7$	(overall)	
3) Centreport I i	(Centreport PkwyWB)	1 //4.0	WBL	F/280.4	C/32.1	WBL	E/57.5
			WBR	B/17.4		WBR	B/12.1
	(Centreport PkwyWB) (U.S. Rt.1-NB)		NBT	C/28.1		NBT	D/39.8
			NBR	A/5.1		NBR	B/15.4
	(U.S. Rt.1-NB)		SBL	E/61.4		SBL	C/26.0
	(U.S. Rt.1-SB)		SBL	D/48.8		SBL	C/26.0 C/26.7
Lagand	(U.S. Rt.1-SB)		SDI	D /48.8		SDI	C/ 20./
<u>Legend</u> : * = Two-v	way stop controlled						
- 1 wo-	ay stop controlled						
LOS	= Level Of Service S	See Annendix (7				
LOS/Delay	= Level Of Service &			onds) - for "Ove	rall Intersection"		

= Level Of Service & Avg. Vehicular Delay (seconds) - for "Overall Intersection"

LOS LOS/Delay

TABLE 8a
Intersection SimTraffic 95% Back-of-Queue Summary
PM Peak Hour

#) Intersection (north-to-south)				2023		2029
(Rd Synchro Dir.)	(Avail.)	Mvmt.	Bkgrd.	Total	Total w/Mitig.	Total w/Mitig.
1) Centreport Pkwy./Ramoth Chur	ch (22)					
(Centreport PkwyNE)	(inf.')	NBL	(0')	(0')	(0')	(0')
(Centreport PkwyNE)	(200')	NBR	(0')	(0')	(0')	(0')
(Ramoth Church RdEB)	(inf.')	EBT	(0')	(0')	(0')	(2')
(Ramoth Church RdEB)	(200')	EBR	(0')	(4')	(2')	(3')
(Ramoth Church RdWB)	(inf.')	WBLT	(24')	(45')	(40')	(70')
6) Centreport Pkwy./Main Site En	t. (6)					
(Main Site Entrance-NE)	(inf.')	WBL		(116')	(119')	(124')
(Main Site Entrance-NE)	(inf.')	WBR		(36')	(32')	(35')
(Centreport PkwyNW)	(200')	SBL		(0')	(0')	(0')
(Centreport PkwyNW)	(inf.')	SBT		(0')	(0')	(0')
(Centreport PkwySE)	(inf.')	NBT		(0')	(0')	(0')
(Centreport PkwySE)	(200')	NBR		(0')	(0')	(0')
2) Centreport Pkwy./Mtn. View Ro					. ,	
(Centreport PkwyNB)- <u>new</u>	(150')	NBL			(135')*	(<u>157</u> ')
(Centreport PkwyNB)	(inf.')	NBTR	(103')	(1352')	(69')*	(87')
(Centreport PkwySB)	(inf.')	SBLTR	(0')	(1041')	(217')*	(527')
(Mountain View RdNW)	(125')	WBL	(6')	(5')	(7')*	(11')
(Mountain View RdNW)	(inf. ')	WBTR	(10')	(10')	(9')*	(15')
(Mountain View RdSE)	(200')	EBL	(21')	(<u>240</u> ')	(87')*	(147')
(Mountain View RdSE)	(inf.')	EBTR	(96')	(961')	(299')*	(741')
3) Centreport Pkwy/I-95 SB Ramp	os (19+79/8	32)				
(Centreport PkwyEB) <u>add 2nd</u>	(inf.')	EBT	(356')	(2137')	(617')	(2038')
(Centreport PkwyEB) <u>new</u>	(325')	EBR			(293')	(<u>532</u> ')
(Centreport PkwyWB)	(300')	WBL	(204')	(261')	(201')	(<u>369</u> ')
(Centreport PkwyWB)	(inf.')	WBT	(140')	(230')	(227')	(607')
(I-95 SB Ramps-SB)	(inf.')	SBLTR	(761')	(756')	(667')	(885')
4) Centreport Pkwy/I-95 NB Ramp	os (18)					
(Centreport PkwyEB)	(365')	EBL	(50')	(139')	(163')	(<u>479</u> ')
(Centreport PkwyEB)	(inf. ')	EBT	(243')	(243')	(213')	(2035')
(Centreport PkwyWB)	(inf.')	WBT	(154')	(254')	(211')	(411')
(I-95 NB Ramps-NB)	(inf.')	NBLT	(130')	(245')	(292')	(513')
(I-95 NB Ramps-NB)	(100')	NBR	(93')	(<u>130</u> ')	(<u>145</u> ')	(<u>133</u> ')
5) Centreport Pkwy/U.S. Rt.1 (15)						
(Centreport PkwyWB)	(inf. ')	WBL	(653')	(624')	(674')	(635')
(Centreport PkwyWB)	(200')	WBR	(<u>254</u> ')	(<u>230</u> ')	(<u>270</u> ')	(<u>278</u> ')
(U.S. Rt.1-NB)	(inf.')	NBT	(152')	(151')	(186')	(189')
(U.S. Rt.1-NB)	(300')	NBR	(115')	(128')	(204')	(183')
(U.S. Rt.1-SB)	(600')	SBL	(199')	(224')	(241')	(<u>780</u> ')
(U.S. Rt.1-SB)	(inf.')	SBT	(389')	(374')	(424')	(2587')

Legend:

Avail. = Available lane stacking space (ft.) -- inf. = infinite

(xxx') = 95% BOQ as reported by SimTraffic (avg. of 10 one-hour runs)

 $(\underline{xxx'})$ = 95% BOQ beyond available stacking space (spillback)

^{* =} w/Signal as mitigation ** Synchro does not report queues for all-way stop intersections

TABLE 8b
Intersection SimTraffic 95% Back-of-Queue Summary
SAT Peak Hour

#) Intersection (north-to-south)				2023		2029
(Rd Synchro Dir.)	(Avail.)	Mvmt.	Bkgrd.	<u>Total</u>	Total w/Mitig.	Total w/Mitig.
1) Centreport Pkwy./Ramoth Chur	ch (22)					
(Centreport PkwyNE)	(inf. ')	NBL				
(Centreport PkwyNE)	(200')	NBR				
(Ramoth Church RdEB)	(inf. ')	EBT				
(Ramoth Church RdEB)	(200')	EBR				
(Ramoth Church RdWB)	(inf. ')	WBLT				
6) Centreport Pkwy./Main Site En	t. (6)					
(Main Site Entrance-NE)	(inf. ')	WBL		(123')	(136')	(119')
(Main Site Entrance-NE)	(inf. ')	WBR		(32')	(36')	(35')
(Centreport PkwyNW)	(200')	SBL		(0')	(0')	(0')
(Centreport PkwyNW)	(inf. ')	SBT		(0')	(0')	(0')
(Centreport PkwySE)	(inf. ')	NBT		(0')	(0')	(0')
(Centreport PkwySE)	(200')	NBR		(0')	(0')	(0')
2) Centreport Pkwy./Mtn. View R	d. (24)					
(Centreport PkwyNB)- <u>new</u>	(150')	NBL			(118')*	(<u>263</u> ')
(Centreport PkwyNB)	(inf. ')	NBTR	(84')	(2557')	(76')*	(2013')
(Centreport PkwySB)	(inf. ')	SBLTR	(0')	(1120')	(250')*	(405')
(Mountain View RdNW)	(125')	WBL	(0')	(0')	(0')*	(0')
(Mountain View RdNW)	(inf.')	WBTR	(0')	(0')	(0')*	(0')
(Mountain View RdSE)	(200')	EBL	(16')	(189')	(53')*	(84')
(Mountain View RdSE)	(inf.')	EBTR	(90')	(594')	(250')*	(430')
3) Centreport Pkwy/I-95 SB Ramp	os (19+79/8	32)				
(Centreport PkwyEB) <u>add 2nd</u>	(inf. ')	EBT	(186')	(1944')	(173')	(273')
(Centreport PkwyEB) <u>new</u>	(325')	EBR			(106')	(166')
(Centreport PkwyWB)	(300')	WBL	(96')	(146')	(112')	(158')
(Centreport PkwyWB)	(inf. ')	WBT	(104')	(182')	(129')	(256')
(I-95 SB Ramps-SB)	(inf.')	SBLTR	(163')	(223')	(179')	(386')
4) Centreport Pkwy/I-95 NB Ram	ps (18)					
(Centreport PkwyEB)	(365')	EBL	(39')	(<u>477</u> ')	(152')	(<u>385</u> ')
(Centreport PkwyEB)	(inf. ')	EBT	(112')	(1635')	(127')	(973')
(Centreport PkwyWB)	(inf. ')	WBT	(104')	(191')	(179')	(385')
(I-95 NB Ramps-NB)	(inf. ')	NBLT	(106')	(262')	(241')	(442')
(I-95 NB Ramps-NB)	(100')	NBR	(76')	(<u>130</u> ')	(<u>129</u> ')	(<u>162</u> ')
5) Centreport Pkwy/U.S. Rt.1 (15)						
(Centreport PkwyWB)	(inf. ')	WBL	(449')	(453')	(492')	(733')
(Centreport PkwyWB)	(200')	WBR	(<u>211</u> ')	(<u>264</u> ')	(<u>262</u> ')	(<u>406</u> ')
(U.S. Rt.1-NB)	(inf. ')	NBT	(179')	(185')	(189')	(302')
(U.S. Rt.1-NB)	(300')	NBR	(147')	(182')	(194')	(<u>318</u> ')
(U.S. Rt.1-SB)	(600')	SBL	(78')	(87')	(92')	(371')
(U.S. Rt.1-SB)	(inf.')	SBT	(249')	(248')	(274')	(709')

Legend:

Avail. = Available lane stacking space (ft.) -- inf. = infinite

(xxx') = 95% BOQ as reported by SimTraffic (avg. of 10 one-hour runs)

 (\underline{xxx}') = 95% BOQ beyond available stacking space (spillback)

^{* =} w/Signal as mitigation ** Synchro does not report queues for all-way stop intersections



Charles A. Kilpatrick, P.E. COMMISSIONER

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION 87 Deacon Road Fredericksburg, VA 22405

February 27, 2017

County of Stafford P. O. Box 339 Stafford, VA 22555-0339

RE: Sycamore Grove TIA & GDP Review #2 REC #16151347, Stafford County

Dear Mr. Zuraf and Mr. Hess:

As requested by Stafford County, VDOT has completed a review of the revision/comment response to the Traffic Impact Analysis (TIA), revision dated December 27, 2016, prepared by VETTRA Company on behalf of IVI Strategies, LLC and the GDP, prepared by The Engineering Groupe, Inc. and sealed 12/28/16, in support of the Sycamore Grove mixed-use (commercial/residential) development rezoning application. The proposed site is generally located along the east side of Centreport Parkway (Route 8900) and north of Mountain View Road (Route 627) in Stafford County. Access to the site is proposed via one (1) full movement intersection, a primary access point on Centreport Parkway.

The TIA indicates the assumed uses for the development include 170 single family detached homes, a 20,000 gsf general office building and 130,000 gsf of general retail space generating a net VPD of 9,796.

The TIA is subject to the Virginia Traffic Impact Analysis Regulations 24 VAC 30-155 in regard to the methodology and assumptions. VDOT offers the following comments to Stafford County for its comprehensive use. It should be noted that addressing these comments may change the results of the operational analyses.

Although certain design features may be referenced in the comments, this review does not cover engineering details. These details, including but not limited to, signalization, site plan, retaining walls, turn-lane storage length, crossover spacing and entrance spacing issues, sight distance and access management will be addressed at a later stage of development review.

Page 2

RE: Sycamore Grove TIA & GDP Review #2 REC #16151347, Stafford County

Traffic Engineering Comments:

- 1. In the proposed Transportation proffer 2(b), the applicant proposes to proffer \$200,000 to a signal at the Mountain View Road /Centreport Parkway intersection only if warrants are met, however, the associated TIA clearly indicates that the intersection fails operationally as a result of the traffic being added by the development. If warrants are met, the developer should be required to build the traffic signal fully at their cost, to include R/W acquisition. If warrants are not met at the time of full buildout, the developer is still adding a significant amount of traffic to this intersection, and therefore should be required to pay the \$200,000 proffer. Failure to meet signal warrants at buildout should not fully relieve the developer of sharing the cost of transportation infrastructure impacts resulting from their projects. It should also be noted that based on current contract prices, the cost for VDOT to signalize this intersection would be significantly higher that the proffered amount, probably in the range of \$350,000 without right of way costs.
- 2. In the proposed Transportation proffer 2(d), the proposed change to add an EB Centreport Pkwy right turn lane onto I-95 southbound will require guardrail and/or signal modifications in addition to pavement widening/depth. VDOT recently investigated adding a right turn lane here, and found that the existing guardrail and signal pole location prohibit large vehicles from making the turn from what is currently striped as shoulder.
- 3. As for the second EB through lane proposed at the I-95 SB signal, how is does the developer plan to terminate this second lane? If it serves only as an auxiliary lane as shown in the synchro file, the lane utilization needs to be adjusted to model this more accurately.
- 4. In the TIA response letter dated December 27, 2016, the analyst indicates in their response to item 3b that the Centreport Pkwy/US Rt. 1 signal operations change from E/C to D/C when the signal timing is optimized. Based on this, our original comment still stands: "For Centreport Parkway/US 1, as discussed for a previous project, optimizing signal timings to heavily favor green time on the minor street approach to Route 1 is not acceptable. The analysis needs to be revised to reflect signal timing closely matching existing timing."
- 5. Overall, TE is concerned that this development proposes significant queueing and delay problems at the Mountain View Road/Centreport Parkway and Rt. 1/Centreport Parkway intersections and that there is apparent lack of intent for necessary improvements. The analyst repeatedly mentions in the response letter that "It is unknown when a signal will be warranted..." at the Mtn View intersection, but does not answer question 2a from our

Page 3

RE: Sycamore Grove

TIA & GDP Review #2

REC #16151347, Stafford County

previous review: "For Centreport Parkway/Mountain View, installation of a traffic signal "when warranted" is indicated. Are warrants met for the 2023 conditions?". As for Rt. 1/Centreport, the analyst only offers signal optimization as a mitigation, which is a measure that is not truly attainable as VDOT has an obligation to maintain acceptable operations along Route 1, the only feasible alternative to I-95.

6. For the Mtn View/Centerport parkway intersection, TE is wondering if the developer had considered the installation of a roundabout. Per the VDOT Road and Bridge manual, consideration of a roundabout shall be given prior to consideration of a new traffic signal. Given the almost certain need for a signal at this location by the design year, the roundabout consideration phase of project development would apply.

GDP Comments:

Detailed construction / site plan has not been submitted or reviewed. These comments are general and additional comments may be rendered when an official site plan has been submitted for review by Stafford County.

- 1. Although only horizontal sight distance is labeled and appears acceptable both vertical and horizontal sight distance will required with the detailed plan review. It is our understanding the developer of the site has the ability to obtain off-site sight distance easements as necessary to meet the minimum required.
- 2. A portion of the entrance road (street) is located on property not owned by the developer. For the internal streets to become state maintained the developer will be required to dedicate the streets to public use. Again, it is our understanding the developer has the ability to obtain the right-of-way. Additional easements may be required.

You may contact Margaret Niemann at (540) 899-4106 if there are any questions.

Sincerely,

David L. Beale, P.E.

Area Land Use Engineer-Fredericksburg

I Bul

Cc: VETTRA

The Engineering Groupe, Inc.



Charles W. Payne, Jr. d. 540.604.2108 | cpayne@hf-law.com

725 Jackson Street, Suite 200 Fredericksburg, VA 22401-5720 t: 540.604.2100 | f: 540.604.2101 www.hf-law.com

March 30, 2017

Sent via email: David.Beale@vdot.virginia.gov & Overnight Delivery

David L. Beale, P.E. Virginia Department of Transportation 87 Deacon Road Fredericksburg, VA 22405

Re:

Sycamore Grove TIA & GDP Review #2 REC #16151347, Stafford County

Dear Mr. Beale:

I hope this finds you well. Below is our response to the February 27, 2017 VDOT Comments regarding the above referenced matter. Please consider this response as a supplement to the pending application referenced above. Please feel free to contact me if you have any questions regarding our response.

Traffic Engineering Comments:

1. In the proposed Transportation proffer 2(b), the applicant proposes to proffer \$200,000 to a signal at the Mountain View Road /Centreport Parkway intersection only if warrants are met, however, the associated TIA clearly indicates that the intersection fails operationally as a result of the traffic being added by the development. If warrants are met, the developer should be required to build the traffic signal fully at their cost, to include R/W acquisition. If warrants are not met at the time of full buildout, the developer is still adding a significant amount of traffic to this intersection, and therefore should be required to pay the \$200,000 proffer. Failure to meet signal warrants at buildout should not fully relieve the developer of sharing the cost of transportation infrastructure impacts resulting from their projects. It should also be noted that based on current contract prices, the cost for VDOT to signalize this intersection would be significantly higher that the proffered amount, probably in the range of \$350,000 without right of way costs.

<u>Applicant Response</u>: The Applicant has proffered \$215,000 in total, including funds for the warrant study and intersection improvements. The Applicant believes this proffered amount will significantly facilitate improvements at this intersection. The Applicant has also proffered to release those funds upon the final approval of the initial site plan.

2. In the proposed Transportation proffer 2(d), the proposed change to add an EB Centreport Pkwy right turn lane onto 1-95 southbound will require guardrail and/or signal modifications in addition to pavement widening/depth. VDOT recently investigated adding a right turn lane here, and found that the existing guardrail and signal pole location prohibit large vehicles from making the turn from what is currently striped as shoulder.

Applicant Response: The Applicant understands and will address this issue upon final engineering and design. Any adjustments or modifications required to be made at the final engineering stage will be part of the proposed intersection improvements proffered (under Section 2(d)) by the Applicant.

3. As for the second EB through lane proposed at the 1-95 SB signal, how is does the developer plan to terminate this second lane? If it serves only as an auxiliary lane as shown in the synchro file, the lane utilization needs to be adjusted to model this more accurately.

<u>Applicant Response</u>: The Applicant plans on tapering the additional lane down to merge with the existing lane after the signal. This should address the issue.

4. In the TIA response letter dated December 27, 2016, the analyst indicates in their response to item 3b that the Centreport Pkwy/US Rt. 1 signal operations change from E/C to D/C when the signal timing is optimized. Based on this, our original comment still stands: "For Centreport Parkway/US 1, as discussed for a previous project, optimizing signal timings to heavily favor green time on the minor street approach to Route 1 is not acceptable. The analysis needs to be revised to reflect signal timing closely matching existing timing."

Applicant Response: Future (w/Mitigation) signal timings are almost exactly the same as Existing "baseline" timings, which was provided by VDOT. An insignificant 1.5 seconds (0f 80.0 seconds green time) which is less than 1% of the cycle length, has been shifted from mainline Rt.1 to side street Cent. Pkwy. The LOS's along the mainline (Rt.1) remain exactly the same, acceptable LOS's with or without the 1.5 second shift.

5. Overall, TE is concerned that this development proposes significant queueing and delay problems at the Mountain View Road/Centreport Parkway and Rt. 1/Centreport Parkway intersections and that there is apparent lack of intent for necessary improvements. The analyst repeatedly mentions in the response letter that "It is unknown when a signal will be warranted..." at the Mtn View intersection, but does not answer question 2a from our previous review: "For Centreport Parkway/Mountain View, installation of a traffic signal "when warranted" is indicated. Are warrants met for the 2023 conditions?". As for Rt. 1/Centreport, the analyst only offers signal optimization as a mitigation, which is a measure that is not truly attainable as VDOT has an obligation to maintain acceptable operations along Route 1, the only feasible alternative to 1-95.

Applicant Response: Please see response 1 and 4 above. The Applicant is providing funding for a warrant study and future signal in the proffers for the Mountain View/Centerport Parkway intx. Also, the TIA shows the Rte. 1 / Centerport Parkway intersection operating at an acceptable level due to recent improvements made by VDOT.

6. For the Mtn View/Centerport parkway intersection, TE is wondering if the developer had considered the installation of a roundabout. Per the VDOT Road and Bridge manual, consideration of a roundabout shall be given prior to consideration of a new traffic signal. Given the almost certain need for a signal at this location by the design year, the roundabout consideration phase of project development would apply.

Applicant Response: If the County or VDOT believe a roundabout at this intersection is a most cost effective option and is warranted, then this will be a County and/or VDOT decision. The Applicant has proffered \$215,000 (under Section 2 (b) of proffers) for warrant study and improvements at this intersection, and those funds may be used at the discretion of the County for a light intersection or roundabout as noted above.

GDP Comments:

1. Although only horizontal sight distance is labeled and appears acceptable both vertical and horizontal sight distance will required with the detailed plan review. It is our understanding the developer of the site has the ability to obtain off-site sight distance easements as necessary to meet the minimum required.

Applicant Response: The Applicant acknowledges that both horizontal and vertical sight distance will need to be met with final plans. The Applicant has an agreement with the adjoining owner to provide such, and a copy of that agreement was forwarded to VDOT for their information. Please see entrance notes on the GDP for the deed book & page where this agreement is recorded in the Stafford County land records.

2. A portion of the entrance road (street) is located on property not owned by the developer. For the internal streets to become state maintained the developer will be required to dedicate the streets to public use. Again, it is our understanding the developer has the ability to obtain the right-of-way. Additional easements may be required.

Applicant Response: As noted above.

Please feel free to contact me with any questions and/or comments.

Charles W. Payne, Jr.

Respectfully,

Cc: Mike Zuraf, Stafford County Planning



COMMONWEALTH of VIRGINIA

Charles A. Kilpatrick, P.E. COMMISSIONER

DEPARTMENT OF TRANSPORTATION 87 Deacon Road Fredericksburg, VA 22405

April 21, 2017

County of Stafford P. O. Box 339 Stafford, VA 22555-0339

RE: Sycamore Grove, Review #3
Response to Review 2 TIA & GDP
REC #16151347, Stafford County

Dear Mr. Zuraf and Mr. Hess:

As requested by Stafford County, VDOT has completed a review of the comment response dated March 30, 2017 for the Traffic Impact Analysis (TIA) in support of the Sycamore Grove mixed-use (commercial/residential) development rezoning application. The proposed site is generally located along the east side of Centreport Parkway (Route 8900) and north of Mountain View Road (Route 627) in Stafford County. Access to the site is proposed via one (1) full movement intersection, a primary access point on Centreport Parkway.

The TIA indicates the assumed uses for the development include 170 single family detached homes, a 20,000 gsf general office building and 130,000 gsf of general retail space generating a net VPD of 9,796.

The TIA is subject to the Virginia Traffic Impact Analysis Regulations 24 VAC 30-155 in regard to the methodology and assumptions. VDOT offers the following comments to Stafford County for its comprehensive use. It should be noted that addressing these comments may change the results of the operational analyses.

Although certain design features may be referenced in the comments, this review does not cover engineering details. These details, including but not limited to, signalization, site plan, retaining walls, turn-lane storage length, crossover spacing and entrance spacing issues, sight distance and access management will be addressed at a later stage of development review.

Page 2

RE: Sycamore Grove TIA & GDP Review #2 REC #16151347, Stafford County

Traffic Engineering Comments:

- 1. In the proposed Transportation proffer 2(b), the applicant proposes to proffer \$200,000 and \$15,000.00 for a warrant study and release those funds upon final approval of the initial site plan for a signal at the Mountain View Road /Centreport Parkway intersection. However, the associated TIA clearly indicates that the intersection fails operationally as a result of the traffic being added by the development. If warrants are met, the county should require the developer to build the traffic signal fully at their cost, to include R/W acquisition. It should also be noted that based on current contract prices, the cost for VDOT to signalize this intersection would be significantly higher that the proffered amount, probably in the range of \$350,000 without right-of-way costs.
- 2. The below comments are previous comments from VDOT's letter dated 2/27/2017
 - a. As for the second EB through lane proposed at the I-95 SB signal, how is does the developer plan to terminate this second lane? If it serves only as an auxiliary lane as shown in the synchro file, the lane utilization needs to be adjusted to model this more accurately. **The applicant response does not address the comment Either the synchro model needs to be updated per this comment, or the second lane should be extended and tie into the left turn lane for NB I-95 (preferred lane drop method). No traffic model modifications would be required for the preferred lane drop method.
 - b. For the Mtn View/Centerport parkway intersection, TE is wondering if the developer had considered the installation of a roundabout. Per the VDOT Road and Bridge manual, consideration of a roundabout shall be given prior to consideration of a new traffic signal. Given the almost certain need for a signal at this location by the design year, the roundabout consideration phase of project development would apply.

 **Comment outstanding It is the responsibility of the applicant to determine the best mitigation for the intersection. "Most cost effective" is not a driving factor in determining roundabout projects, safety and operations are. Cost is only considered when it can be shown that a roundabout costs significantly more than a signal with no or only marginal improvements to safety and operations over a signal (i.e, a roundabout may cost more, but is still the preferred method over signalization per VDOT policy).

Page 3

RE: Sycamore Grove

TIA & GDP Review #2

REC #16151347, Stafford County

GDP Comments:

Detailed construction / site plan has not been submitted or reviewed. These comments are general and additional comments may be rendered when an official site plan has been submitted for review by Stafford County.

1. The comment response acknowledges that all design features will meet VDOT's and Stafford County design standards and have the ability to construct same and acquire any offsite right-of-way necessary.

You may contact Margaret Niemann at (540) 899-4106 if there are any questions.

Sincerely,

David L. Beale, P.E.

Area Land Use Engineer-Fredericksburg

Cc: VETTRA

The Engineering Groupe, Inc.



November 23, 2016

Stafford County Planning Dept. Attn: Mr. Mike Zuraf 1300 Court House Rd Stafford VA 22554

RE:

Sycamore Grove Project Review

Mike,

Thank you for the opportunity to review the application package of the development known as "Sycamore Grove". I understand this project to be a rezoning request from A-1 to B-2 for approximately 10.2 acres, and A-1 to R-2 for approximately 88.3 acres along Centerport Parkway and potentially 133.1 acres remaining as A-1 zoning.

The B-2 zoning does not appear to be an issue provided no business activities which are incompatible with the airport overlay district in the H-1 area are located in this area which is directly under the local flight path above.

The R-2 rezoning is another matter and is not supported by the Airport Authority. The current configuration as represented on the GDP depicts 170 single family units all located directly under the local aircraft traffic pattern, which is between 1,000 and 1,200 feet directly overhead the proposed housing. This 88.3 acre parcel would support 29.4 homes on 3 acre lots as zoned A-1. As stated in the Comprehensive Land Use Planning guide, the Authority could support up to 1.5 time this density or 44 homes.

Additionally, the remaining 133.1 acres of the overall parcel size of 231.6 acres was not addressed with this GPD and rezoning request. It is our contention that approval of the proposed rezoning request within this overall parcel would open the door for future increases in development density in the remaining 133.1 acres using the justification of the previous support of a rezoning request.

To summarize, the B-2 rezoning request could be supported. The R-2 rezoning is not supported due to the location of high density housing under the current aircraft flight pattern, which is incompatible with the airport overlay and the Compatible Land Use Planning guidelines. Additionally, the remaining A-1 zoning (133.1 acres) is a major concern relative to any rezoning action increasing the density of development on any portion of the overall parcel.

Sincerely,

Charles L. Kirkland, Vice-Chairman Stafford Regional Airport Authority

ADDENDUM TO PHASE I CULTURAL RESOURCES SURVEY OF OAKENWOLD TRACT STAFFORD COUNTY, VIRGINIA VDHR#

Prepared For: The Engineering Groupe, Inc. 13580 Groupe Drive, Suite 301 Woodbridge, Virginia 22192 (703) 670-0985

Prepared By: Carol D. Tyrer, Principal Investigator, and Dawn M. Muir-Frost

> Circa~ Cultural Resource Management, LLC 453 McLaws Circle, Suite 3 Williamsburg, Virginia 23185 (757) 220-5023

> > June 2016

ABSTRACT

In the spring of 2013, Angler Environmental contracted Circa~ Cultural Resource Management, LLC (Circa~) to conduct a Phase I cultural resources survey of the Oakenwold Tract in Stafford County, Virginia. The purpose of this Phase I cultural resources survey was to identify and record all historic resources within the project area prior to development of the site. This survey resulted in the identification of six isolated finds, three new archaeological sites, one previously identified archaeological site, and one previously identified architectural resource. The Stafford County Historic Commission concurred with Circa~'s recommendations.

In the summer of 2016, Circa~ returned to the Oakenwold Tract to review the current conditions of the four historic structures. Over the last few years, several large storms and snowfalls have occurred throughout Virginia, which could have impacted the buildings on the Oakenwold Tract. Circa~ was asked to review the property to determine if any changes have occurred to Site 089-0157 since the original survey in 2013.

Site 089-0157 is identified as the circa 1855 Oakenwold Farm. In 2013, when Circa~ resurveyed the structures previously identified within the project area boundaries, they determined that some of the modern buildings would not be contributing to the Oakenwold complex and would not be considered eligible for listing on the National Register of Historic Places and could be dismantled. However, the main house, kitchen, school, and corncrib were considered contributing elements to the complex and are eligible for listing on the National Register of Historic Places.

Since the 2013 survey, the main house, though overgrown and neglected, is still in good shape. The three outbuildings, the kitchen, school, and corncrib, have deteriorated since the previous survey. The kitchen is almost completely overgrown with vegetation and the school and corncrib are in various stages of collapse with their roof systems in bad shape. While these building still appear to be contributing to the complex, major repair will now be needed on the outbuildings to stabilize and ensure their future.

TABLE OF CONTENTS

ABSTRACT	i
TABLE OF CONTENTS	ii
LIST OF FIGURES	iii
LIST OF PLATES	iii
INTRODUCTION	1
RESULTS	2
Site 089-0157	2
Main House	2
Kitchen	6
School	8
	10
CONCLUSIONS AND RECOMMENDATIONS	12
Architectural Resources	12
Site 089-0157	
REFERENCES CITED	

LIST OF FIGURES

Figure 1. Approximate location of Site 089-0157 within the Oakenwold tract, Stafford
USGS quad1
LIST OF PLATES
Plate 1. View of main house, façade, looking north
Plate 5. View of main house, rear (north) elevation additions, looking southeast
Plate 20. View of cornerib, rear (north) elevation and side (west) elevation, looking southeast.

INTRODUCTION

In the spring of 2013, Circa~ Cultural Resource Management, LLC (Circa~) conducted a Phase I cultural resources survey of the Oakenwold Tract in Stafford County, Virginia (Figure 1). The property consists of approximately 250 acres of mixed pasture and woods with roughly 150 acres slated for development. The project tract is bordered by woods and Centerport Parkway to the north, by Mountain View Road to the west, by woods to the south, and by I-95 and woods to the east. The tract is bisected by Potomac Creek and Oakenwold Lane runs through the northwestern section of the tract. In the summer of 2016, Circa~ returned to the site to document the current conditions of the four historic architectural structures associated with Site 089-0157.

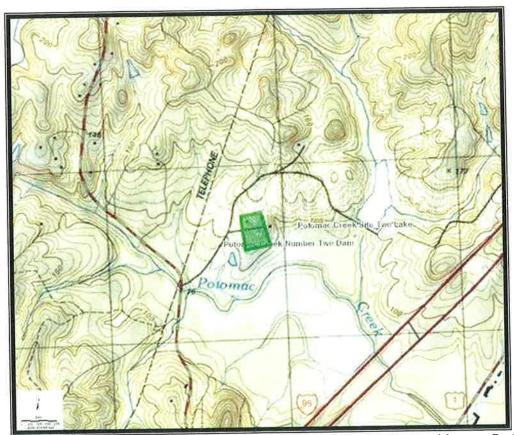


Figure 1. Approximate location of Site 089-0157 within the Oakenwold tract, Stafford USGS quad.

At Circa~, Carol D. Tyrer served as Project Manager and Principal Investigator for the project. Dawn M. Muir-Frost served as the Architectural Historian for the project and completed the architectural survey. Dawn M. Muir-Frost and Carol D. Tyrer prepared the report.

RESULTS

Site 089-0157

Within the project area, there is the circa 1855 Oakenwold house with one secondary dwelling, one kitchen, one corncrib, one school, three sheds, one modern shed, two wells, a cluster of three sheds, one ice house, and the remains of a cemetery. In 2013, a maintained mowed lawn surrounded the complex with well-kept ornamental plantings and mature trees scattered throughout the property. Today, this complex is surrounded by an overgrown lawn with mature trees and unkempt ornamental plantings around the house and outbuildings. The wood and chain link fences are still visible, although overgrown. Oakenwold Lane still runs to the west of the house with a dirt road leading from the Lane to the house. The circular carriage trace, although overgrown, is still visible in front of the house.

Main House

The circa 1855 main house has undergone no major changes since the last survey (Plates 1 - 4). The white paint on the wood weatherboard has started to peel in several places, although the rusticated stone foundation appears to be intact. The standing-seam roof is intact with no major structural damage and the dormers and windows appear intact. Vines are starting to overtake the addition on the side (east) elevation.



Plate 1. View of main house, façade, looking north.

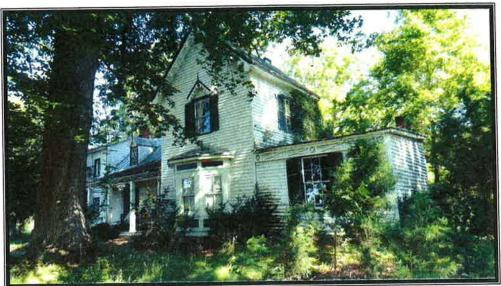


Plate 2. View of main house, façade and east elevation addition, looking northwest.

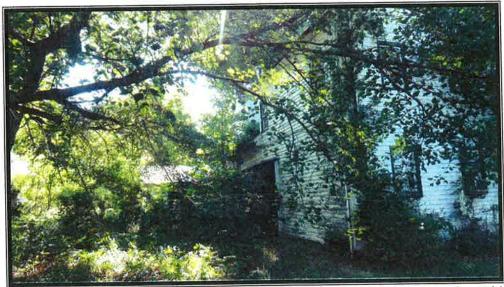


Plate 3. View of main house, side (west) elevation and rear (north) elevation addition, looking east.

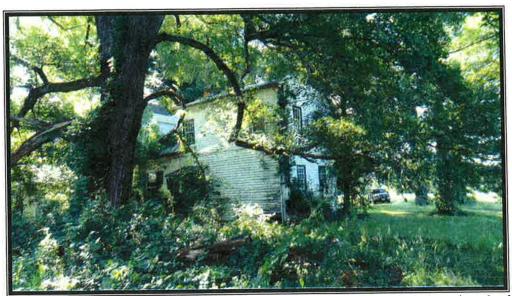


Plate 4. View of main house, side (west) elevation and rear (north) elevation, looking southeast.

The addition attached to the north elevation of the easternmost addition of the main block is greatly deteriorated (Plates 5 and 6). The white paint on the wood weatherboard is peeling and some of the weatherboard has pulled away from the wood framing, leaving the structural system exposed. The brick chimney on this elevation is almost completed obstructed by overgrown vegetation and the roof of the addition is starting to collapse (Plate 7).



Plate 5. View of main house, rear (north) elevation additions, looking southeast.



Plate 6. View of main house, rear (north) elevation additions, looking southwest.



Plate 7. View of main house, roofline of rear (north) elevation addition, looking south.

Kitchen

To the north of the main house, there is a circa 1855 kitchen. This kitchen is now almost completely covered by overgrown vegetation (Plates 8 and 9). The white paint is starting to deteriorated on the wood weatherboard and the addition to the building is starting to collapse in some places (Plate 10). The rusticated stone foundation appears intact. The standing-seam metal roof also appears mostly intact over the main structure (Plate 11).



Plate 8. View of kitchen, façade, looking east.

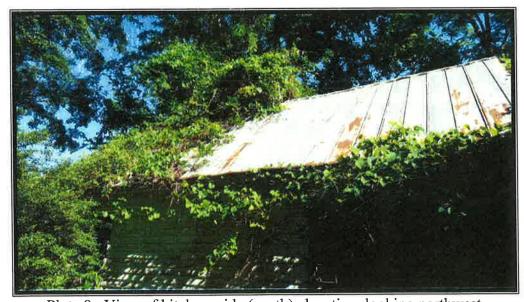


Plate 9. View of kitchen, side (south) elevation, looking northwest.

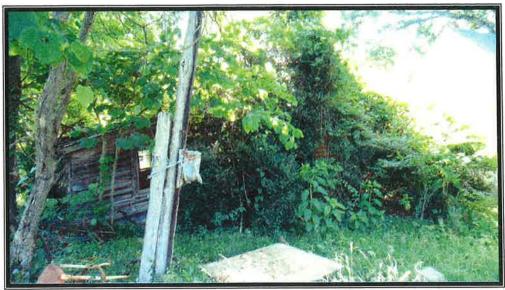


Plate 10. View of kitchen, side (north) elevation addition, looking east.

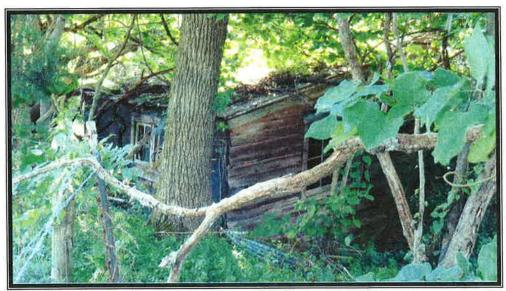


Plate 11. View of kitchen rear (west) elevation and addition, looking east.

School

To the northwest of the main house, there is a circa 1855 school. When Circa~ originally surveyed this building, it appeared in poor condition with the side (south) elevation almost completed deteriorated. Since that survey, the roof has completely collapsed, as has the side elevation (Plates 12, 13, and 14). The façade is only partially standing. The stone chinking is almost completely deteriorated. The windowpanes are broken and falling out of the frame and the window frame has separated from the building in several places (Plate 15). The interior of the school has been exposed to the elements due to the partial collapse of the building (Plate 16).

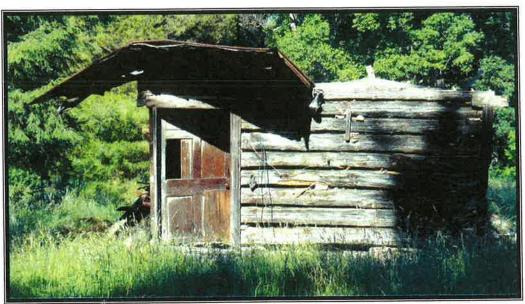


Plate 12. View of school, façade, looking west.

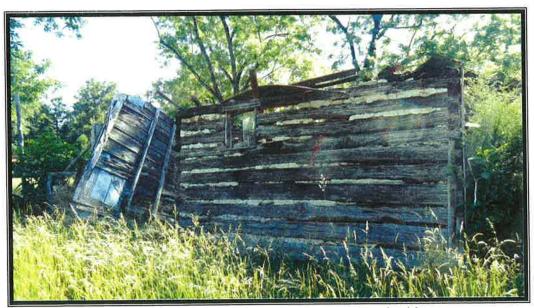


Plate 13. View of school, rear (west) elevation, looking east.

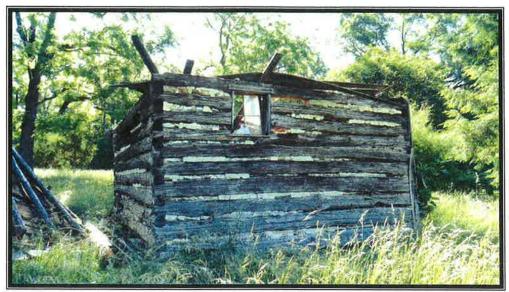


Plate 14. View of school, side (north) and rear (west) elevation, looking east.

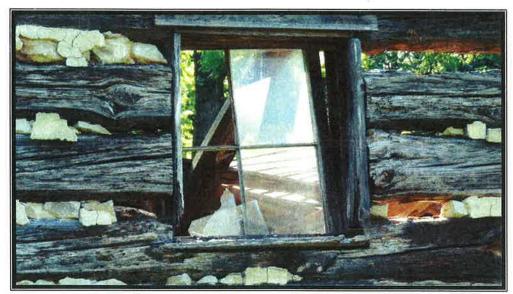


Plate 15. Detail view of school window.



Plate 16. View of school, side (south) elevation and interior, looking north.

Corncrib

To the north of the main house, there is a circa 1855 corncrib. The corncrib is now almost completely overgrown with vegetation and the standing-seam metal roof has collapsed (Plates 17-20). Vines almost completely cover the side (east) elevation and the eastern portion of the roof. The stone chinking is almost completely deteriorated leaving gaps in the structural system. The stone pier foundation appears to be intact.



Plate 17. View of corncrib, façade, looking northeast.



Plate 18. View of corncrib, rear (north) elevation, looking south.



Plate 19. View of corncrib, side (east) elevation, looking west.

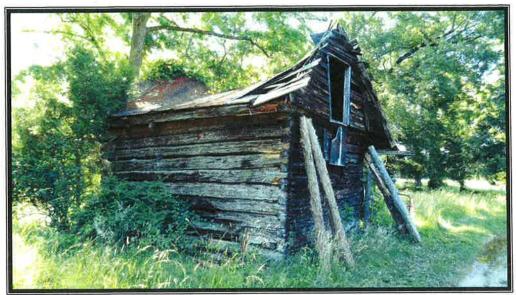


Plate 20. View of corncrib, rear (north) elevation and side (west) elevation, looking southeast.

CONCLUSIONS AND RECOMMENDATIONS

Architectural Resources

Site 089-0157

Site 089-0157 is identified as the circa 1855 Oakenwold Farm. In 2013, when Circa~ resurveyed the structures previously identified within the project area boundaries, they determined that some of the modern buildings would not be contributing to the Oakenwold complex and would not be considered eligible for listing on the National Register of Historic Places and could be dismantled. However, the main house, kitchen, school, and corncrib were considered contributing elements to the complex and are eligible for listing on the National Register of Historic Places.

Since the 2013 survey, the main house, though overgrown and neglected, is still in good shape. The three outbuildings, the kitchen, school, and corncrib, have deteriorated since the previous survey. The kitchen is almost completely overgrown with vegetation and the school and corncrib are in various stages of collapse with their roof systems in bad shape. While these building still appear to be contributing to the complex, major repair will now be needed on the outbuildings to stabilize and ensure their future.

REFERENCES CITED

Advisory Council on Historic Preservation

"36 CFR Part 800: Protection of Historic Properties." Regulations of the Advisory Council on Historic Preservation Governing the Section 106 Review Process.

Department of the Interior, National Park Service

Archaeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines. *Federal Register* 48:44716-44762.

National Park Service

1990 National Register of Historic Places Bulletin 15: How to Apply the National Register of Historic Places Criteria for Evaluation.

EXHIBIT C

Fiscal Impact Statement

"The Economic, Fiscal and Capital Infrastructure Impacts of the Proposed Sycamore Grove Project on Stafford County, Virginia", dated June 29, 2016.

8022822-1 041239.00001

THE ECONOMIC, FISCAL AND CAPITAL INFRASTRUCTURE IMPACTS OF THE PROPOSED SYCAMORE GROVE PROJECT ON STAFFORD COUNTY, VIRGINIA

Prepared for

IVI Strategies, LLC Woodbridge, Virginia

Prepared by

Dean D. Bellas, Ph.D. President Urban Analytics, Inc. Alexandria, Virginia

Table of Contents

Executive Summary	4
Economic Impact	
Fiscal Impact	
Capital Contributions	
•	
Sycamore Grove Proposed Development Program	8
Proposed Residential Building Program	8
Proposed Non-residential Building Program	
Estimated Population at Full Build-out and Occupancy	
Economic Impact on Stafford County	10
Construction Phase	11
Post-Construction Phase	11
Economic Growth in Stafford County	12
Contribution to Gross County Product	13
Fiscal Impact on Stafford County	14
Fiscal Impact Model	14
Fiscal Impact Findings	
Fiscal Impact Break-Even Values	
Fiscal Impact Absorption Schedule on Stafford County	17
Capital Contributions to Stafford County	19
Fiscal Impact Methodology	22
Contact Information	23

List of Tables

Table 1: Economic Impact Summary	5
Table 2: Fiscal Impact Summary	
Table 3: Residential and Non-Residential Building Program Data	
Table 4: Estimated Gross County Product	13
Table 5: Fiscal Break-Even Values	16
Table 6: Absorption Schedule	18
Table 7: Net Fiscal Impact Phasing Schedule	18
Table 8: Applicant Proposed Proffers / Impact Fees	20
	2.4
Appendix Table A - 1: Economic Impact of Construction Spending	
Appendix Table A - 2: Economic Impact Construction Jobs and Personal Earnings	
Appendix Table A - 3: Annual Economic Impact of Household Spending	26
Appendix Table A - 4: Annual Economic Impact of Worker Spending	27
Appendix Table B - 1: Revenue by Source Multipliers	28
Appendix Table B - 2: Baseline Service Level Multipliers	
Appendix Table C - 1: Revenues Generated by New Single Family Houses	30
Appendix Table C - 2: Expenditure Requirements of New Single Family Houses	
Appendix Table C - 3: Revenues Generated by Retail Space	
Appendix Table C - 4: Expenditure Requirements of New Retail Space	
Appendix Table C - 5: Revenues Generated by Office Space	
Appendix Table C - 6: Expenditure Requirements of New Office Space	

Executive Summary

Sycamore Grove is proposed as a mixed-use development project in Stafford County, Virginia. This development project is planned for 170 single-family houses and 150,000 square feet of office and retail space. In this report, the findings of an economic and fiscal impact analysis prepared for the proposed Sycamore Grove project are presented. Also presented in the report is a discussion of the proposed proffered capital contributions to Stafford County. The findings presented in this report indicate that the fiscal and economic benefits to the County's economy are substantial. In layman's vernacular, the proposed Sycamore Grove project not only "pays its own way", it also subsidizes existing residential units in the County that generate an annual net fiscal deficit to the County. In addition, the Applicant proposes to contribute \$ 2,411,595 in cash proffers to the County.

Economic Impact

An *economic impact* analysis estimates the number of new jobs created in the local economy as a result of the economic activity associated with the construction of a new project, the personal earnings of these newly created jobs, the multiplier effect on the local economy resulting from economic activity associated with new construction spending, and the multiplier effect on the local economy resulting from new, annual post-construction spending at full build-out and occupancy. The economic benefits generated by developing the Sycamore Grove project will contribute to the vitality of the Stafford County economy. The findings of the economic impact analysis are as follows:

- Over a four-year development period, the total economic impact to the Stafford County economy of developing the Sycamore Grove project is estimated to be \$84.68 million in economic activity associated with construction spending outlays;
- These construction spending outlays are estimated to create 391 new jobs over the four-year development period with related personal earnings of \$19.07 million;
- The estimated economic activity associated with construction spending outlays average out to \$21.17 million annually over a four-year development period and are estimated to contribute a little over four-tenths of one percent (0.41 percent) to the Stafford County Gross County Product (in 2014 dollars);
- Over the long-term (the post-construction phase), the total economic activity associated with spending from residents and workers at the Sycamore Grove project are estimated to be \$8.79 million annually and is estimated to contribute slightly less than two-tenths of one percent (0.17 percent) annually to the County's GCP; and
- The total economic activity associated with the annual spending from residents and workers at the Sycamore Grove are estimated to support 44 new jobs with related personal earnings of \$1.44 million *in addition to* the 400 new jobs supported by the new office and retail space. These benefits are summarized in Table 1.

Table 1: Economic Impact Summary Proposed Sycamore Grove Project Stafford County, Virginia

-		Direct		Indirect		Total		
Economic Impacts	Economic Impacts O			<u>Outlays</u>		Outlays		
Short-Term (Construction Pha	se)							
Hard Costs	\$	35,745,174	\$	17,243,472	\$	52,988,646		
Soft Costs	\$	22,319,776	\$	9,369,842	\$	31,689,618		
Total	\$	58,064,950	\$	26,613,314	\$	84,678,264		
Estimated New Jobs 1						391		
Estimated Personal Earnings ²					\$	19,068,631		
Long-Term (Post-Construction	n Pha	ase)						
From Residents	\$	5,692,960	\$	1,982,848	\$	7,675,808		
From Workers	\$	814,229	\$	308,187	\$	1,122,416		
Total	\$	6,507,189	\$	2,291,035	\$	8,798,224		
Estimated New Jobs from Annual	ΙΗοι	ısehold (Residen	t) Sp	ending ¹		44		
Estimated Personal Earnings of t	hese	New Jobs ²			\$	1,444,802		
Estimated New FTE Jobs Suppo	rted	from Non-resider	ntial	Space ³		400		
Annual Contribution to Gross	Cou	nty Product (G0	CP)					
Average Annual Economic Activit	ty: Sh	nort-Term (4-year	develo	pment period)		\$21,169,566		
Stafford County 2014 Estimated (Stafford County 2014 Estimated GCP (in 2014 dollars)							
Annual Sycamore Grove Contribu		•				0.41%		
Annual Sycamore Grove Contribu	ıtion	to GCP (Long-Terr	n)			0.17%		

Source:

Urban Analytics, Inc.; Woods & Poole Economics, Inc.; U.S. Department of Commerce; IVI Strategies, LLC.

Note:

Fiscal Impact

A *fiscal impact* analysis estimates the type and dollar amount of new tax revenues generated by a new community (at full build-out and occupancy) and the estimated expenditures required to provide public services to the community. In Stafford County, these revenues include (but are not limited to) real estate taxes, personal property taxes, sales taxes, utilities (consumer) taxes, transient occupancy (hotel and motel) taxes, revenues from licenses, fees, permits, fines, forfeitures and charges for services, miscellaneous and other local taxes, and intergovernmental transfers (revenue sharing) from the federal government and the State of Virginia. Estimated expenditures for public services in Stafford County include (but are not limited to) general government administration, judicial administration, planning and zoning, public safety, public works, health and welfare, community development, parks, recreation and culture, miscellaneous, and public schools. The findings of the fiscal impact analysis are as follows:

¹ Includes jobs located on-site, off-site, in the county, and outside the county.

² Stafford County only.

³ At full build-out and occupancy of the Sycamore Grove project. Stafford County only.

- The proposed Sycamore Grove community is estimated to generate \$1.89 million annually (at full build-out and occupancy) in tax and other non-tax revenues to Stafford County;
- The demand for public services by the residents and workers at Sycamore Grove is estimated to be \$1.16 million annually at full build-out and occupancy;
- The net fiscal benefit to Stafford County from the full build-out and occupancy of the Sycamore Grove project is estimated to equal to \$0.73 million annually; and
- While existing housing units in the County (as of fiscal year end 2014) generated \$0.89 in County revenues for every \$1.00 in public services, the residential units at the proposed Sycamore Grove project (at full build-out and occupancy) are estimated to generate \$1.38 in County revenues for every \$1.00 in County expenditures.

This surplus of \$0.38 per dollar in County revenues would then be returned to the County's General Fund for use by the County at its own discretion. This additional revenue helps to subsidize those existing housing units in the County that generate a net fiscal deficit to the County (as of the end of fiscal year 2014). The estimated net annual fiscal surplus generated by Sycamore Grove (at full build-out and occupancy) assumes that fiscal year 2014 levels-of-service provided by the County and the County's fiscal year 2014 tax base and tax rates remain constant. If tax rates or levels of services are changed in future years, then respective revenue and expenditure estimates would also change. These fiscal benefits are summarized in Table 2.

Capital Contributions

Virginia state law (Va. Code Section 15.2-2298) allows local governments to accept proffers (whether physical dedication of land, construction of infrastructure or cash proffers for capital infrastructure) provided that (i) the rezoning itself give rise to the need for the conditions; (ii) the conditions have a reasonable relation to the rezoning; and (iii) all conditions are in conformity with the locality's comprehensive plan.

The second goal of Stafford County's <u>2010 Comprehensive Plan</u> states that the comprehensive plan should "ensure that growth and development is managed in a fiscally responsible manner." Implicit in this language is that proposed rezoning projects must "paytheir-own-way." According to the Stafford County <u>2010 Comprehensive Plan</u> monetary contributions (cash proffers) are one of three acceptable means of mitigating impacts. The developer of the Sycamore Grove project proposes to make monetary contributions in the amount of \$2,411,595 to the County.

Table 2: Fiscal Impact Summary Proposed Sycamore Grove Project Stafford County, Virginia

Residential Land Uses	Total		er-Unit Basis
Estimated County Revenues Generated	\$ 1,321,658	\$	7,774
Estimated County Expenditures Impact	\$ 960,985	\$	5,653
Estimated County Revenue Surplus	\$ 360,673	\$	2,122
		Pe	r-Sq. Ft.
Non-residential Land Uses	<u>Total</u>	<u> </u>	<u>Basis</u>
Estimated County Revenues Generated	\$ 575,262	\$	3.84
Estimated County Expenditures Impact	\$ 196,650	\$	1.31
Estimated County Revenue Surplus	\$ 378,612	\$	2.52
Combined Land Uses	<u>Total</u>		
Estimated County Revenues Generated	\$ 1,896,920		
Estimated County Expenditures Impact	\$ 1,157,635		
Estimated County Revenue Surplus	\$ 739,285		

Source:

Urban Analytics, Inc.

Note:

These are the estimated revenue and expenditure figures that could have been generated had the Sycamore Grove project been fully built-out and occupied by the end of FY2014. Revenues and expenditures are based on the Stafford County, Virginia FYE 2014 Comprehensive Annual Financial Report (CAFR).

In addition to the *annual* net fiscal surplus of \$739,285 to the County, there is an additional one-time contribution of \$2,411,595 to the County. The proposed Sycamore Grove project meets the "fiscally responsible manner" requirement of the <u>2010 Comprehensive Plan</u>. The proposed project estimated net fiscal surplus to the County of \$739,285 not only "pays its own way" but subsidizes existing residential units in the County that generate a net fiscal deficit to the County annually. The additional cash proffer may be considered as "icing on the cake" to the County. These additional funds may be used by the County to fund the cost of planned capital improvement projects but it must be noted here that the proposed Sycamore Grove project (*from an economic perspective*) does <u>not</u> place an economic or fiscal burden on the County's capital infrastructure needs.

If a proposed residential project generates a net fiscal deficit to Stafford County, then the possibility exists that there could be an adverse annual fiscal impact to the County's short-and long-term capital improvement needs. Included in the estimated net fiscal surplus of

\$739,285 annually, however, is Sycamore Grove's estimated pro rata share of the County's total operating debt service as of the end of fiscal year 2014. That is, the County's annual debt service was apportioned across all residential and non-residential land uses in the County. Sycamore Grove's pro rata fair share of that debt service was calculated and included within the estimated \$1.16 million annual expenditures for public services (see Table 2) that the residents and workers at Sycamore Grove would demand from the County.

Even though the County's proffer guidelines call for a monetary contribution to offset capital improvement needs, major capital improvement expenditures in the County's <u>Capital Improvement Plan</u> associated with new residential and non-residential development are financed by the County through bond sales that are repaid over a fixed period. Therefore, the real carrying costs of the capital improvements associated with new residential development should be the annualized debt service required to cover these costs.

Sycamore Grove Proposed Development Program

Sycamore Grove is proposed as a mixed-use development project in Stafford County, Virginia. It is planned to be located along the east side of Centreport Parkway (Route 8900) and north of Mountain View Road (Route 627) in Stafford County. This development project is planned for 170 single-family houses and 150,000 square feet of office and retail space. The development will include several amenities for the community. These amenities are discussed in the Applicant's <u>Voluntary Proffer Statement</u>.

Proposed Residential Building Program

The residential data for Sycamore Grove are presented in Table 3. The Sycamore Grove community is currently planned for 170 single family houses detached houses. The average assessed real estate value of the single family houses is estimated to be \$525,000. The total assessed value of the residential land uses at full build-out and occupancy is estimated to be \$89.25 million. These prices are the values in 2014 dollars that these residential units are assumed to have been assessed for if all 170 units had been fully built and occupied in 2014.

Proposed Non-residential Building Program

The non-residential data for Sycamore Grove are also presented in Table 3. The Sycamore Grove community is currently planned for 150,000 square feet of non-residential space. Of the 150,000 square feet of non-residential space, 60,000 square feet is planned for general office space and 90,000 square feet is planned for general retail space. The total assessed value of the non-residential land uses at full build-out and occupancy is estimated to be \$35.10 million.²

For the purpose of the fiscal impact analysis, the average number of full-time equivalent (FTE) jobs per square foot of non-residential space is one job for every 450 square feet of

¹ Source: Values provided by IVI Strategies, LLC.

² Source: Ibid.

retail space, and one job for every 300 square feet of office space. It is estimated that at completion and full-tenancy, the 150,000 square feet of office and retail space can support an additional 400 new, FTE jobs in Stafford County. The actual number of FTE jobs supported by the total non-residential space at Sycamore Grove community will be determined by the individual tenants occupying this space at the proposed project.

Table 3: Residential and Non-Residential Building Program Data
Proposed Sycamore Grove Project
Stafford County, Virginia

Residential Uses Single Family Total	Total <u>Units</u> <u>170</u> 170	Average Real Estate <u>Market Value</u> ¹ \$525,000	Total Real Estate Market Value \$ 89,250,000 \$ 89,250,000 \$ SAY:	Estimated Population 533.80 533.80 534	Estimated Children 112.20 112.20 112.20
Non-Residential Uses Office (40%) Retail (60%) Total	Total Sq. Ft. 60,000 90,000 150,000	Avg. Real Estate Market Value ¹ per Sq. Ft. \$210 \$250	Total Real Estate Market Value \$ 12,600,000 \$ 22,500,000 \$ 35,100,000 \$ SAY:		Estimated FTE Jobs ² Supported 200.00 200.00 400.00 400
Total Value			\$ 124,350,000		

Source:

IVI Strategies, LLC; U.S. Census; Stafford County Public Schools; Urban Analytics, Inc.

Note:

Estimated Population at Full Build-out and Occupancy

In this report, average household size figures by type of housing unit for single-family, townhouse, and multifamily units in the County are imputed based on an analysis of the total number of housing units by type, the total number of households by occupied housing units by type and by tenure, and the total number of vacant units by type as reported in the 2010 U.S. Census. In Stafford County, single family houses are estimated to have an average occupancy rate of 3.14 persons per occupied housing unit, 2.92 persons per occupied town house unit, and 2.14 persons per occupied multifamily unit.³

¹ Current dollars.

² Full-time equivalent jobs

³ According to the Stafford County <u>2010 Comprehensive Plan</u>, the average household size in the County is 2.93 persons per unit, slightly lower than the imputed average household size of 3.03 persons per unit as calculated by Urban Analytics, Inc., based on data from the 2010 U.S. Census.

Typically, the number of children residing in different types of housing is a function of housing unit size (including the number of bedrooms per housing unit), with larger, single-family units averaging more children per unit than smaller, town house units, which in turn, average more children per unit than smaller, multifamily units. For planning purposes, the Stafford County Public Schools utilized (in 2010) an average student generation factor of 0.66 students per single family house, 0.63 students per town house unit, and 0.32 students per multifamily (for-sale and for-rent) units. At full build-out and occupancy, the 170 single-family houses planned for the proposed project are estimated to have 534 people and 112 school-age children residing at Sycamore Grove.

Economic Impact on Stafford County

An economic impact analysis estimates the number of new jobs created in the local economy, the spending effects (personal earnings) of these newly created jobs, and the multiplier effect on the local economy resulting from new spending. The economic and fiscal benefits associated with the construction of Sycamore Grove proposed project will contribute to the vitality of the economy of Stafford County. The total economic impact of the direct and indirect outlays are calculated by applying sector-specific multipliers computed for Stafford County by the Bureau of Economic Analysis (U.S. Department of Commerce) and published in Regional Multipliers-RIMS II (2010). These multipliers permit the total output values (i.e., their contribution to the County's gross county product) to be calculated from the proposed Sycamore Grove's direct dollar outlays, and for job and earnings impacts of these direct outlays to be estimated.

Direct outlays are defined in this report as the estimated outlays incurred (captured) within Stafford County to develop the proposed project to full build-out and occupancy. Direct outlays are the initial spending generated in Stafford County (including materials and payroll) necessary to develop the proposed Sycamore Grove project. Direct outlays received by vendors, suppliers and other entities associated with providing goods and services to the builder (or builders) of the proposed Sycamore Grove project, in turn, purchase goods and services from other companies. Additionally, employees of the builder (or builders) and employees of the vendors, suppliers and other entities purchase goods and services in Stafford County from their payroll earnings. These purchases (including the effects of payroll spending in the local economy) are known as indirect impacts or indirect outlays. *Indirect outlays* are defined in this report as the net increase in direct outlays (in Stafford County) that deliver a dollar of output to its final use. For example, the multiplier for direct construction spending outlays in Stafford County is 1.4824. For every \$1.00 of construction outlays incurred in the local economy, a total of \$1.48 is generated (captured) in the local economy. The direct impact is 1.0. The indirect impact is 0.4824.

The economic impacts reported in Table 1 report only those personal earnings and fiscal benefits that are retained within Stafford County's economy. Although residential and non-residential land uses in the proposed Sycamore Grove community are planned for delivery over a four-year development period between 2018 and the end of 2021, the economic and fiscal analyses presented in this report express the proposed development's potential impacts in constant 2014 dollars. The economic impacts of Sycamore Grove result from construction

and other economic activity during the construction phase and from continuing annual, post-construction spending flows following its completion.

Construction Phase

During the construction phase economic impacts involve both on-site and off-site spending that supports locally based employment and personal earnings. These activities extend from pre-construction design, engineering and project development activities through the actual construction and related construction management activities. Direct outlays in support of these construction activities will generate additional economic benefits in Stafford County in the form of new jobs and related earnings over the construction period.

The total economic impact of construction spending at Sycamore Grove is shown in both Table 1 and in Appendix Tables A-1 and A-2. It is estimated that the total direct outlays for developing Sycamore Grove (net of land acquisition costs, financing costs, insurance costs, real estate property taxes, transfer and recordation taxes, building permits, and profits) is \$58.06 million. Estimated direct outlays for construction costs (hard costs) for the total project are \$35.75 million. Estimated direct outlays for soft costs are estimated to total \$22.31 million. The economic benefits generated by the direct hard cost outlays of \$35.75 million for the construction of Sycamore Grove will contribute an additional \$17.24 million in spending for a total of \$52.99 to Stafford County's economy over the four-year construction period. Direct outlays for hard costs will generate a total of 249 on-site and off-site jobs supported by construction-related spending and the re-spending of construction payroll over the four-year development period (see Appendix Table A-2). Direct outlays for hard costs will generate \$10.89 million in total personal earnings.

The estimated soft costs associated with Sycamore Grove include professional services (e.g., design and engineering), marketing, accounting and legal, leasing, and other soft costs associated with new building construction. Excluding financing costs, insurance costs, and profits, direct outlays for soft costs of \$22.31 million will generate an additional \$9.34 million in local spending for a total \$31.65 million. Direct outlays for soft costs will generate a total of 142 jobs. Direct outlays for soft costs will generate \$8.17 million in total personal earnings over the four-year development period.

The \$84.68 million in total economic activity resulting from the development of the proposed Sycamore Grove project equates to \$21.17 million annually over the four-year development period. The 391 new jobs over the construction period are estimated to equal 98 new jobs annually. These new 98 annual jobs are estimated to receive \$4.77 million in personal earnings annually.

Post-Construction Phase

The economic impact of household spending at Sycamore Grove is shown in Appendix Table A-3. At full build-out and occupancy, Sycamore Grove will house 170 new households with an estimated median household income of \$119,600 for a total of \$20.33 million in gross

household income.⁴ Approximately 28 percent of this household income (or \$5.69 million) is estimated to be captured within the local Stafford County economy. It is estimated that direct spending from these households will generate an additional \$1.98 million in indirect outlays for a total of \$7.67 million annually in Stafford County. Direct household income captured locally includes spending for goods and services such as retail and other personal services, local health care services, entertainment (including restaurants), transportation costs, and home maintenance expenditures.

The economic impact of post-construction spending by the office and retail workers in the proposed Sycamore Grove community is shown in Appendix Table A-4. At full build-out and tenancy, it is estimated that these workers employed in the various land uses proposed for the Sycamore Grove project will spend \$0.81 million in retail spending (including food and beverages) and sundry items for miscellaneous goods and services. It is estimated that direct spending from these workers will generate an additional \$0.31 million in indirect outlays for a total of \$1.12 million annually in Stafford County.

The economic impact analysis presented above does not take into account taxes that would be generated by construction spending and post-construction spending. Nor does this economic impact analysis measure the secondary and tertiary impacts of spending. Thus, the projected economic impact on the local economy from the full build-out of the proposed Sycamore Grove project is understated.

Economic Growth in Stafford County

The Stafford County economy grew rapidly over the 2000-2007 period, increasing from \$2.01 billion to \$4.11 billion for a gain of 105 percent over this eight-year period. This growth was driven by a combination of population growth (up 29 percent) and job growth (up 39 percent). The fact that the County's economy had grown faster than its employment base during this time period is an indication that the County also experienced a structural shift towards higher value-added jobs. Stafford County, however, did not escape the effects of the recent 2007-2009 national recession. The County's economy slowed down in 2008 before beginning its recovery in 2009. Beginning in 2012, it appears that movement in the County's economic growth rate has begun to stabilize. The stabilized growth in the County's economy is projected to grow in the range of 1.88 percent to 1.89 percent annually through 2019. The County's annual economic growth from 2000 to 2019 is presented in Table 4.

⁴ This is the estimated weighted-average median household income required to obtain a mortgage subject to mortgage financing terms in 2014. Actual median household incomes may be higher or lower.

⁵ The National Bureau of Economic Research, December 2007 (start) and June 2009 (end).

⁶ U. S. Department of Commerce; Woods & Poole Economics, Inc.

Table 4: Estimated Gross County Product Stafford County, Virginia 2000 - 2019

(in millions of 2014 dollars)

<u>Year</u>	Gross County Product	Annual Change
2000	\$2,095.345	
2001	\$2,203.244	5.15%
2002	\$2,386.977	8.34%
2003	\$2,691.142	12.74%
2004	\$3,081.440	14.50%
2005	\$3,384.225	9.83%
2006	\$3,634.144	7.38%
2007	\$4,110.495	13.11%
2008	\$4,269.681	3.87%
2009	\$4,458.353	4.42%
2010	\$4,664.363	4.62%
2011	\$4,892.374	4.89%
2012	\$4,984.796	1.89%
2013	\$5,078.917	1.89%
2014	\$5,174.771	1.89%
2015	\$5,272.385	1.89%
2016	\$5,371.793	1.89%
2017	\$5,473.027	1.88%
2018	\$5,576.117	1.88%
2019	\$5,681.098	1.88%

Source:

U.S. Department of Commerce; Woods & Poole Economics, Inc.; Urban Analytics, Inc.

Contribution to Gross County Product

In 2014, the Gross County Product (GCP) for Stafford County was \$5.17 billion (in 2014 dollars). Over a four-year development period, the economic impact to the Stafford County economy of developing the proposed Sycamore Grove project is estimated to be \$150.2 million in economic activity associated with the construction of this project. On an annual basis, the estimated \$16.67 million in total economic activity associated with this project is estimated to contribute 0.35 percent to Stafford County's GCP (in 2014 dollars). On an annual basis, the estimated \$19.37 million in post-construction economic activity associated with the residents and workers of this project is projected to contribute slightly less than one-half of one percent (0.41 percent) to the County's 2014 GCP. The economic benefits generated by developing the proposed Sycamore Grove project will contribute to the vitality of the Stafford County economy both over the short-term and the long-term.

Fiscal Impact on Stafford County

There are two objectives of this fiscal impact analysis. The first objective is to measure the expenditure demand that the proposed residential and non-residential land uses at the Sycamore Grove project would place on Stafford County's operating budget. The second objective is to measure County revenues that will be generated by the Sycamore Grove community at full build-out and occupancy. The fiscal impact of the proposed Sycamore Grove project on Stafford County reflects the increases in fiscal revenues that will be generated by the new residents, workers and real estate development associated with the community minus the expenditures required to provide public services to these new residents and workers. These revenue and expenditure flows are different for each type of land use development in the County.

Fiscal Impact Model

In order to accurately measure these distinct fiscal flows, a fiscal impact model was developed that allocates local revenues and expenditures by land use type including distributions across different types of residential and non-residential land uses. The County's prorated actual revenues and expenditures for FY 2014 as well as the allocation factors used to prorate actual operating revenues and expenditures for each budget category are shown in Appendix Tables B-1 and B-2. The allocation factors calculated for Stafford County are based on a detailed analysis of County data provided by the County's various departments and agencies. For example, in Appendix Table B-1, a detailed analysis of revenues from charges for services indicated that 86.5 percent of these revenues were generated by the occupants of residential land uses while the remaining 13.5 percent was generated by workers associated with non-residential land uses. Likewise, this same detailed level of analysis was performed for the County's various uses of expenditures. For example, in Appendix Table B-2, an analysis of community development expenditures indicated that 55.7 percent of these expenditures were attributed to providing services to the residential sector and 44.3 percent to the non-residential sector. For public education services, 100 percent of these costs are allocated to the residential sector.

This fiscal impact model has been calibrated to reflect the level of services and costs of operations as well as the schedule of tax rates and revenue sources, as reflected in the Stafford County Comprehensive Annual Financial Report (CAFR) for fiscal year 2014. This analysis reflects 2014 real dollar values, tax rates and levels of services, and provides an accurate measurement of expenditures and revenues reflecting these rates. If tax rates or levels of services are changed in future years, then respective revenue and expenditure estimates would also change. Similarly, if assessments change at a rate exceeding the rate of inflation, then the value base for calculating revenues would also change. For the purposes of this analysis, all of these values are held constant and this provides an accurate portrayal of the fiscal impacts of Sycamore Grove as if this development existed as part of the tax base in 2014.

Fiscal Impact Findings

The estimated annual fiscal flows associated with each type of residential and non-residential land use at the Sycamore Grove project are presented in Appendix Tables C-1 through C-6. Based on an examination of all potential local revenue sources and associated County expenditures allocated to the residential and non-residential land uses proposed at the Sycamore Grove project, the total net annual fiscal benefit to Stafford County was found to equal an estimated \$739,285 reflecting the generation of revenues totaling \$1,896,920 with associated County expenditures totaling \$1,157,635. It should be noted that the expenditure demands included in this analysis assign the same per capita and per worker costs to Sycamore Grove residents and workers as for residents and workers elsewhere in the County. This approach assumes that each person living or working in Stafford County has access to the County's services and therefore potentially shares from the benefits of these services. This cost or expenditure allocation is not based on the actual utilization of County services by specific individuals but rather reflects equal access to and availability of these services to all County residents and persons working in the County.

The capital costs associated with new residential and non-residential development are financed by the county through bond sales that are repaid over a fixed period, usually fifteen to twenty years. The real carrying costs of the capital improvements associated with new residential and non-residential development are the annualized debt service required to cover these costs. Debt service requirements for new residential and non-residential development are pro-rated on a per-job and per capita basis and are included in the full fiscal impact analysis presented in Appendix Tables C-1 through C-6.

The total real estate market value of the 170 proposed residential units at Sycamore Grove is estimated to be \$89.25 million (in 2014 dollars). The total real estate market value of the 150,000 square feet of office and retail space is estimated to be \$35.10 million. The total real estate market value of all taxable land uses at the proposed Sycamore Grove project is \$124.35 million (in 2014 dollars).

Fiscal Impact Break-Even Values

A comparative analysis of the estimated fiscal break-even values for residential units in the County and the average real estate market values of residential units planned for the proposed Sycamore Grove project is shown in Table 5. The estimated fiscal break-even point in Stafford County in fiscal year 2014 was \$317,650 for single-family houses, \$303,825 for townhouses, and \$152,450 for multifamily for-sale and for-rent units. The estimated fiscal break-even values shown in Table 5 reflect estimated assessed values.

Table 5: Fiscal Break-Even Values
Existing Units and Proposed Units
Stafford County, Virginia
Fiscal Years 2010, 2012, 2013, and 2014

Stafford	l Real Estate	Fiscal Break-Even	Fiscal Break-Even	Fiscal Break-Even
County	Tax Rate ²	Single Family	Town House	Multifamily ³
	Ex	cisting Units in Staffe	ord County	
FY 2010	\$1.10	\$303,575	\$290,190	\$143,910
FY 2012	\$1.07	\$308,975	\$295,330	\$147,100
FY 2013	\$1.07	\$318,400	\$304,300	\$153,550
FY 2014	\$1.02	\$317,650	\$303,825	\$152,450
	Estimated Assessed	d Values for Propose	d Units at Sycamore	<u>Grove</u>
FY 2014		\$525,000	not applicable	not applicable

Source: Urban Analytics, Inc.

Notes:

The "break-even point" is the value at which all operating costs and debt service associated with a specific housing unit type will be compensated for by the operating revenues generated by that housing unit type and the spending of its occupants (households). In other words, the fiscal break-even value is the point where a specific housing unit type "pays-its-own-way." Housing units assessed at the FY 2014 break-even value or higher will pay for all of their capital and operating costs, assuming a continuation in the levels-of-service currently provided for in the 2014 audited financial statements, and the present revenue structure and tax rates reported in the audited financial statements.

These break-even values provide a guideline for assessing the fiscal impact of individual projects. Break-even values fluctuate from fiscal year to fiscal year based on a number of variables. These variables include (but are not limited to): estimated non-real estate operating revenues generated; estimated outlays for public services (public expenditures); the average household size by unit type; the average student generation factor by unit type; changes in the annual level of public school enrollment; estimated real estate assessed values by unit type; real estate tax rates; non-real estate taxes; and fees (charges for services) generated by service category. As the variables change each fiscal year, the effect on fiscal break-even values is non-linear. Fiscal break-even values should not be used to restrict the development of new housing units that are priced below the break-even fiscal value. The result of such a land-use policy of exclusion based solely on value would be to make Stafford

¹ The estimated fiscal break-even value reflects estimated market value, in current dollars.

² Real Estate tax rate for informational purposes only. Fiscal break-even value each year is a function of annual Stafford County operating revenues and expenditures.

³ Includes for-sale and for-rent unit types.

County's housing unaffordable to households working in the public service sector and in other jobs not having high, value- added salaries. Finally, it is important to note that in fiscal impact analysis, a net finding of plus or minus one hundred dollars (\pm \$100) is considered to be within the fiscal break-even range for a particular land use. That is, estimated revenues generated by a particular land use are sufficient to cover the estimated expenditures demanded (required) to provide public services to that land use.

Fiscal Impact Absorption Schedule on Stafford County

It is estimated that the proposed Sycamore Grove project will be fully built-out and occupied over a four-year development period. The pre-development phase of Sycamore Grove project has already started and is expected to continue through the end of 2017 and the beginning of 2018. This pre-development phase includes site planning, engineering and design studies, architectural engineering and design for the proposed land uses, and obtaining all necessary project approvals by the County. Beginning with project approval and continuing on through the end of 2021, both residential and non-residential development is expected to be developed and delivered to the market.

An illustrative schedule of residential unit delivery and non-residential square foot delivery over a four-year absorption period is shown in Table 6. The phasing (timing) of actual residential and non-residential absorption is subject each year to actual market conditions, actual socioeconomic and demographic conditions, and other non-economic market forces such as weather conditions and the availability of labor and construction materials. The illustrative absorption schedule shown in Table 6 is the basis for phasing (distributing) the net fiscal benefits (Table 7) of the Sycamore Grove project to the County over the estimated four-year delivery of all land uses to the market.

The residential unit development and sales absorption phase is expected to occur between 2018 and 2021. For the purpose of estimating the phasing of the net fiscal impacts generated to the County (including real estate taxes), the absorption schedule in Table 6 reflects the first full calendar year *following* occupancy of residential units and non-residential space. Based on current and forecasted *market* conditions and after 20 single-family houses have been built and delivered to the market, the Applicant has proffered that 20,000 square feet of the office and retail space will be delivered to the market.

An illustrative fiscal absorption schedule of the calculated net revenue surpluses (in constant 2014 dollars) to Stafford County over a four-year absorption period is shown in Table 7. The phasing (timing) of net revenue surpluses is subject each year to actual market conditions (described above), as well as other factors (including but not limited to) actual socioeconomic and demographic conditions, actual number of residential and non-residential starts, annual property assessments, and annual property tax rates.

Table 6: Absorption Schedule
Proposed Sycamore Grove Project
Stafford County, Virginia

<u>Year</u>	Date ¹	Units <u>SF</u>	Units <u>TH</u>	Units <u>MF</u>	Sq. Ft. <u>Retail</u>	Sq. Ft.	Total Units <u>Residential</u>	Total Sq. Ft. <u>Non-Residential</u>
1	2017	0	0	0	0	0	0	0
2	2018	20	0	0	12,000	8,000	20	20,000
3	2019	50	0	0	26,000	17,000	50	43,000
4	2020	50	0	0	26,000	17,000	50	43,000
5	2021	50	0	0	26,000	18,000	50	44,000
6	2022	0	0	0	0	0	0	0
7	2023	0	0	0	<u>0</u>	<u>0</u>	0	0
8	2024	0	0	0	<u>0</u>	<u>0</u>	0	0
9	2025	0	0	0	<u>0</u>	<u>0</u>	0	0
Total		170	0	0	90,000	60,000	170	150,000

Source:

IVI Strategies, LLC.

Note:

¹ Assumes land uses are fully built-out and occupied at the end of the stated year. Absorption schedule reflects first full calendar year following stated year of build-out and occupancy for tax purposes only. This is an illustrative absorption schedule. Actual absorption schedule based on market conditions.

Table 7: Net Fiscal Impact Phasing Schedule Proposed Sycamore Grove Project Stafford County, Virginia

	1	2	3	4	5	6	7	8	9
Year*	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>
1	\$ -	\$ -	\$ -						
2		\$ 92,914	\$ 92,914						
3			\$ 214,686						
4				\$ 214,686	\$ 214,686	\$ 214,686	\$ 214,686	\$ 214,686	\$ 214,686
5					\$ 216,999	\$ 216,999	\$ 216,999	\$ 216,999	\$ 216,999
6						\$ -	\$ -	\$ -	\$ -
7							\$ -	\$ -	\$ -
8								\$ -	\$ -
9									\$ -
Total	\$ -	\$ 92,914	\$ 307,600	\$ 522,286	\$ 739,285	\$ 739,285	\$ 739,285	\$ 739,285	\$ 739,285

Source:

Urban Analytics, Inc.

Note:

*Assumes land uses are fully built-out and occupied at the end of the stated year. Phasing reflects first full calendar year following stated year of build-out and occupancy for tax purposes only. This is an illustrative phasing schedule of the annual net fiscal impacts to Stafford County over a 4-year development peiod. Actual phasing of net impacts subject to market conditions, build-out schedule, annual property assessments and tax rates, and Stafford County's future annual fiscal revenue and expenditure operating budgets.

It is estimated that the net fiscal flow to the County will be \$92,914 in 2018. By the end of 2019, the mid-point in the development and delivery portion of the proposed project, the net

fiscal flow to the County is estimated to be \$307,600. At full build-out and occupancy at the end of 2021, the net fiscal flow to the County is estimated to be \$739,285 annually.

This absorption schedule reflects 2014 real dollar values, tax rates and levels of services, and provides an accurate measurement of expenditures and revenues reflecting these rates. If tax rates or levels of services are changed in future years, then respective revenue and expenditure estimates would also change. Similarly, if assessments change at a rate exceeding the rate of inflation, then the value base for calculating revenues would also change. For the purposes of this analysis, all of these values are held constant in 2014 dollars.

Capital Contributions to Stafford County

The application of the Applicant's proposed monetary contributions is shown in Table 8. The developer of the Sycamore Grove project proposes to make monetary and non-monetary contributions in the amount of \$2,411,595 to the County.

Although the County's proffer guidelines call for a monetary contribution to offset capital improvement needs, major capital improvement expenditures in the County's <u>Capital Improvement Plan</u> associated with new residential and non-residential development are financed by the County through bond sales that are repaid over a fixed period. Therefore, the real carrying costs of the capital improvements associated with new residential development should be the annualized debt service required to cover these costs.

Table 8: Applicant Proposed Proffers / Impact Fees Sycamore Grove Project Stafford County, Virginia

Applicant Proposed Cash Proffers / Impact Fees		Units Units Cash Proffer/ Excluded Subject to Impact Fee By-Right Proffers per Unit				_	Total Cash Proffer/ Impact Fee <u>Proposed</u>		
Single-Family Dwelling									
Parks and Recreation	65	0	65	\$	1,468.50	\$	95,452.50		
Schools	65	0	65	\$	30,000.00	\$	1,950,000.00		
Libraries	65	0	65	\$	459.75	\$	29,883.75		
Fire and Rescue	65	0	65	\$	1,110.00	\$	72,150.00		
Transportation	65	0	65	\$	-	\$	-		
General Government	<u>65</u>	<u>0</u>	<u>65</u>	\$	1,524.75	\$	99,108.75		
Sub-Total	65	0	65	\$	34,563.00	\$	2,246,595.00		
Section 2 (b)*: Intersection Improvement Section 2 (d)*: Turn Lane Striping from Section 2 (e)*: Bus Stop for FRED Ser Section 4: Walking and Bike Trails Section 6: Contribution to the McCarty Section 6: Contribution to the Belmont	Additional Proposed Proffers Section 2 (b)*: Intersection Improvements at Centreport Parkway & Mountain View Road Section 2 (d)*: Turn Lane Striping from Centreport Parkway to I-95 South Section 2 (e)*: Bus Stop for FRED Service Section 4: Walking and Bike Trails Section 6: Contribution to the McCarty "Mack" Moncure Scholarship Fund Section 6: Contribution to the Belmont Rehabilitation Project Section 6: Contribution to the Seven Lakes Community Spillway						487,000.00 27,600.00 20,000.00 40,000.00 50,000.00 25,000.00 699,600.00		
					All Proffers	Ф	2,946,195.00		
Less: Proffers that are Offset Agains Section 2 (b)*: Intersection Improvement Section 2 (d)*: Turn Lane Striping from Section 2 (e)*: Bus Stop for FRED Ser	\$ \$ \$	487,000.00 27,600.00 20,000.00 534,600.00							
			T	otal -	Sub-Total All Proffers	•	2,411,595.00		

Source:

IVI Strategies, LLC. Voluntary Proffer Statement.

^{*} These proffers are offset against the cash proffer/impact fees.

<u>Appendix</u>

Fiscal Impact Methodology

The process of calculating the revenue and expenditure flows generated by the residential and non-residential land uses at Sycamore Grove involved formulating a fiscal model that allocates the County's operating revenues and expenditures to their direct sources. The basis for this analysis was the Stafford County Comprehensive Annual Financial Report (CAFR) for fiscal year 2014. The audited revenue and expenditure totals by source and agency reported in this document were divided between those generated by (assignable to) residential and non-residential uses according to percent distributions developed from a detailed examination of the County's actual spending in fiscal year 2014. These percent distributions of fiscal revenues and expenditures were calibrated to the demographic and economic characteristics of Stafford County. The residential share of each category of county revenue and expenditures (that is, the portions generated by local residents as opposed to local business activities or which provide services to local residents as distinguished from local businesses) was converted to a per capita equivalent to facilitate the calculation of fiscal flows associated with each residential land use analyzed. The non-residential share of each category of county expenditures was converted to a per job equivalent to facilitate the calculation of non-residential fiscal flows from commercial development.

This approach assumes that each person living or working in Stafford County has access to the County's services and therefore potentially shares from the benefits of these services. This cost or expenditure allocation is not based on the actual utilization of County services by specific individuals but rather reflects equal access to and availability of these services to all County residents and persons working in the County. The findings derived in this report are based on an analysis of average costs, not marginal costs. By using average costs and revenue multipliers in this analysis and not adjusting revenue sources and expenditure demands to reflect the income structure of the future residents of Sycamore Grove or the actual utilization rate of specific services, the actual revenue forecast is likely to be conservative and the actual demand for County services and programs may be overstated. However, where specific costs and revenues could be assigned based on actual use or values, these were calculated based on available data.

The methodology employed in the fiscal impact model is land-use and price-point sensitive. The model is also sensitive to persons per unit, school-age children per unit, and the number of square feet per worker. Additionally, the model is subject to project-specific socioeconomic conditions.

Contact Information

Author: Dean D. Bellas, Ph.D.

Mailing Address: Urban Analytics, Inc.

Post Office Box 877

Alexandria, Virginia 22313-0877

Telephone: 703.780.8200 *Fax:* 703.780.8201

Web Site: www.UrbanAnalytics.com
Email - #1: Dbellas@UrbanAnalytics.com

Email - #2: Dbellas101@aol.com

Dr. Bellas is president of Urban Analytics, Inc., an Alexandria, Virginia-based real estate and urban planning consulting firm providing urban development analytical services to public and private sector clients. Consulting services include fiscal and economic impact studies, market research analysis, real estate asset management, real estate development economics, and project feasibility studies. Since 1996, Dr. Bellas has analyzed the fiscal and economic impact of real estate development on towns, cities and counties in Maryland, Virginia, West Virginia, Kansas, and the District of Columbia. During this time period, Dr. Bellas analyzed the fiscal impact on over 16,000 residential units and over 38.7 million square feet of non-residential space. The total estimated real estate value of all land-use types analyzed is over \$5 billion. Dr. Bellas has authored or co-authored over sixty research reports on the fiscal and economic impact of real estate development.

In addition to Urban Analytics, Dr. Bellas is affiliated with The Catholic University of America where he is an adjunct faculty member in Real Estate Development in the School of Architecture and Planning. Previously, he has been an adjunct faculty member in the School of Professional Studies in Business and Education at the Johns Hopkins University, and in the School of Management at George Mason University. Dr. Bellas has also taught candidates for the CFA designation on behalf of the Washington Society of Investment Analysts.

Dr. Bellas received a Bachelor of Science in Business Administration from Western New England College with a concentration in Finance (1982), a Master of Urban and Regional Planning from the George Washington University (1993), and his Doctorate in Public Policy with a concentration in regional economic development policy at George Mason University (2005). His doctoral dissertation was entitled, "Fiscal Impact Simulation Modeling: Calculating the Fiscal Impact of Development." His research interests include regional and local developmental growth patterns, economic and fiscal impact effects of real estate development on municipal government, and economic development policy. Dr. Bellas is a member of Lambda Alpha International, an honorary society for the advancement of land economics. He is also a full member of the Urban Land Institute and sits on its national Public Development and Infrastructure Council.

Appendix Table A - 1: Economic Impact of Construction Spending Sycamore Grove: Residential and Non-Residential Land Uses Stafford County, Virginia

(Hard Costs) Construction Outlays	Estimated Hard Costs ¹ <u>Direct Outlays</u>	Regional Data RIMS II <u>Multiplier</u>	Estimated Hard Costs Indirect Outlays	Estimated Hard Costs Total Outlays
Single Family	\$26,400,150	1.4824	\$12,735,432	\$39,135,582
Office	\$3,354,624	1.4824	\$1,618,271	\$4,972,895
Retail	\$5,990,400	1.4824	\$2,889,769	\$8,880,169
Subtotal	\$35,745,174		\$17,243,472	\$52,988,646

(Soft Costs)	Estimated Soft Costs ²	Regional Data RIMS II	Estimated Soft Costs	Estimated Soft Costs
Construction Outlays	Direct Outlays	Multiplier ³	Indirect Outlays	Total Outlays
Soft Costs	\$22,319,776	1.4198	\$9,369,842	\$31,689,618
Subtotal	\$22,319,776		\$9,369,842	\$31,689,618

Estimated Total		Estimated Total	Estimated All Costs
Construction Outlays	Direct Outlays	<u>Indirect Outlays</u>	Total Outlays
Hard Costs	\$35,745,174	\$17,243,472	\$52,988,646
Soft Costs	\$22,319,776	<u>\$9,369,842</u>	\$31,689,618
Total	\$58,064,950	\$26,613,314	\$84,678,264

Source:

U.S. Department of Commerce, Bureau of Economic Analysis <u>Regional Multipliers-RIMS II</u>. IVI Strategies, LLC; Urban Analytics, Inc.;

¹ Hard Costs exclude land acquisition costs, soft costs, and leakage from region.

² Soft Costs exclude financing costs, insurance costs, real estate property taxes, transfer & recordation taxes, building permits, profits, and leakage from region.

³ Composite multiplier.

Appendix Table A - 2: Economic Impact Construction Jobs and Personal Earnings Sycamore Grove: Residential and Non-Residential Land Uses Stafford County, Virginia

	_		_	Regional Data	
	Estimated	GDP	Inflation-Adjusted	RIMS II Jobs	Total
Construction Outlays	Direct Outlays	Deflator	Direct Outlays ¹	<u>Multiplier²</u>	<u>Jobs³</u>
Hard Costs	\$35,745,174	0.9295	\$33,224,281	7.4848	249
Soft Costs	<u>\$22,319,776</u>	0.9295	<u>\$20,745,696</u>	6.8480	<u>142</u>
Total	\$58,064,950		\$53,969,977		391
	Regional Data RIMS II Earnings	Total Local			
Construction Outlays	<u>Multiplier</u>	<u>Earnings</u> ⁴			
Hard Costs	0.3048	\$10,895,129			
Soft Costs	0.3662	\$8,173,502			
Total		\$19,068,631			

Source:

U.S. Department of Commerce, Bureau of Economic Analysis Regional Multipliers-RIMS II (2010). Urban Analytics, Inc.

- 1 Adjusted to constant 2010 dollars.
- 2 Per \$1,000,000 in direct outlays.
- 3 Includes jobs on-site, off-site, in the county, and outside the county.
- 4 Adjusted to constant 2014 dollars.

Appendix Table A - 3: Annual Economic Impact of Household Spending Proposed Sycamore Grove Project Stafford County, Virginia

Calculation of HH Income Single Family Total	<u>Units</u> 170 170	Average Per Unit Real Estate <u>Market Value</u> \$525,000 \$525,000	Estimated Purchase <u>Down Payment</u> 20%	Estimated Per Unit HH Income Needed for Purchase 1 \$119,600 \$119,600	Estimated Total HH Income \$20,332,000 \$20,332,000
Local HH Income Captured			HH Income	Estimated Per Unit	Estimated Total
		Average Per Unit	Captured	HH Income	HH Income
	<u>Units</u>	HH Income	<u>Locally</u>	Captured Locally	Captured Locally
All Housing Units	170	\$119,600	28%	\$33,488	\$5,692,960
Local Direct & Indirect Outlays		Followsky I Total		Estado I Tabel	Followsky I Total
	IIII Income	Estimated Total	Decienal Date	Estimated Total	Estimated Total
	HH Income Captured	HH Income Captured Locally	Regional Data RIMS II	HH Income Captured Locally	HH Income Captured Locally
	Locally	Direct Outlays	Multiplier	Indirect Outlays	Total Outlays
Retail Spending	11.0%	\$2,236,520	1.3415	\$763,772	•
Health Costs	5.0%	\$1,016,600	1.3391	\$344,729	
Entertainment	2.5%	\$508,300	1.3922	\$199,355	
Transportation Costs	9.0%	\$1,829,880	1.3494	\$639,360	
Home Maintenance	0.5%	\$101,660	1.3505	\$35,632	\$137,292
Total	28.0%	\$5,692,960		\$1,982,848	\$7,675,808

Source:

U.S. Department of Commerce, Bureau of Economic Analysis Regional Multipliers-RIMS II (2010) Urban Analytics, Inc.

¹ Subject to mortgage financing terms such as: rate, term, debt-to-income ratio, real estate taxes, and hazard insurance.

Appendix Table A - 4: Annual Economic Impact of Worker Spending Proposed Sycamore Grove Project Stafford County, Virginia

				Regional Data RIMS II				
<u>Workers</u>	Outlay Type	<u>Dir</u>	ect Outlays	<u>Multiplier</u>	<u>Ind</u>	<u>irect Outlays</u>	<u>To</u>	<u>tal Outlays</u>
Office	Food/Beverage	\$	330,000	1.3922	\$	129,426	\$	459,426
Office	Miscellaneous	\$	220,000	1.3415	\$	75,130	\$	295,130
Retail	Food/Beverage	\$	264,229	1.3922	\$	103,631	\$	367,860
Total		\$	814,229		\$	308,187	\$	1,122,416

Source:

U.S. Department of Commerce, Bureau of Economic Analysis Regional Multipliers-RIMS II (2010) Urban Analytics, Inc.

Appendix Table B - 1: Revenue by Source Multipliers Stafford County, Virginia FYE June 30, 2014

		<u></u>					
				Allocatio	n Factor	Cont. Marg	jin
	<u>Category</u>	2014 Revenues	1	Res.	Non-Res.	Res.	Non-Res.
1	Real Estate						
	Residential Non-Residential	\$111,100,595 \$28,404,003	5 5	100.00% 0.00%	0.00% 100.00%	51.75%	50.25%
2	Personal Property	. , ,	5	78.19%	21.81%	16.06%	17.02%
3	Sales Tax	\$13,230,190	2	77.34%	22.66%	4.77%	5.30%
4	Utilities (Consumer)	\$11,793,044	2	65.33%	34.67%	3.59%	7.23%
5	Local Meals Tax	\$7,178,041	2	77.34%	22.66%	2.59%	2.88%
6	Other Taxes	\$6,225,067	2	65.62%	34.38%	1.90%	3.79%
7	Licenses, Fees, Permits	\$4,312,561		78.98%	21.02%	1.59%	1.60%
8	Fines & Forfeitures	\$1,057,819		72.20%	27.80%	0.36%	0.52%
9	Use of Money	\$413,350		72.20%	27.80%	0.14%	0.20%
10	Charges for Services	\$6,326,343		86.47%	13.53%	2.55%	1.51%
11	Miscellaneous	\$7,402,475		72.20%	27.80%	2.49%	3.64%
12	State\FedSoc. Services	\$12,700,613	3	100.00%	0.00%	5.92%	0.00%
13	State-Shared Expenses	\$11,549,422	3	79.87%	20.13%	4.30%	4.11%
14	Intergovernmental-Other	\$5,405,745	3,4	79.80%	20.20%	2.01%	1.93%
	Total	\$271,201,669				100.00%	100.00%
				Contribut	ion Margin:	79.16%	20.84%

Note:

- 1 Includes Operating Revenues only (General Fund, Special Revenue and Other Governmental Funds).

 Does not include Capital Projects revenues.
- 2 Estimated distribution of \$38,426,342 in total Other Local Taxes revenues.
- 3 Estimated distribution of \$28,851,916 in total Intergovernmental revenues.
- 4 Includes \$803,864 in Other Governmental Fund revenues.
- 5 Estimated distribution of \$183,606,999 in total General Property Taxes revenues.

Source:

Stafford County, Virginia <u>Comprehensive Annual Financial Report</u> FYE June 30, 2014 Urban Analytics, Inc.

Appendix Table B - 2: Baseline Service Level Multipliers Stafford County, Virginia FYE June 30, 2014

			Allocatio	n Factor	Contributi	ion Margin
	<u>Category</u>	2014 Expenditures ¹	<u>Res.</u>	Non-Res.	Res.	Non-Res.
1	General Government Administration	\$13,822,502 ²	72.20%	27.80%	4.17%	15.10%
2	Judicial Administration	\$7,683,973 ²	79.45%	20.55%	2.55%	6.20%
3	Public Safety	\$55,191,126 ²	73.02%	26.98%	16.85%	58.50%
4	Public Works	\$5,452,009 ²	81.87%	18.13%	1.87%	3.88%
5	Health and Welfare	\$14,433,224 ²	97.59%	2.41%	5.89%	1.37%
6	Parks, Recreation and Cultural	\$14,590,397 ^{2,3}	96.00%	4.00%	5.86%	2.29%
7	Community Development	\$5,171,401 ²	55.72%	44.28%	1.20%	9.00%
8	Miscellaneous	\$3,347,968 ⁵	72.20%	27.80%	1.01%	3.66%
9	Public Schools	\$144,984,778 4	100.00%	0.00%	60.61%	0.00%
	Total	\$264,677,378			100.00%	100.00%
			Contribut	ion Margin:	90.38%	9.62%
	<u>Summary</u>					
	Total Revenues	\$271,201,669	100%		79.16%	20.84%
	Total Expenditures	\$264,677,378	<u>100%</u>		90.38%	<u>9.62%</u>
	Net Surplus (Deficit)	\$6,524,291	0%		-11.22%	11.22%

Note:

- 1 Includes Operating Expenditures only (General Fund, Special Revenue and Other Governmental Funds). Does not include Capital Projects expenditures.
- 2 Includes apportioned Capital Outlays of \$10,339,246.
- 3 Includes estimated Debt Service of \$819,920.
- 4 Includes estimated Debt Service of \$34,435,051.
- 5 Includes \$3,347,968 in Transportation expenditures.

Source:

Stafford County, Virginia Comprehensive Annual Financial Report FYE June 30, 2014 Urban Analytics, Inc.

Appendix Table C - 1: Revenues Generated by New Single Family Houses

Proposed Sycamore Grove Project Stafford County, Virginia

	<u>Category</u>	Annual Estimated County Revenues <u>Generated</u> 1	Annual Estimated Per Unit <u>Generated</u>
1	Real Estate Residential Non-Residential	\$910,350 \$0	\$5,355
2	Personal Property	\$136,934	\$805
3	Sales Tax	\$40,632	\$239
4	Utilities (Consumer)	\$30,594	\$180
5	Local Meals Tax	\$22,045	\$130
6	Other Taxes	\$16,221	\$95
7	Licenses, Fees, Permits	\$13,525	\$80
8	Fines & Forfeitures	\$3,033	\$18
9	Use of Money	\$1,185	\$7
10	Charges for Services	\$21,723	\$128
11	Miscellaneous	\$21,223	\$125
12	State\FedSoc. Services	\$50,434	\$297
13	State-Shared Expenses	\$36,630	\$215
14	Intergovernmental-Other	\$17,130	\$101
	Total	\$1,321,658	\$7,774

¹ Residential based on 170 single-family detached houses with an estimated average assessed value of \$525,000 per unit.

Appendix Table C - 2: Expenditure Requirements of New Single Family Houses Proposed Sycamore Grove Project Stafford County, Virginia

		Annual Estimated County Services	
	<u>Category</u>	<u>Impact</u>	<u>Impact</u>
1	General Government Administration	\$39,630	\$233
2	Judicial Administration	\$24,242	\$143
3	Public Safety	\$160,032	\$941
4	Public Works	\$17,725	\$104
5	Health and Welfare	\$55,933	\$329
6	Parks, Recreation and Cultural	\$55,620	\$327
7	Community Development	\$11,442	\$67
8	Miscellaneous	\$9,599	\$56
9	Public Schools	\$596,360	\$3,508
	Total	\$960,985	\$5,653
	Estimated County Revenues Generated	\$1,321,658	\$7,774
	Estimated County Services Impact	\$960,985	\$5,653
	Estimated County Revenue Surplus	\$360,673	\$2,122

Appendix Table C - 3: Revenues Generated by Retail Space Proposed Sycamore Grove Project Stafford County, Virginia

	<u>Category</u>	Annual Estimated County Revenues <u>Generated</u>
1	Real Estate	
	Residential Non-Residential	\$0 \$229,500
2	Personal Property	\$37,157
3	Sales Tax	\$11,581
4	Utilities (Consumer)	\$15,795
5	Local Meals Tax	\$6,283
6	Other Taxes	\$8,268
7	Licenses, Fees, Permits	\$3,502
8	Fines & Forfeitures	\$1,136
9	Use of Money	\$444
10	Charges for Services	\$3,307
11	Miscellaneous	\$7,950
12	State\FedSoc. Services	\$0
13	State-Shared Expenses	\$8,981
14	Intergovernmental-Other Total	\$4,218 \$338,121
	lotai	\$338,121

Note:

Non-residential based on 90,000 square feet of retail space.

Appendix Table C - 4: Expenditure Requirements of New Retail Space

Proposed Sycamore Grove Project Stafford County, Virginia

	<u>Category</u>	Annual Estimated County Services Impact
1	General Government Administration	\$14,844
2	Judicial Administration	\$6,100
3	Public Safety	\$57,523
4	Public Works	\$3,818
5	Health and Welfare	\$1,344
6	Parks, Recreation and Cultural	\$2,255
7	Community Development	\$8,846
8	Miscellaneous	\$3,595
9	Public Schools	\$0
	Total	\$98,325
	Estimated County Revenues Generated	\$338,121
	Estimated County Services Impact	\$98,325
	Estimated County Revenue Surplus (Deficit)	\$239,797

Appendix Table C - 5: Revenues Generated by Office Space Proposed Sycamore Grove Project Stafford County, Virginia

1	<u>Category</u> Real Estate	Annual Estimated County Revenues <u>Generated</u>
•	Residenti Non-Residenti	• •
2	Personal Property	\$37,157
3	Sales Tax	\$11,581
4	Utilities (Consumer)	\$15,795
5	Local Meals Tax	\$6,283
6	Other Taxes	\$8,268
7	Licenses, Fees, Permits	\$3,502
8	Fines & Forfeitures	\$1,136
9	Use of Money	\$444
10	Charges for Services	\$3,307
11	Miscellaneous	\$7,950
12	State\FedSoc. Services	\$0
13	State-Shared Expenses	\$8,981
14	Intergovernmental-Other Tot	\$4,218 \$237,141

Note:

Non-residential based on 60,000 sq. ft. of office space.

Appendix Table C - 6: Expenditure Requirements of New Office Space

Proposed Sycamore Grove Project Stafford County, Virginia

		Annual Estimated County Services
	Category	Impact
1	General Government Administration	\$14,844
2	Judicial Administration	\$6,100
3	Public Safety	\$57,523
4	Public Works	\$3,818
5	Health and Welfare	\$1,344
6	Parks, Recreation and Cultural	\$2,255
7	Community Development	\$8,846
8	Miscellaneous	\$3,595
9	Public Schools	\$0
	Total	\$98,325
	Estimated County Revenues Generated	\$237,141
	Estimated County Services Impact	\$98,325
	Estimated County Revenue Surplus (Deficit)	\$138,817

This Page Intentionally Left Blank

Project Information & Primary Contacts

PROJECT INFORMATION	ON	PROJECT #	16151347
Sycamore Grove			
PROJECT NAME			SECTION
68 Oakenwold Lane			231.6 acres
ADDRESS (IF AVAILABLE)			TOTAL SITE ACREAGE
37-80			A-1
TAX MAP /PARCEL(S)			ZONING DISTRICT
Northwest quadrant of the LOCATION OF PROJECT	e Interstate 95 interchange w	ith Centreport Parl	kway
APPLICANT/AGENT (P.	rovide attachment if oplicant and Agent differ)	Primary Conta	act Person 🗆
John S. Groupe V (Applic	cant)	IVI Strategies	s, LLC
NAME		COMPANY	
13580 Groupe Drive	Woodbridge	V.	
ADDRESS	CITY	STATE igroupe@en	ZIP nggroupe.com
		MICHARCIA	Iddi Gabe.com
PHONE NUMBER	FAX NUMBER	EMAIL ADDRESS	
OWNER (Provide attachr			
OWNER (Provide attachr Michelle L. Moncure		Primary Conta	
OWNER (Provide attachr Michelle L. Moncure	ments if multiple owners)	EMAIL ADDRESS	
OWNER (Provide attachr Michelle L. Moncure	ments if multiple owners)	Primary Conta	act Person 🗆
OWNER (Provide attachmunichelle L. Moncure NAME 352 Sweetgrass Creek R	ments if multiple owners)	Primary Conta	29412
OWNER (Provide attachments) Michelle L. Moncure NAME 352 Sweetgrass Creek R ADDRESS PHONE NUMBER PROFESSIONAL (Engine	nents if multiple owners) Coad Charleston CITY FAX NUMBER	Primary Conta	29412 ZIP
OWNER (Provide attachmented in Michelle L. Moncure NAME 352 Sweetgrass Creek R ADDRESS PHONE NUMBER PROFESSIONAL (Engine Billy Flynn, L.S.B.	nents if multiple owners) Coad Charleston CITY FAX NUMBER	Primary Conta	29412 ZIP
OWNER (Provide attachments) Michelle L. Moncure NAME 352 Sweetgrass Creek R ADDRESS PHONE NUMBER PROFESSIONAL (Engine	nents if multiple owners) Coad Charleston CITY FAX NUMBER Per, Surveyor, etc.)	Primary Conta	29412 ZIP
OWNER (Provide attachments) Michelle L. Moncure NAME 352 Sweetgrass Creek R ADDRESS PHONE NUMBER PROFESSIONAL (Engine Billy Flynn, L.S.B. NAME	ments if multiple owners) Coad Charleston CITY FAX NUMBER Cer, Surveyor, etc.) Lite 301 Woodbridge CITY	Primary Conta	29412 ZIP act Person cring Groupe, Inc. VA 22192 STATE ZIP
OWNER (Provide attachmename 352 Sweetgrass Creek Raddress PHONE NUMBER PROFESSIONAL (Engine Billy Flynn, L.S.B. NAME 13580 Groupe Drive, Su	ments if multiple owners) Coad Charleston CITY FAX NUMBER Deer, Surveyor, etc.) Site 301 Woodbridge	Primary Conta	29412 ZIP act Person cring Groupe, Inc. VA 22192 STATE ZIP

Project Information & Primary Contacts

PROJECT INFORMATION	<u> </u>	PROJECT #	
Sycamore Grove			
PROJECT NAME			SECTION
68 Oakenwold Lane			231.6 acres
ADDRESS (IF AVAILABLE) 37-80			TOTAL SITE ACREAGE A-1
TAX MAP /PARCEL(S)			ZONING DISTRICT
	terstate 95 interchange with	Centreport Park	kway
LOCATION OF PROJECT			
APPLICANT/AGENT (Prov	vide attachment if icant and Agent differ)	Primary Cont	act Person 🗷
Charles W. Payne, Jr. (Age	,	Hirschler Fle	eischer
NAME		COMPANY	
725 Jackson Street, Suite	200 Fredericksburg	VA	22401
ADDRESS	CITY	STATE	ZIP
540-604-2108	540-604-2101	cpayne@hf	-law.com
PHONE NUMBER	FAX NUMBER	EMAIL ADDRESS	
OWNER (Provide attachme	nts if multiple owners)	Primary Cont	act Person 🗆
NAME		COMPANY	
ADDRESS	CITY	STATE	ZIP
PHONE NUMBER	FAX NUMBER	EMAIL ADDRESS	
PROFESSIONAL (Engineer	, Surveyor, etc.)	Primary Cont	ract Person 🗆
NAME		COMPANY	
ADDRESS	CITY		STATE ZIP
PHONE NUMBER	FAX NUMBER	EMAIL ADDRESS	

Statements of Understanding

I, as owner/co-owner of the property subject to this application, do hereby certify that I have read and understand the requirements for the submission of a reclassification as provided under the Stafford County Code, and further, that this submittal is in compliance with the requirements and applicable provisions of the Stafford County Zoning Ordinance, Chapter 28 of the Stafford County Code.

M. 2. M. Signature of Owner/Co Owner	Michelle Moncure Printed Name	U/29/10 Date
Signature of Owner/Co Owner	Printed Name	Date
Signature of Owner/Co Owner	Printed Name	Date

I, as applicant or agent for the owner(s) of the property subject to this application, do hereby certify that I have read and understand the requirements for the submission of a reclassification as provided under the Stafford County Code, and further, that this submittal is in compliance with the requirements and applicable provisions of the Stafford County Zoning Ordinance, Chapter 28 of the Stafford County Code.

Signature of Applicant/Agent

^{*} Additional sheets may be used, if necessary.

STAFFORD COUNTY REZONING APPLICATION OWNER'S NOTARIZED CONSENT

I, the undersigned, do hereby authorize the applicant, IVI Strategies, LLC, or its successors and assigns (collectively "Applicant"), to file on my behalf all rezoning, conditional use permit, special use permit or other land use or permitting applications necessary to rezone and develop Tax Map Parcel 37-80 from A-1 to R-2 and B-2 or other zoning designation as Applicant may reasonably determine, and further authorize Applicant, at its sole cost and expense, to procure, file and provide all necessary studies, application content regarding said property, any proffer statements, plans and other application materials, and to undertake all other actions necessary to obtain approval for all of the same.

OWNER ACKNOWLEDGMENT & CONSEN	<u>r</u>
MICHELE L. MONCURE	
STATE/COMMONWEALTH OF South Concentration, to with	rolina,
The foregoing instrument was acknowledge Michele L. Moncure.	ed before me this Aday of June, 2016, by Notary Public
My Commission expires: 11-09-72525 Notary Registration number: 14	HOMY TUNE
7974761-1 041239 00001	SER THE CARROLLING

__Single Family Lots_____

General Information

Clearly indicate all information that applies to this project: DETAILED DESCRIPTION OF PROJECT Sycamore Grove is a proposed mixed use development, with 75,000-150,0000 sq. ft._____ of commercial development and a 170 single family lot subdivision. More than half ___the total parcel area will remain open space._____ **INFORMATION FOR FEE CALCULATIONS** _98.5_____# of Acres Type of Rezoning: X Standard Rezoning Planned Development Proffer Amendment Minor Proffer Amendment Minor Proffer Amendment (when submitted simultaneously with Minor Conditional Use Permit Application) <u>INFORMATIONAL</u> Previous Ordinance #_____ Previous Resolution # _____ # of Lots (if rezoning to residential)__170___ Original Zoning_____A-1____ Proposed Zoning____B-2 / R-2_____ Proposed Use(s) ___Mixed Use:____ __Commercial (Retail / Office) and_____

Review Fee Calculations

STAFFORD COUNTY FEES:

The County review fee calculations are divided into four sections. Each section is based on a different type of reclassification. Determine the application fee by filling out the one section that applies.

Section I. Standard Rezoning:	
A. Base Fee: (Required - Enter the dollar amount that applies) If less than 5.0 acres\$4,375.00 If 5.0 acres or greater\$12,500.00	\$ 12,500.00
B. General Fee: (If greater than 5 acres)	
(_98.5_ Acres -5) X \$125	\$ 11,687.50
C. Fire & Rescue Review Fee (required)	\$ 125.00
D. Utilities Department Review Fee (required)	\$ 215.00
E. Public Works Review Fee (required)	\$ 200.00
F. Traffic Impact Analysis Review Fee: (If TIA required) Volume <1,000 VPD\$200.00 Volume >1,000 VPD\$400.00	\$ 40 <u>0.00</u>
G. Adjacent Property Notification (required):	
(6 Adjacent properties) X \$6.48	\$ 38.88
Sub-total (Add appropriate amounts from lines A thru G above)	\$ 25,166.38
H. Technology Fee (sub-total x 2.75% or 0.0275)	\$ 692.08
TOTAL (Sub-total + H. Technology Fee)	\$ 25,858.46

List of Adjoining Property Owners

The applicant is required to provide a list of the owners as shown on the current real estate tax assessment books of all abutting properties and properties immediately across the street or road from the property to be rezoned or issued a Conditional Use Permit. If the application requests a rezoning of only a portion of the parcel or a Conditional Use Permit on only a portion of the parcel, the entire parcel must be the basis for the below listing.

Provide additional pages if needed. (See Attached Page)

TAX MAP / PARCEL	NAME		
MAILING ADDRESS			
СПҮ		STATE	ZIP
TAX MAP / PARCEL	NAME		
MAILING ADDRESS			
СІТУ		STATE	ZIP
TAX MAP / PARCEL	NAME		
MAILING ADDRESS			
СІТУ		STATE	ZIP

Tax Map / Parcel Number	Property Address	Adjacent Property Owner	Owner Address
37 – 30	i.e.	Blue Ridge Associates LC	12500 Fair Lakes Circle Suite 400 Fairfax, VA 22033-3804
37 – 74J) -	Stafford- Centerport Inc.	7200 Wisconsin Ave Suite 1104 Bethesda, MD 20814-5005
37 – 29	-	Beverly Beach Snellings	10140 Forrest Patch Drive Mechanicsville, VA 23116-2706
37 – 27B	403 Mountain View Road	John Philip & Susan C. Snellings	2434 Lance Drive Greenville, NC 27858-7294
37 – 30B	-	Northern Virginia Conservation Trust	4022 Hummer Road Annandale, VA 22003-2403
37 - 14F	-	Chesapeake Holdings CSG LLC	25 South Charles Street Baltimore, MD 21201-3330

 \overline{X} Rezoning

Application Affidavit

This form to be filed with:				
STAFFORD COUNTY BOARD OF SUPERVISORS	Internal Use Only Project Name: Sycamore Grove A/P #: 16151347			
1300 COURTHOUSE ROAD STAFFORD, VIRGINIA 22555	Date:			
All applicants for a special exception, a special use permit, conditional use permit, amendment to the zoning ordinance or variance shall make complete disclosure of the equitable ownership of the real estate involved in the application, including in the case of corporate ownership, limited liability company ownership or similar business ownership, the name of stockholders, officers, managing partners, general partners, owners and members, and in any case the names and addresses of all of the real parties in interest. The requirement of listing names of stockholders, officers and directors shall not apply to a corporation whose stock is traded on a national or local stock exchange and having more than 500 shareholders. In the event the ownership of the involved real estate changes in any respect during the time the application is pending, the applicant shall make complete disclosure of the new equitable ownership of the real estate involved in the application as required herein. If the applicant is a contract purchaser, the ownership information required herein shall be provided for the contract purchaser in addition to the owner of the real estate involved in the application. This section applies to applications before the board of supervisors, planning commission and board of zoning appeals.				
See Section 15.2-2289 for State Enabling A	Authority			
1. Applicant information				
	gies, LLC			
Applicant Address13580 Groupe Drive Woodbridge, VA 22192				
Applicant's Signature	SCIZ			
Name of AgentCharles \	W. Payne, Jr., Hirschler Fleischer			
Address of Agent725 Jacks	son Street, Suite 200, Fredericksburg, VA 22401			
2. Type of Application				
☐ Conditional Use Permit	Variance			

Special Exception

Application Affidavit Page 2 Applicant:IVI Strategi	es, LLC	Project Name: A/P #: Date:	
3. Property Information			
Assessors Parcel(s)	37 - 80		
Address	68 Oakenwold Lane Staffor <u>d, VA 22554</u>		
4. Unless the equitable o ownership, list all equita		n, limited liability company or similar business rty.	
Name of owners	<u>Address</u>		
Michelle L. Moncure352 Sweetgrass Creek Road Charleston, SC 29412			
business ownership, list	all officers, managing p sion shall not apply if t	corporation, limited liability company or similar artners, general partners, share holders, owners he corporation is listed on a national or local stock	
Name of Members	<u>Address</u>		
	-	d is a corporation, limited liability company or nvolved with the purchase of the property.	
			

individuals listed in this section.

Application Affidavit		Project Name:
Page 3 Applicant: _IVI Strategi	ies, LLC	Date:
		
		d is a corporation, limited liability company or similar
		ing partners, general partners, share holders, owners ly if the corporation is listed on a national or local stock
exchange and has more	than 500 share hold	ers
Name of Members		
John S. Groupe V	Managing Me	mber
_John S. Groupe IV		
		
8. Have all individuals l	listed on this affiday	vit been notified of the purpose of the application?
		The second control of the property of the experience of
X Yes	☐ No	
		not been notified about this application plus submit nning and Zoning or Code Administration to send
		of this application prior to the public hearing.
Name	Address, includi	ng zip code, no P.O. Box please
-		
Number of owners to be	e notified:	x
Cost for certified letters		(cost as of the day of submittal)
Total due:	<u>\$(</u>]	Make checks payable to County of Stafford)
Please submit a check in	n the amount due w	ith this application to cover the cost of serving the

Application Affidavit Page 4 Applicant:IVI Strategies, LLC	Project Name:A/P #:Date:			
Tippicanaivi onategies, 22e				
10. Affirmation & Witness				
I hereby make oath or affirmation that the contents of this affidavit are true and correct to the best of my knowledge, information and belief. In the event the ownership of the involved real estate changes during the time the application is pending, I shall make complete disclosure of the new equitable ownership of the real estate involved in the application as required herein.				
Printed name of SignerJohn S. Groupe V				
Corporate Office of Signer MEMBER Signature C 28 16				
COMMONWEALTH OF VIRGINIA COUNTY OF STAFFORD, to wit:				
The forgoing affidavit was acknowledged	d before me this $\frac{28}{}$ day of June, $\frac{2016}{}$ by			
My commission expires: 01-31-	PARLING G			
\$	REGISTATION S			

myStafford Payments Home > Account Search > Account Details

Stafford County Real Estate Tax Search/Payment

Owner

Name / Mailing Address: MONCURE MICHELLE L 352 SWEETGRASS CREEK RD CHARLESTON SC 29412-9129 **Property Description**

Map #: Alt. ID/PIN: Legal: 37-80 23627

68 OAKENWOLD LN

Current Assessment

Land Value: \$2,269,500
Improvment Value: \$311,800
Land Use Value: \$222,600
Total Taxable Value: \$534,400

View Real Estate Details

● Pay Total Due Today: \$0.00○ Pay Total For Year: \$2,645.28

O Select Invoices to Pay

O Pay Another Amount: \$0.00

Next

Invoice History

Filter by Year Paid to get tax payments for a particular year

Bill Type
- ALL -

Year Paid
- ALL -

Clear Filter

Print Version

¢2 387 71

4n nn

6/22/2012

Filter Results

Thange Penalty/Interest Calculation Date

Total Due:

\$2,645.28 Total Tax Paid:

Total Tax Paid: Total Penalty/Int Paid: Total Fees Paid: Total Other Assessments: \$90,023.60

\$602.50 \$0.00 \$0.00

40.00

		_			Laure Bura	Donaldy Dyn	Interest Due	Total Due	Total Paid	Date Paid
Year	Bill #	Туре	Due Date	Rate	Levy Due	Penalty Due	Interest Due	TOTAL DUE	i Utai Palu	Date Palu
2016	23244	Real Estate	12/5/2016	0.990	\$2,645.28	\$0.00	\$0.00	\$2,645.28	\$0.00	
2016	23244	Real Estate	6/6/2016	0.990	\$2,645.28	\$0.00	\$0.00	\$0.00	\$2,645.28	6/1/2016
2015	23262	Real Estate	12/7/2015	1.019	\$2,589.79	\$0.00	\$0.00	\$0.00	\$2,589.79	11/30/2015
2015	23262	Real Estate	6/5/2015	1.019	\$2,589.79	\$0.00	\$0.00	\$0.00	\$2,589.79	5/29/2015
2014	23282	Real Estate	12/5/2014	1.019	\$2,589.79	\$0.00	\$0.00	\$0.00	\$2,589.79	12/5/2014
2014	23282	Real Estate	6/5/2014	1.019	\$2,589.79	\$0.00	\$0.00	\$0.00	\$2,589.79	6/6/2014
2013	23294	Real Estate	12/5/2013	1.070	\$2,561.58	\$0.00	\$0.00	\$0.00	\$2,561.58	12/11/2013
2013	23294	Real Estate	6/5/2013	1.070	\$2,561.58	\$0.00	\$0.00	\$0.00	\$2,561.58	6/7/2013
2012	23312	Real Estate	12/5/2012	1.070	\$2,387.71	\$0.00	\$0.00	\$0.00	\$2,387.71	12/11/2012

¢n nn

Go Back

22212

Dool Ectate

6/10/2012

1 070

¢7 787 71



JUNE 6, 2016
METES AND BOUNDS DESCRIPTION
A PORTION OF
THE PROPERTY OF
MICHELLE L. MONCURE
WILL BOOK 25 PAGE 753
TAX MAP 37 PARCEL 80
TO BE REZONED R-2
ROCK HILL MAGISTERIAL DISTRICT

ROCK HILL MAGISTERIAL DISTRICT STAFFORD COUNTY, VIRGINIA

Beginning at a point in the easterly right-of-way line of Mountain View Drive, State Route 627, (variable width) and the southerly property corner of the now or formerly Stafford-Centerport, Inc. property; thence departing the said easterly right-of-way line of Mountain View Drive, State Route 627, (variable width) and with the said now or formerly Stafford-Centerport, Inc. property, N18°40'32"E 1,155.05 feet to a point being the southerly corner of the now or formerly Blue Ridge Associates L.C. property; thence departing the said now or formerly Stafford-Centerport Inc. property and with the said now or formerly Blue Ridge Associates L.C. property and running through the said Michelle L. Moncure property the following courses and distances:

S09°07'56"E 297.02 feet to a point, N80°52'04"E 120.00 feet to a point, S09°07'56"E 27.00 feet to a point, N80°52'04"E 402.47 feet to a point, S45°43'43"E 59.61 feet to a point,

65.37 feet along the arc of a curve to the left having a radius of 300.00 feet, a delta angle of 12°29'06" and a chord bearing and distance of N38°01'44"E 65.24 feet to a point,

N31°47'11"E 16.29 feet to a point,

196.13 feet along the arc of a curve to the left having a radius of 298.00 feet, a delta angle of 37°42'33" and a chord bearing and distance of N12°55'54"E 192.61 feet to a point,

361.86 feet along the arc of a curve to the right having a radius of 437.00 feet, a delta angle of 47°26'37" and a chord bearing and distance of N17°47'56"E 351.61 feet to a point,

N41°31'15"E 262.88 feet to a point in the southerly line of the aforesaid now or formerly Blue Ridge Associates L.C. property; thence with the said now or formerly Blue Ridge Associates L.C. property the following courses and distances:

S52°49'09"E 579.39 feet to a point,

S08°49'09"E 950.00 feet to a point; thence departing the said now or formerly Blue Ridge Associates L.C. property and running through the said Michelle L. Moncure property the following courses and distances:

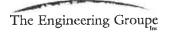
S08°47'47"E 553.67 feet to a point, S80°52'04"E 788.78 feet to a point, S29°19'37"W 465.10 feet to a point, S62°48'50"W 740.55 feet to a point, N39°30'38"W 364.58 feet to a point,

N80°47'41"W 511.97 feet to a point in the aforesaid easterly right-of-way line of Mountain View Drive, State Route 627, (variable width); thence with the said easterly right-of-way line of Mountain View Drive, State Route 627, (variable width) the following courses and distances:

N82°16'17"W 12.00 feet to a point, N08°56'28"E 94.52 feet to a point, N07°43'43"E 47.37 feet to a point,

288.82 feet along the arc of a curve to the left having a radius of 411.97 feet, a delta angle of 40°10'04" and a chord bearing and distance of N12°21'19"W 282.94 feet to the point of beginning and containing 88.2734 acres.

This description does not represent a boundary survey and was written from existing of records.





JUNE 6, 2016
METES AND BOUNDS DESCRIPTION
A PORTION OF
THE PROPERTY OF
MICHELLE L. MONCURE
WILL BOOK 25 PAGE 753
TAX MAP 37 PARCEL 80
TO BE REZONED B-2
ROCK HILL MAGISTERIAL DISTRICT

ROCK HILL MAGISTERIAL DISTRICT STAFFORD COUNTY, VIRGINIA

Commencing at a point in the easterly right-of-way line of Mountain View Drive, State Route 627, (variable width), point being the southerly property corner of the now or formerly Stafford-Centerport, Inc. property and a westerly corner of the Michelle L. Moncure property; thence departing the said easterly right-of-way line of Mountain View Drive, State Route 627, (variable width) and with the said now or formerly Stafford-Centerport, Inc. property and the said Michelle L. Moncure property, N18°40'32"E 1,155.05 feet to a point being the southerly corner of the now or formerly Blue Ridge Associates L.C. property; thence departing the said now or formerly Stafford-Centerport Inc. property and with the said now or formerly Blue Ridge Associates L.C. property and the said Michelle L. Moncure property, N51°38'32"E 521.16 feet to the point of beginning; thence continuing the said now or formerly Blue Ridge Associates L.C. property the following courses and distances:

N51°38'32"E 1,030.16 feet to the point,

S52°49'09"E 220.61 feet to a point; thence departing the said now or formerly Blue Ridge Associates L.C. property and running through the said Michelle L. Moncure property the following courses and distances:

S41°31'15"W 262.88 feet to a point,

361.86 feet along the arc of a curve to the left having a radius of 437.00 feet, a delta angle of 47°26'37" and a chord bearing and distance of \$17°47'56"W 351.61 feet to a point,

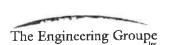
196.13 feet along the arc of a curve to the right having a radius of 298.00 feet, a delta angle of 37°42'33" and a chord bearing and distance of \$12°55'54"W 192.61 feet to a point,

\$31°47'11"W 16.29 feet to a point,

65.37 feet along the arc of a curve to the right having a radius of 300.00 feet, a delta angle of 12°29'06" and a chord bearing and distance of S38°01'44"W 65.24 feet to a point,

N45°43'43"W 59.61 feet to a point, S80°52'04"W 402.47 feet to a point, N09°07'56"W 27.00 feet to a point, S80°52'04"W 120.00 feet to a point, N09°07'56"W 297.02 feet to the point of beginning and containing 10.1664

This description does not represent a boundary survey and was written from existing of records.



acres.

2. <u>RC16151347</u>; <u>Reclassification - Sycamore Grove</u> - A proposed zoning reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density (88.27 acres) and B-2, Urban Commercial (10.17 acres) Zoning Districts, to allow for a mix of single-family detached residential units and commercial retail uses, on a portion of Tax Map Parcel No. 37-80. The portion of the parcel under consideration for rezoning totals 98.44 acres, is located on the east side of Centerport Parkway and north side of Mountain View Road, and within the Hartwood Election District. (**Time Limit: June 2, 2017**)

Mr. Harvey: Mr. Chairman, please recognize Mike Zuraf for the presentation.

Mr. Zuraf: Good evening Mr. Chairman, members of the Planning Commission. If I could have the computer please? I'm Mike Zuraf with the Planning and Zoning Department. This item is a reclassification for a project known as Sycamore Grove. This is a request for a reclassification from the A-1, Agricultural Zoning District to two zoning districts, R-2, Urban Residential and B-2, Urban Commercial. This is on a portion of... the rezoning is on a portion of Tax Map Parcel 37-80. The total area of the reclassification is approximately 98 acres, of which 88 acres would be to the R-2 Zoning District and 10 acres to the B-2 Zoning District. The applicant is IVI Strategies, LLC with Charlie Payne as the agent. The site's on the south and east side of Centreport Parkway and north side of Mountain View Road. The 98-acre portion to be rezoned is cross-hatched on this image. And the remainder of the parcel accounts for 133 acres. In total, the parent parcel is 231 acres. But again, 98 acres subject to rezoning. Looking at the zoning map for this site, the upper half of the... you see the site is zoned A-1. Surrounding the property on the upper half is M-1 zoned... M-1, Light Industrial zoned land. Also, the area to the west is zoned R-2, Urban Residential. That R-2 and M-1 zoned land was part of the rezoning known as Centreport. Looking at the history of this property, there are no proffers on the property. In 2013, two applications were proposed; one for a cluster subdivision under the current A-1 zoning, and a zoning reclassification following soon after to rezone the land, the entire property to the P-TND Zoning District. The cluster subdivision has not been approved. During the review of the project, the cluster subdivision regulations were amended and that amendment reduced the potential dwelling unit yield from 105 lots to 77 lots. The zoning reclassification in the meantime was later denied in 2014. The applicant has filed suit against the County for both of those applications; both lawsuits are currently stayed until the zoning reclassification... this zoning reclassification application is considered. To date, no other development has been proposed on the property. So, in the evaluation of the by-right impacts of this application, the applicant is using the higher density of a 105 by-right dwelling units under their proposed cluster plan. Staff notes that the actual by-right impacts would likely be lower today under the by-right density of something closer to 77 lots. The land includes a mix of forested land cover and open agricultural fields and pasture land. Potomac Creek runs along the southern limits of the rezoning area, with perennial and intermittent tributary stream channels, wetlands, and 100-year floodplain. topography of the subject area includes rolling terrain and areas of some steep slopes. The General Development Plan depicts a proposed design of the site which would include up to 170 residential lots, all single-family detached, and up to 150,000 square feet of commercial development. In the image, the areas of B-2 zoning are highlighted in red, and the R-2 zoning area is highlighted in the orange. The development would be accessed primarily from a single point on the northern end of the site off of Centreport Parkway. And additional access points may be provided in the future from inter-parcel access opportunities that might occur as surrounding properties develop. A collector road would provide access to the commercial areas that are located on the western side of the road. And the commercial retail and office uses are shown as potential development scenario in this case under a conventional kind of suburban development pattern. The collector road then continues on past the commercial areas to the south into the residential area. The site includes a combination of a grid pattern network of streets and

some cul-de-sac streets. Within the residential zone, there's 30% open space provided, which would include active and passive recreation, typical stormwater management, and protection of sensitive natural resources. Also, a community center with pool and clubhouse is proposed and that is generally centrally located in the site in this area. A Traffic Impact Analysis evaluated the impact of this project on select intersections along the entire length of Centreport Parkway, from Ramoth Church Road down to the intersection with Jefferson Davis Highway. The specific intersections evaluated are highlighted with the green stars. The results of the Traffic Impact Analysis indicate the site development would have a negative impact on a few of the intersections that were looked at at buildout of this project, which was estimated at year 2023. That would be impacts without mitigation. The specific intersections that were found to have some potential impact were the Centreport Parkway/Mountain View Road intersection, and the intersections at the northbound and southbound ramps to Interstate 95. So, mitigation is proposed at these intersections that are found to have some negative impact. At the Mountain View Road/Centreport Parkway intersection, the applicant would add turn lanes both on Centreport Parkway and Mountain View Road, and contribute to evaluating whether a traffic signal is needed and then providing funds if it's determined that a traffic signal is needed in the future. And then at the two intersections to the on-ramps at Interstate 95, the mitigation that helped these two intersections was to add a dedicated turn lane, rightturn lane, on Centreport Parkway onto southbound 95, and add a second through lane through that same intersection. And then signal timing adjustments at these intersections improved both intersections. The Comprehensive Plan identifies the site as being within the Central Stafford Business Planning Area on the latest adopted Future Land Use Plan. The Planning Area includes a conceptual land use plan which recommends the site for Business and Industry Future Land Use. The commercial component of the project would be consistent with this recommendation although the residential component would not be considered consistent. Another element of the Comprehensive Plan looks at airport impacts. property lies within the Airport Land Use Compatibility Zone which is identified in the latest Comp Plan. The airport zones are divided into subzones and use compatibility is recommended within each of these zones. The property is identified within the darker green area, which is Zone H-1. This is a horizontal inside flight zone which is an area where planes might fly parallel to the runway if they're circling the airport. This image superimposes the...

Mr. Apicella: Mr. Zuraf? Is that the small planes or larger planes, the H-1?

Mr. Zuraf: Within H-1, it's most likely to correspond with the smaller planes (inaudible).

Mr. Apicella: So the more frequent traffic.

Mr. Zuraf: At this point, yes. So this image identifies the... it just kind of superimposes the GDP over this airport impact zone. Also the, within the Central Stafford Business Planning Area, the plan designates sectors around the airport taking into account these different airport impact zones and divides them into sub-areas or sectors, and identifies if a use might otherwise be permitted, whether it would because of its proximity to the airport be considered not compatible or might need additional review. This site is within Area 3 or Sector 3. But since residential use is not recommended in this location, it's not identified as a permitted use. Regardless of this, as an attempt to address the residential incompatibility issues the applicant is proffering to incorporate soundproofing construction materials and provide disclosures to purchasers of properties in this area to make them aware of the proximity to the airport. And also one of the other recommendations in this area for any residential would be to provide significant open space, and the applicant does do that with the open area that is not being rezoned and proffered to be preserved. Staff notes that these are mitigation measures if the proposal is identified as needing additional review. Also, the proposal complies with additional review standards that apply to commercial

development in the H-1 Zone as the project does not exceed population concentration thresholds and usable open space is provided as already mentioned. The Stafford Regional Airport Authority did express support for the B-2 zoning proposal, but they do not support the R-2 zoning giving the amount of density under the aircraft traffic pattern. They did note that they would be more supportive of a density that is a lower density in this location. Looking at environmental impacts, the GDP does identify a development scenario that may conflict with natural resources on the site. There's an area where there are lots and streets sited across wetland areas. Staff notes that the Comprehensive Plan discourages development that would result in these impacts. Policies in the plan recommend new development be sensitive to environmental features and protect natural resources. Also, there are three Dam Break Inundation Zones associated with upstream dams from this site. And significant portions of the residential units would be located within these zones. Policy recommendation in the Comp Plan discourages development of new buildings and structures within these Dam Break Inundation Zones.

Mr. English: Mike, where's that creek... is this the creek on the bottom?

Mr. Zuraf: On the bottom is Potomac Creek in this location.

Mr. English: And isn't there a creek or something that runs through that property also? Or is that the only one?

Mr. Zuraf: There is a creek over in this location as well.

Mr. English: So it's nothing (inaudible)...

Mr. Zuraf: And there is an intermittent stream that kind of runs through this location.

Mr. English: That's what I thought, okay.

Mr. Zuraf: Staff would note though that DCR, the Department of Conservation and Recreation, and County Codes do not prohibit development in these zones, we're just bringing this up because there are Comp Plan policies that discourage new development in these locations.

Mr. Apicella: Mr. Zuraf, do we have notice requirements in dam inundation areas, whether it's by-right or happens to be part of a rezoning?

Mr. Zuraf: As far as notice requirements...

Mr. Apicella: For the... for somebody who might be buying a piece of property that's in a dam inundation zone, I would think they'd want to know that that might be an issue. Do we not have notice requirements?

Mr. Harvey: Mr. Chairman and Mr. Apicella, the County does not have specific notice requirements. We do have those maps available on the County website that people can view. If they are in a Dam Break Inundation Zone, that affects the classification rating of the dam itself and may require the dam owner to do upgrades to make the dam safe by inspections from the state.

Mr. Apicella: Okay, thanks.

Mr. Zuraf: Also, there are two bald eagle nests that are currently located on the site along Potomac Creek and required to meet guidelines for minimizing disturbance, which would include setbacks of development that may range from 330 to 660 feet. The General Development Plan associated proffers would require that any residential buildings be set back 330 from any active eagle nests.

Mr. Apicella: Mr. Chairman? That is some artwork; I just thought I'd point it out.

Mr. Zuraf: We get to keep that with this. Also, as noted, the remaining 133 acres of the parcel would be proffered to be preserved as open space. Staff notes that although this site in general is a prime location for development, the sensitive resources on the site, definitely in that location of the property, would limit the development potential making this portion of the site... designating it as open space would be appropriate given the conditions. So, the applicant submitted a Fiscal Impact Analysis and that did determine a net fiscal benefit of... an annual net fiscal benefit of \$739,000, and that fiscal benefit result does assume full buildout of both residential and commercial uses. Staff would note that the proffers require only 20,000 square feet of commercial development to be constructed prior to all the residential units being built-out. So, given that, that would likely lower the full fiscal benefits of the project of what's required to be built. Staff did evaluate the fiscal impact benefits against the fiscal analysis that was developed back as part of the 2010 Comprehensive Plan with some estimates based on different types of development. And under full buildout, our estimate identified \$544,000 net fiscal benefit again at full buildout; but then considering the reduced commercial buildout of only 20,000 square feet of commercial, a fiscal benefit of \$107,000 of annual benefits. There are monetary contributions proposed through the proffer statement provided. The monetary contributions being offered are approximately \$13,000 per residential unit. Over the 170 units, that would amount to 2.2 million dollars approximately. This application did come in prior to the June 30th deadline, so the old proffer guidelines that were in effect at the time still apply. The proffer guidelines at that time were \$48,000 per single-family residential unit. Applied to the 170 units, that would amount to 8.2 million dollars under the recommended proffer guidelines. Looking at what might occur and how this may equate to considering credit for the 77 byright units that would exist on this property, and discounting those units that they already have rights to build, that would increase the per unit proffer to approximately \$24,000 per unit. And in addition to the per unit contributions, the applicant is proposing \$215,000 as mentioned before for the traffic signal studying and contribution for that construction, if it's warranted. And then there is other community benefits being offered in the amount of \$125,000. That amounts to \$50,000 for a Mac Moncure Endowment Scholarship Fund through the schools; \$25,000 towards Belmont Museum; and \$50,000 to Seven Lakes Community for improvements and repairs to their principal and emergency spillway at their dam. Staff notes that these other proffers are beyond the extent of what would be considered acceptable proffers as they are not directly related to the project and not identified in the County's CIP. So, if these proffers are to remain, they should be amended to require the contributions be made directly to those other entities and not the County.

Mr. Coen: Mr. Zuraf?

Mr. Zuraf: Yes.

Mr. Coen: So, when the applicant comes up with their analysis of how much per unit it is, they've included those items that are not normal proffers that really are not tied to the site, correct?

Mr. Zuraf: No, the previous number mentioned, the \$13,000 per unit, that does not include these extra payments.

Mr. Coen: Okay. But then, if along the way, I mean, it also would include the \$215,000, right?

Mr. Zuraf: No, that's extra.

Mr. Coen: Okay, so if the grand total they're saying we're offering a package of x, their x is actually including something that isn't the norm and that we normally don't accept or that we can't technically say because it's not tied to this particular development.

Mr. Zuraf: The \$125,000 is beyond...

Mr. Coen: Right.

Mr. Zuraf: ... but everything else is... the traffic improvements, those are appropriate.

Mr. Coen: Thank you sir.

Mr. Zuraf: So, several proffers are being proposed to mitigate impacts. Many of these I've kind of addressed and so I'm not going to go into too much detail. But the proffers would require development in accordance with the General Development Plan; would limit the development to the 170 single-family units; prohibit several commercial uses that would otherwise be permitted by-right; there's the requirement for commercial development phasing which I had mentioned would allow or require at least 20,000 square feet of commercial development before the full 170 units could build out; transportation improvements I've already reviewed that would be provided; there's a proffer that the applicant would install a FRED bus stop by I believe the 100th unit or within a certain timeframe of the residential project that FRED agrees to provide service to this location, they would provide the stop. Also, a community center with pool and community building and shared-use trails would be offered as community amenities. I've gone over the per unit cash contributions and lump sum payments that are being offered. Also, there's a proffer to preserve and protect the historic Oakenwold house that's on the site. They would do this through playing berms and/or fencing around the historic Oakenwold property to prevent vandals from accessing that historic structure. And also, I've gone over the portion of the property, the 133 acres that are not being developed. That area would be preserved as open space and either be retained by the HOA for the community or possibly be dedicated to the County or a conservation group that may want to hold that property in a conservation easement. Also, the airport disclosures and mitigation I've gone over and the setbacks from the bald eagles' nests. Also, there are building design guidelines that would ensure consistent high quality design of the commercial and residential buildings on the site. And then also, for Fire and Rescue safety, require a secondary access by the 120th building permit. And if they don't access the secondary access through the identified inter-parcel connections, the applicant would need to utilize the current existing alignment of Oakenwold Lane as that secondary access point. The application does include the architectural guidelines that I mentioned that apply to both the commercial and residential portions of the project. These are representative images of the guidelines and show the general type, character, and quality of architectural design. The design standards are in conformance with several of the recommendations in the Neighborhood Design Standards Plan of the Comprehensive Plan. Looking at the evaluation of this proposal, there are several positive aspects. The commercial uses do meet the recommendations in the Comprehensive Plan. There are significant cultural resources preserved. Proffers would mitigate impacts to the road network. Design guidelines ensure high quality development. And they would be preserving a significant amount of open space with this request. There are several negative aspects as well; the residential zone and use would be inconsistent with the future land use

recommendations. Some of the wetland impacts are inconsistent with Comp Plan policies. Residential density would be inconsistent with Airport Land Use Compatibility recommendations. The siting of new buildings and structures in the Dam Break Inundation Zone would be inconsistent with Comp Plan policy recommendations. And residential use would be located farther away from public facilities and services in the near term. And monetary proffers do not fully mitigate impacts for certain types of facilities. Given the positives and negatives, staff would support the proposed B-2 zoning but would not be able to support the request for the zoning to R-2 on this property. Staff would also note that proffers are predicated on the approval... approving the reclassification to both B-2 and R-2 zoning districts. And so if the Commission was to only approve one of the zoning districts, the proffers would not apply. And I'll take any questions at this time.

Mr. Coen: Thank you Mr. Zuraf. Any questions for Mr. Zuraf? Seeing none, we'll ask the applicant to come forward.

Mr. Payne: Mr. Chairman and other members of the Planning Commission, my name is Charlie Payne with the law firm Hirschler Fleischer and we represent the applicant. I appreciate your time this evening. I think this is my first time before you this year so Happy New Year to you. It's always good to be in Stafford County. Congratulations Mr. Coen on being the new Chair. Mr. Zuraf, thank you for your presentation. I think we've got similar PowerPoints, just different conclusions. So, I'll try to get through this as quickly as possible and then to address any questions you may have. We do have the Engineering Groupe team here as well who can address some of the more technical aspects of this presentation. As noted, we represent the applicant and the Tax Map Parcel is 37-80. What do I hit, Mike? Sorry.

Mr. Harvey: Can we have the computer please?

Mr. Payne: Computer please. Thank you. I'm not a very technical savvy, just for the record. Just real quick: project overview, and I think Mr. Zuraf covered a lot of this. You know, the background on this project, as many of you may recall, of 2014 there was a application, rezoning application when this site was within a UDA for over 650 mixed residential units and 250,000 square feet of commercial. As staff noted, that case is pending litigation. There is also a submitted cluster subdivision plan for 105 singlefamily detached units. The Ordinance changed in the middle of that application process and there's also a pending litigation involved with that case. Just for the record, also, to note that this case... this current application was filed prior to July 1, 2016, so it's not the new proffer legislation but obviously the prior. As staff had noted, the rezoning for a portion of the property is from A-1 to R-2; it includes about... over 88 acres. We are also rezoning another portion of the property, about 10.2 acres, to B-2. It's also important to note that this application does include proffers to preserve the remaining 130-plus acres, so this project does include the entire site including the preservation of 130-plus acres, which we'll show here in a minute in our slides. It is important to note, I think, that the surrounding uses are fairly compatible with us, including commercial and residential to our north; to our south commercial; of course, to our east is I-95; and to our west is a fairly large mixed-use zoned property. The overall rezoning project has 170 single-family detached units, village style units as staff had noted. The commercial footprint is up to 150,000 square feet. Obviously this is located in the County's most recent TGA... I'm sorry, Central Stafford Business District, so commercial obviously being an important part of that focus. It's also located with the Urban Service Area and will connect to public water and sewer; we in fact have it onsite. The total fiscal impact of this project is \$739,285 as full buildout, including both residential and commercial. Staff had utilized a model created by Dr. Fuller. His protégé, Dr. Bellas, was our consultant on this project. Just real quick on the residential component, again, 170 single-family detached units and includes over 30% open space which is very important. And you'll see later slides how we're protecting wetlands extensively. The residential density is 2 units to an acre versus what we

allowed under R-3 at 3.5, so it is lower dense. It is a walkable village-style community we're seeing with access to retail, restaurants, and walking trails. We're seeing this as an attractive model for future home buyers and current home buyers. The units will generate again, just this residential component, a net fiscal impact at full buildout of \$360,000... I think over \$360,000. I think that's important to note, especially in regards to offsetting not only operating costs in the County, but also any capital impacts. We have proffered architectural features which are consistent with the County's Neighborhood Design Standards as noted in the staff report as well. We have proffered several neighborhood amenities, including a community center, a pool, exercise room, walking and bike trails. We have also included a phasing component to this that no more than 101 single-family detached units will be built until 20,000 square feet commercial... until permits for 20,000 square feet of commercial space have been issued. And here is a quick overview of the architectural renderings which again are consistent with the County's Neighborhood Design Standards. Just real quick on the commercial overview: up to 150,000 square of commercial. We anticipate that would include 30,000 to 60,000 square feet of commercial office space, including... we hope to have 20,000 square feet fairly soon; 45,000 to 90,000 square feet of restaurants, general retail and services, and commercial uses again to create this village style environment. The FAR, I think it's important to note that 0.34 as compared to what we can do under a B-2 zoning of 0.70 which is again less dense, less intensified if you will for purposes of our location. The commercial component will be a positive job creator, including professional office uses as stated. And the net fiscal impact for this component is over \$378,000 annually at full buildout. And here's a quick overview of what that will look like, which we have proffered. Just real quick on the Comprehensive Plan; I'm sure, as you've heard me before, the Comprehensive Plan is a guide, not necessarily an ordinance. We believe that this project is consistent with that component... with the Comprehensive Plan. You may also recall that the initial filing, when we filed this back in prior to July 1, this was a designated UDA and not the current land use district. Again, we believe that the project is in general compliance with the transportation land use section of the Comprehensive Plan. As you all, including the Central Stafford Business Planning Area, they do encourage not only commercial, but also residential. In fact, there's 750 units slotted for this particular land use district, including 550 single-family attached units. The proposed commercial uses are consistent with the Comprehensive Plan as staff has noted. The proposed project will also include a variety of uses recommended in the Business Planning Area such as a community center, the passive recreational facilities, and extensive open space. The project is within the County's Urban Service Area and, again, sewer and water are available on the site. Airport Compatibility. We have (inaudible) the Airport Authority several times, including about a couple weeks ago, so we've had some fairly good discussions with them I think. I think the recommendation you received from them was back from November or maybe later than that. I don't know if they have any updated recommendation; perhaps they don't. But we thought we had a pretty good conversation with them. Again, the site is located within the H-1 Horizontal Zone which does not per se prohibit residential uses. It requires additional review. All residential units... dwelling units are located again outside of this 3,200 linear foot centerline of runway standard, which is consistent with your Airport Land Use Compatibility Standards. The proposed 170 units are consistent with the by-right density yield and include only 2 units to the acre versus 3.5. Again, and our FAR layout is 0.34, so again we're creating a less dense development here, certainly as compared to what was initially requested of 650 units and there were 250,000 square feet of commercial. The project does include up to 150,000 square feet of commercial space. We are preserving 133 acres on this site which will be located to basically the south of where the residential and the commercial will be. If you look at the Land Use Compatibility Standards in the Appendix, this is a plus for public safety. We've also proffered noise mitigation standards, which are consistent with what was approved in the Courtyards at Colonial Forge. We have also proffered airport notice standards; all those are very key to the airport and we understand why, we understand why it's important to them for that purpose. And not only notice today, but notice to future buyers as well, successor buyers to those properties once they're built out. As

Mr. Zuraf noted, there is also an analysis on population concentrations. We are very, very low if you apply what those standards are in your appendix, the Land Use Compatibility Appendix. In fact, the low standard is 200 and 250 and we're at 6.9 people per acre, which is really low. This slide shows the distance from the airport centerline to the boundary line. The closest point is over 3,200 feet. As staff had noted, our transportation improvements will improve the immediate transportation impact area. The offsite transportation proffer improvement include, as staff had noted, \$215,000 in case for the light warrant study and signal improvements at Centreport Parkway and Mountain View Road. The next slide will show you the specific details: the construction of a northbound left-turn lane along Centreport Parkway onto Mountain View Road; the restriping of existing left-only and thru right-turn lane for Mountain View Road onto southbound Centreport Parkway to create a left thru; and a dedicated right-turn lane. Again addressing and mitigating not only what our traffic will generate an impact, but also what currently and future impacts will be. And again, restriping the Centreport Parkway and I-95 southbound exit as may requested by VDOT of Stafford County for purposes of accommodating a dedicated eastbound right-turn lane. All in, this is about \$665,000 in transportation proffers, including the cash which is \$215,000. The project will provide a FRED stop as well. This here... this slide here, and it's hard to see on my screen, shows both the improvements at the intersection of Centreport Parkway and the southbound I-95... I-95 southbound ramp, and Centreport Parkway and Mountain View. Again, these were the proffered conditions that were listed here. Cash proffers. As staff had noted, the \$2,246,595 includes \$1,906,594-plus for schools, over \$170,000 for Parks and Recreation, and Fire and Rescue about \$170,000. There's also... this project will be subject... the residential component will be subject to transportation impact fees, so there's another approximately \$3,000 per unit, about \$509,000-plus will be added to the process. We have also made some community proffers although not necessarily consistent with the proffer guidelines. They are in fact, benefits to our community, including \$50,000 to the McCarty Mack Moncure Endowment Scholarship administered by the School Board, which is a really important endowment; \$25,000 to Belmont which is one of our art jewels and cultural jewels in Stafford County; and \$50,000 to be used to assist Seven Lakes Community in design and construction of principal or emergency spillways at Seven Lakes Community. Other proffers -- it's important to note the applicant will undertake measures to stabilize the historic Oakenwold site. We'll conduct Phase 2 archeological studies, part of site disturbance (inaudible) that were designated in our Phase 1 analysis. Again, preservation of the south open space; I think this is really important to keep emphasizing. The cluster plan would include impacts to that site, so would the 650 unit and 250,000 square-foot plan again that's currently pending litigation. This particular proffer would preserve obviously that area in perpetuity, whether by restrictive covenant or by a third party easement holder, conservation easement holder. There is the Northern Virginia Trust just to our south, immediately to our south, and we're thinking they would be an obvious third-party candidate for that purpose. There are construction of shared-use trails that will be open to the public, but they will be privately maintained. So again another public benefit. The applicant will also construct no residential building within 330 feet of an active eagle's nest site as staff had noted as an affirmative plus. And it will have emergency access to two future inter-parcel connections from Centreport Parkway which was something that the Fire Marshal asked us to look at, and VDOT. And in regard to the Dam Break Inundation Zone, the DBIZ, this has been reviewed and vetted both by staff and by DCR for purposes of this development, and there were no issues in regard to us being able to develop it. So with that, I don't know if Joyce or Billy or Deja, if you guys just want to get into a little more details as to where the DBIZ actually are on the site, when we get to the next slide. Is that better for you Joyce? That one? Okay.

Ms. Lupia: Hi, my name is Joyce Lupia. I am an engineer with the Engineering Groupe; I'm also a Certified Floodplain Manager. And just to give you a little bit of background, yes there are three dams that are regulated by the state within the vicinity of this property. In case you don't know, there are three

dam classifications; low hazard, significant hazard, and high hazard. And all three of these dams are already classified as high hazard dams by the state, so any development that is downstream of them cannot cause the classification to become higher. And any of these dams already have to undergo the inspections by the state as required, and any improvements that would have to be made to these dams based on those inspections have to be made by the dam owner, not by any downstream property owners. The Dam Break Inundation Zones, or the DBIZ as we call them, are based on a catastrophic storm event that causes a dam to fail. Someone had mentioned notifications earlier. Each of these dams already has to have an emergency action plan on file with DCR and the Fire and Rescue Department of Stafford. And in that book each downstream dam owner has to be listed and that plan itemizes how and when people have to be notified in the event of a disaster. So anyway, there's three dams as we mentioned. The detail on the right is the Dam Break Inundation Zone for Lake Curtis. And, as you can see, it is downstream of the property and there's no impact to the property from that DBIZ. The middle image is for Potomac Creek Dam #2, and there are a few lots that are located within that Dam Break Inundation Zone. The image on the left is for Potomac Creek Dam #1 and you can see that it has the largest impact on the site. Now, if you could go up one slide. These slides show the image on the left is how the site used to look under one of our other rezonings, and we have significantly reduced the impact caused by the Dam Break Inundation Zone on the site. Far less property is within the Dam Break Inundation Zone. So, that explains it.

Mr. Payne: (Inaudible).

Ms. Lupia: Right, and both DCR... there are no regulations in DCR that prohibit construction within the Dam Break Inundation Zone and the County has also said that there's no prohibition to construction in the DBIZ. Thank you.

Mr. Payne: Thank you Joyce. Do you have any questions for Joyce while she's up here?

Mr. English: Does she know, or do you know the last time these dams were inspected?

Ms. Lupia: Actually I think it was last year they were inspected. I believe it was last year; I don't have that information with me.

Mr. English: And do you know, or Mike or somebody, how old are these dams? Do you know?

Mr. Coen: (Inaudible - microphone not on). And I believe Mr. Apicella was asking, and let me know if I'm wrong Mr. Apicella, but he was asking about notification prior to owning the house. You were referring to notification post haste so that it really wasn't addressing his question. His question is, there's no policy about notifying the people ahead of time.

Ms. Lupia: Right.

Mr. Coen: Okay, thank you ma'am.

Mr. Payne: And we just wanted to also kind of go through the wetlands analysis real quick. You want to start with that slide Billy? Billy Flynn with the Engineering Groupe.

Mr. Flynn: Good evening.

Mr. Coen: If you could state your name.

Mr. Flynn: Yeah, Billy Flynn with the Engineering Groupe. Just for the record, the dam DBIZ that we are in is... the dam is owned by the Department of Utilities, Stafford County, so you guys own and maintain that dam.

Mrs. Vanuch: Which one?

Mr. Flynn: The one that we are in, the Potomac Creek 1.

Mr. Harvey: Yes, the County owns both the dams for Potomac Creek 1 which people might know that more as the Abel Lake Dam. And then Potomac Creek 2, the County owns that as well; that's the dam that you see when you drive along Centreport Parkway.

Mr. Payne: The two applicable dams we're within.

Mr. Flynn: Right. Owned and maintained by the County. You should be able to get the records for inspection pretty easily from those guys. The wetlands... I'm having a hard time seeing. We have a total of 41.61 acres onsite that consists of wetlands, open water, and streams. Out of the 41.61 acres, we are impacting less than 6% -- 5.5%. So this plan is environmentally sensitive we feel. Under the old rezoning, we were closer to 10% impacts, so we kind of reduced that in half. So we are preserving 94½% of all wetlands, open waters, and streams. So that... and we still have to go through the DCR process of permitting these and they'll take another closer look at what we're disturbing to make sure it's within the limits. This is the comparison of the old rezoning application, the P-TND, and our new application, which again we reduced the wetlands and stream impacts in half. And those numbers don't include the RPA which we are also preserving, which is a 100-foot buffer on both sides of the stream across the whole center of our project. So we feel this, again, that 5½% of the total wetlands (inaudible), that's pretty environmentally sensitive in our opinion. Any questions?

Mr. Coen: I don't believe so, thank you sir.

Mr. Flynn: Okay, thank you.

Mr. Payne: Thank you Billy. And just quickly in closing, and appreciate your patience Mr. Chairman and Board, just to reiterate a few things. I mean, the project is significantly less dense than the prior application obviously of 650 mixed residential uses and over 250,000 square feet of commercial as you saw on the last illustration. The project is a better alternative to the 105 single-family detached cluster development which impacts most of the site as we stated, including portions of the 130-plus acres we're looking to preserve. The project does protect and preserves approximately 166 of the 230-acre site; so that's very positive in our opinion. The positive net fiscal impact at full buildout I think we're going to have to somewhat disagree; I think (inaudible) a \$200,000 difference with staff analysis over \$739,000. The project does include up to 150,000 square feet of commercial space, including phasing for that. We have properly mitigated Stafford Regional Airport H-1 compatibility standards as required under... I won't say required, as advised under your Land Use Compatibility standards for the airport in your Comp Plan, including addressing noise, notice, distance, density, and open space as reiterated earlier. The project will improve transportation impact area... this particular transportation impact area with in-kind proffers and cash. As we have stated, it will improve the Level of Services in that location, including paying impact fees. We are protecting historical resources on this site and the total cash proffers are

about \$3.1 million just in cash. And if you took out the 105 by-right units, which we believe we have, that'd be \$47,692 per unit. If you apply the County's 77 unit analysis, that's over \$33,000 a unit. And again, that cash would be for schools, parks, and public safety, which would total over \$2.37 million, and for transportation \$215,000 in cash plus the \$509,000-plus in impact fees. We also have in-kind offsite transportation improvements as we noted, over \$445,000. So, all in it's about \$3.5 million in proffers, cash, and in-kind. Again, this is just a conceptual overview. It shows both the B-2 and the residential, which you've seen already, and the open space preservation, and obviously our location. So with that, I'm happy to answer any questions you may have.

Mr. Coen: Any questions for Mr. Payne? Mr. English?

Mr. English: Mr. Payne, could you give me a copy of your PowerPoint?

Mr. Payne: Yes sir.

Mr. Coen: Any other questions? (Inaudible - microphone not on).

Mr. Payne: Thank you for your patience; I appreciate that.

Mr. Coen: We now go to the public hearing portion. Those individuals wishing to speak on this public hearing item are encouraged to come forward to do so. Remember to state your name and your address before you start speaking, and address the Commission as a whole. You have 3 minutes to speak when the green light comes on. Then, after the yellow light comes on, you have 1 minute left. And at the red light we ask that you wrap up your comments. And so now (inaudible - microphone not on).

Mrs. Carlone: Ruth Carlone. This is not... this is not compatible with the Airport Land Use Compatibility Zone. H-1 is not recommended for residential development. It also conflicts with Comp Plan Policy 4.42, which discourages use in dam inundation areas. Would you buy a house for you or your mother below these 3 dams? I certainly wouldn't. Okay. This is the main thing -- this should be recommended for denial to the Board of Supervisors. There wasn't a mention, as far as the 170 units, for VDOT for a single-family home, they consider two cars at 10 vehicle trips per day. So that's about 1,700 vehicles per day. That, and it mentions in the plan here for commercial, 9,796 vehicle trips per day. That's just quite a bit for that area. But, what is ludicrous also, and this comes up constantly, are these proffers that we won't build a tot lot till the 1,000th unit... I mean, that's an exaggeration... but here it's no community center till 101st residential unit is sold. Okay, that's two persons they figure per unit, so that's about 200-something have no community center, nothing, until the 101st is built. The FRED system. Wow! Whew! That's a lot; that's great! No FRED system till the 101st unit. Here again, 200 people, that this is supposed to be such a great proffer. I would highly recommend denial of this, especially the dams. We have a current problem right now as you know with another earthen dam that is having problems. Oo-oo... times up. But anyway, I would highly recommend -- stop, you're making me laugh -- of recommending denial to the Board of Supervisors. Thank you.

Mr. Coen: Thank you Mrs. Carlone. Alright, anyone else wishing to speak on this, come forward. Thank you sir.

Mr. Kirkland: Thank you Mr. Chairman. Lindy Kirkland, I'm also serving as the Vice Chairman of the Stafford Regional Airport Authority. And I just want to talk very briefly about a couple of issues that we have with this particular project. As staff noted, this is cited directly in the H-1 subzone of the Airport

Overlay. The H-1 subzone is defined as the airport traffic pattern. So, every airplane that enters the Stafford Regional Airport traffic pattern would fly directly over this project at about a thousand feet above the ground level. So, current level of operations, we're talking 75 to 150 aircraft per day now, but that's really just a fraction of the design capacity for the airport. So, as we go forward in the future, traffic will increase, you'll have a lot more conflicts with that. So, just keep in mind that the H-1 Zone -- yes, lateral from the runway, it is outside the 3,200 feet. But it's directly below the aircraft traffic pattern. So every airplane flying into the airport will fly right over this particular subdivision. The second, I would take a little bit different approach on the density and that it would not be compatible. If you take the entire 233 acres, the by-right would give you 77. If you take the 1.5 multiplied by that number gets you to about 115 units per the compatible land use guidelines that the Commission put in the Comprehensive Plan. So, I think if you're looking at 170 units, that's approximately 50% greater than the maximum density that would be allowed by the current guidelines. So I would just argue that that is not compatible with the Comprehensive Plan. So, those are our main two objections. I'll take any questions you might have.

Mr. Coen: We can't really ask questions but I'm sure we can you (inaudible).

Mr. Kirkland: Yep. Thank you very much for your time.

Mr. Coen: Thank you Mr. Kirkland. Anyone else wishing to speak on this item? Seeing none, Mr. English, before I say anything about the public hearing, did you want to say anything?

Mr. English: Yeah, I want to make a recommendation that we defer this and leave the public hearing open.

Mr. Coen: Okay.

Mr. English: I would like to defer it to at least April 26; I have a couple questions I want to get with staff on.

Mr. Coen: Okay, one second. Ms. McClendon is getting my attention.

Ms. McClendon: The applicant has rebuttal time Mr. Chairman.

Mr. Coen: Okay. Alright, so go ahead Mr. Payne if you'd like to rebut and then we'll go forward. But the public hearing is still open, that's why I asked him at this point.

Mr. Payne: Thank you Mr. Chairman, other members of the Board and certainly respect Mr. English's concerns and wishes. Again, we always appreciate input from our community, especially from the Airport Authority. And again, we... you know, we have reached out to them and will continue to do so. I think we may just agree to disagree as to the impact of this project on the airport. I think if you just look at where we've come from and a planning position to where we are now, I think we've taken a very unique and creative approach to how to best develop this site. We've included commercial components which are important obviously for purposes of land use district. We've also included residential components which are not per se discouraged in the Central Stafford Business District, and nor are they prohibited under H-1 land use compatibility standard from the Airport Authority perspective. So, what we have done with the H-1 component is, we have pursuant to additional review standards provided what I believe are very reasonable and more than adequate mitigation proffers for that purpose. And, bottom line is, from a population density perspective, we are very, very low. So, again, this is not a very dense project. I think the DBIZ issue is a little bit of a red herring. I think the bottom line is, is that the two

regulatory components that count or agencies that count in that process, the County and DCR are not going to prohibit development on this site due to the DBIZ issue, or we even being within the DBIZ. But again, that's something that comes up in the site plan stage and goes through a final review process. And in regards to the density calculations, I think again we're going to agree to disagree. There's obviously a cluster plan that we believe we can do 105 units; staff and I believe I heard the Airport Authority make a comment about 77 and then by multiplying that by $1\frac{1}{2}$. Even if you use a 115 versus 170, we're very close and we're adding 150,000 square feet of commercial and we're also... this seems to be getting lost... preserving well over 130 acres of land which is a bonus in my opinion both for the airport and that particular area. So with that, I'm happy to answer any questions you may have and I appreciate your time this evening.

Mr. Coen: Okay, seeing no questions, thank you sir. Alright, Mr. English, I think we know what you'd like to do.

Mr. English: Yep. Do I need to make a motion?

Mr. Coen: Yes sir.

Mr. English: I'd like to make a motion to defer to at least April 26 meeting.

Mr. Coen: Okay, let me... is there a second to defer this until April 26?

Mrs. Vanuch: I'll second.

Mr. Coen: Alright, we have a motion by Mr. English, seconded by Mrs. Vanuch. Mr. English, you have the floor.

Mr. English: Okay, the reason of deferral is I would like to make a site visit. I'm concerned about the dam issue and I'd also like to meet again with the airport in reference to the H-1. So that is my concerns that I have to deferring this. And I am, yes, requesting to leave the public hearing open. And also I did have a question about the schools too, some issues on the schools.

Mr. Coen: Okay, Mrs. Vanuch?

Mrs. Vanuch: I want to echo Mr. English's comments. I think one of my biggest concerns is what Mr. Kirkland brought forward within the Airport Overlay and the compatibility for this density, as well as the dam issues by Mrs. Carlone. So, I'd like to take some time with Mr. English and visit the site and find out a little more information as well.

Mr. Coen: Alright, and so... anyone else? Mr. Rhodes would like to speak.

Mr. Rhodes: I have no problem with the deferral. I do think we have six sessions between now, after tonight and the deadline, and to wait four of them, I'm just always prone to if it's at all possible, move them forward so that if there is further discussion, further questions, that we get those opportunities. So, I would just make the comment that waiting until the fourth session between now and the deadline does take up a bit of the time if there are things we need to react to. That's all. Thank you Mr. Chairman.

Mr. Coen: Thank you Mr. Rhodes for the comments. Any other comments? By anyone? So, so far, just so that staff understands, we have besides getting more information from the Airport Authority, I have a couple items that I would like to either look into myself or get with staff on. First of all, is in Attachment 3, page 6 of 12, it has the details about the land south of the parcel and what can and cannot be done. And I just would like to get clarification as to that, because the language is such that it could be used for certain elements and things, and I just want to get some clarification on that. I also have concerns about the 330-foot buffer and how close actually the taking down of trees and clearing the land will actually get to it. Mr. Harvey and Ms. McClendon and I had a conversation last week about some projects that are already... I see every day going to work and then at work where the concept was there would be a, for example, 10-foot buffer of trees but it has actually become one row of trees. And so my concern is, is that yes, we're saying there's a 330-foot buffer, but is that just going to be one tree along that are versus what the perception of what we got in the PowerPoint which was a nice pristine area that was going to kept pristine. So I have a concern about that. When this came before us before, I raised the question about the language about the eagles' nest. In the PowerPoint slide it talks about active eagles' nest. But the language in the proffer says current. And, as I pointed out last time when this came to us, eagles will stay in a nest for 3 to 4 years. And so therefore if, since they've been in the same nest for a couple years, they were to move, that would negate the entire proffer so that all those trees could be taken down, because the language in the proffer makes it pretty clear it only relates to the active nest. And so, we also, people who are watching the eagle cam in D.C. and on the website know that if the offspring from the eagles can have food source in that area, they will build nests in the same general area. Therefore, yes the parents are in tree x; the offspring, one of them could make a nest in a tree 3 or 4 or 5 feet away or 10 feet away, but according to the proffer language that is before us, that's irrelevant. And so that... I had a concern than, I have a concern now as to that. And so I probably would like to get together with staff on that. And I also would like a nice comparison about the commercial component to find out exactly apples to apples what commercial components they are envisioning to do and see what we already have in the County and see if their numbers actually match what we're actually getting. If people remember from many years now, Mr. Gibbons and I and Mr. English and Mr. Apicella and many, many other people have pointed out brick and mortar are going by the wayside. And so I'm leery of basing something on numbers that are not really realistic given today's economy. So, with those elements in mind, we'll put it to a vote to defer this until April 26. All those in favor will vote one way and oppose the other. Alright, thank you, and it has passed unanimously (7-0). Thank you very much.

1. <u>RC16151347</u>; Reclassification - Sycamore Grove - A proposed zoning reclassification from the A-1, Agricultural Zoning District to the R-2, Urban Residential-Medium Density (88.27 acres) and B-2, Urban Commercial (10.17 acres) Zoning Districts, to allow for a mix of single-family detached residential units and commercial retail uses, on a portion of Tax Map Parcel No. 37-80. The portion of the parcel under consideration for rezoning totals 98.44 acres, is located on the east side of Centerport Parkway and north side of Mountain View Road, and within the Hartwood Election District. (Time Limit: June 2, 2017) (History: February 22, 2017 Public Hearing Continued to April 26, 2017)

Mr. Harvey: Thank you Mr. Chairman. For the continuation of the staff presentation, Mike Zuraf will lead the discussion.

Mr. Coen: Good evening Mr. Zuraf.

Mr. Zuraf: Good evening Mr. Chairman, members of the Planning Commission; Mike Zuraf with the Planning and Zoning Department. If I could have the floor computer please. This item is a continuation of a public hearing for a proposed zoning reclassification of a project known as Sycamore Grove. The public hearing was conducted originally on February 22, 2017, and continued to this meeting. The entire site is highlighted in red. It covers 231 acres. It's located on the east side of Centreport Parkway and west side of Interstate 95. The hatched area represents the 98-acre portion of the site to be rezoned, and the remainder of the parcel that's not hatched covers 133 acres. The applicant is proposing to reclassify the zoning on the 98 acres from A-1, Agricultural, to B-2, Urban Commercial, and R-2, Urban Residential-Medium Density. Those areas are highlighted on the image; the B-2 area surrounded in red and the orange area reflects the R-2 residential zoning. The GDP depicts the proposed design of the site to include the 170 residential lots and approximately 150,000 square feet of commercial development. The remaining 133 acres not to be rezoned is identified in the proffers as area that would be designated as a south open space. Commissioner Coen had questioned what could be done in the open space, and the staff report highlights the permitted uses as allowed in the proffers. This includes the ability to put in the extension of utilities that typically would be sewer or water lines that might be needed; the construction of roads for access to and from Mountain View Road, that's where this open space parcel fronts on; potential wetlands mitigation, if needed; stormwater and LID measures, if needed; certain project amenities might be allowed such as trails or a community garden for residents of the project; and other temporary grading and impacts and maintenance that might be needed. Since the first public hearing, new proffers have been submitted with a few modifications that I would like to go through briefly. The first change, the applicant originally was going to contribute \$200,000 specifically for a new traffic signal at Centreport Parkway and Mountain View Road if it was warranted. And originally if it was not warranted then the money would go away. So in the revised proffer, the applicant will contribute the funds even if the signal is not warranted. If it's not for a signal, the funds would be used for other transportation improvements in the immediate area of the project. On the second point there is a new proffer that would prohibit the applicant from requesting credits from the required transportation impact fees. That's something that's permitted when a development or developer is providing offsite transportation improvements. So, the applicant would forego that method of reducing their costs. So with the third point, there are cash proffer allocations that are being shifted. Originally, there were two lump sum payments; \$25,000 for the Belmont Museum and \$50,000 for Seven Lakes Community dam repair. These funds are being deleted and the equivalent amount is being shifted over to the per unit contributions, and those funds would be allocated to schools. So, the total cash contribution amount would remain the same, it's just shifting the format and how it's received. Also, originally the proffers required residential buildings to be set back

330 feet from active eagles' nests. The proffer was modified to require a statement and identification of any bald eagle protection zones on each final site plan in accordance with state and federal laws governing the protection of any active bald eagles' nests. Staff would note that this would ensure any necessary increased setbacks that might be required. There are, under the federal and state... under federal rules those protection areas may be required up to 660 feet from any active nests. So, this does open up and allow for the full potential of that regulation to take effect. That 660-foot buffer is identified with the blue hatch circle and that would, of course, require site layout modifications if that additional setback is needed in the future. Also, there was another request at the last meeting by Commissioner Coen for a better bead on the comparable commercial development similar to what is being envisioned on the GDP on this site. We haven't received any additional information on that at this point. So, in summary, these are the approval Ordinance numbers and the denial Resolution. You do have a time limit of June 2, 2017, and I'll take any... oh, and also, just to remind the Planning Commission that the proposed proffers are predicated upon approving the reclassification for both zoning districts, both the B-2 and R-2 zoning districts. If only a portion is reclassified, the proffers would not apply. And I'll take any questions at this time.

Mr. Coen: Alright, any questions for Mr. Zuraf?

Mr. English: I do.

Mr. Coen: Yes, Mr. English.

Mr. English: Mike, a couple questions. For the airport overlay, what zone is that again? It is in H-2? H-1?

Mr. Zuraf: This is in the airport overlay within the Comprehensive Plan it's designated as H-1 zone, which is a horizontal zone.

Mr. Coen: And just one second -- and could you sort of summarize? I'm sorry Mr. English.

Mr. English: That's okay.

Mr. Zuraf: The horizontal zone is just an area that's recognized where there is potential for aircraft overflight that might be circling the runway. And it would be kind of planes that would be flying in parallel to the runway but needing to circle.

Mr. English: So, maybe I guess it's in the flight plan.

Mr. Zuraf: Excuse me?

Mr. English: It's in the flight plan, what you're saying? Well, not in the landing or taking off, but it's just on the outskirts...

Mr. Zuraf: It's in the general traffic pattern of the airport.

Mr. English: Okay, and then the application, does it or does not comply with the Airport Compatibility Land Use Plan? How do you explain that?

Mr. Zuraf: Well, so in the Comprehensive Plan, the underlying... the recommended land use in this area is Business and Industry. So, the residential uses do not conform with the underlying land use. The plan identifies and recognizes uses that would be potentially compatible and if they need additional review.

Mr. English: Right.

Mr. Zuraf: So, it doesn't really go further into any recommendations, but the plan... the framework of the plan does include some recommendations. So if the area was to support... if the plan was to support residential development in this location, this is in a location where additional review standards would apply. And in the Appendix of the Comprehensive Plan, there's a series of additional review standards that would be recommended. And this proposal does meet many of the additional review standards in that they're located 3,000 feet away from the runway; because they're in the overflight zone, they do provide usable open space with the 133 acres; they require, through the proffers, real estate disclosures; require a notification statement on all marketing literature of the location and the proximity of the airport; and then also in the proffers include noise mitigation measures as part of the construction standards for the homes to reduce internal noise. But again, those are additional review standards that would apply when residential uses are supported in that area.

Mr. English: Okay. And one more question. The dams on the property, do you have a highlight of that tonight or could you just go just go (inaudible) time?

Mr. Zuraf: Yeah. If we could go back to the computer. So, on this image, the shaded area is the site. And we kind of went over this in the original public hearing that there are three Dam Break Inundation Zones that affect this property. So, the first Dam Break Inundation Zone I'll point out is the dam associated with Abel Lake. That is... the dam is in this location and the Inundation Zone is this dark purple line that runs across this area. So, it kind of covers this entire area.

Mr. English: So, if the dam broke, that's kind of where all the water would...?

Mr. Zuraf: That's the idea there, yes.

Mr. English: Okay.

Mr. Zuraf: And the other one is the reservoir that's adjacent to Centreport Parkway in this location. I think this is identified as Potomac Creek Dam #2 is the technical terminology. And the Inundation Zone there is the lighter pink area, and that's here so that kind of covers this location. And the other third one is the Dam Break Inundation Zone related to Curtis Lake. And that is the more narrow brown shaded area along Potomac Creek in this area.

Mr. English: Okay. Thank you Mike.

Mr. Coen: Anyone else?

Mr. Apicella: Mr. Chairman?

Mr. Coen: Mr. Apicella.

Mr. Apicella: So, in our package were some updates, and one of those updates was the applicant's response to VDOT. And, so there were some I guess back and forth between the applicant and VDOT, and I'm hoping you can help me understand what the issues were with regard to Centreport Parkway and Route 1, and if and how those issues have been addressed to VDOT satisfaction.

Mr. Zuraf: So, the issue was that the... to mitigate and impacts and kind of reduce the Level of Service impacts on the Centreport Parkway/Route 1 interchange, they proposed signal modification timing modifications; so it adjusts the...

Mr. Apicella: You say the applicant or VDOT?

Mr. Zuraf: Well, the applicant may do it through VDOT. I don't know exactly who does the actual adjusting of the timing, if VDOT does that for the applicant or they are permitted to go do that. But they would increase maybe the ability... it's an adjustment to improve the flow on Centreport Parkway. But comments from VDOT is that that adjustment creates more of a negative impact on the flow of Route 1 traffic which is more of a primary highway, and to my knowledge that has not been fully addressed.

Mr. Apicella: Okay. The other comment that stood out at me was the discussion about the traffic light at Mountain View and Centreport Parkway. So, the applicant is proffering \$200,000 and VDOT indicated it would cost a minimum of \$350,000, so there's a delta of 150. Who pays that different if a traffic light is necessary there?

Mr. Zuraf: The difference would be covered by... well, so they would submit the \$200,000 and the difference would be covered by whoever is installing the traffic signal; if it's VDOT... it may be actually being a County project and so either the County taxpayers or VDOT would pick up the remainder of the tab.

Mr. Apicella: Alright, thank you.

Mr. Coen: Anyone else? Alright, thank you Mr. Zuraf. The applicant, Mr. Payne.

Mr. Payne: One second Mr. Chairman. Sorry Mr. Chairman. Mr. Chairman, other members of the Planning Commission, my name is Charlie Payne with the law firm Hirschler Fleischer. We appreciate your time this evening and we represent the applicant. Thanks to staff for its presentation and comments and response to Planning Commission questions. We want to just real quickly reiterate a couple of points and address some of the questions that came up during this session. Just a quick reminder, as many of you know, this is a project that derives from a larger project that was presented a couple years ago that had over 650 mix of units. At that time, it was in a UDA and proposed for a mixed use as well, including well over 250,000 square feet of commercial. There's also a pending cluster plan, subdivision plan for this project of 105 units. It's obviously pending at this juncture as well. So, this project obviously was a derivative of that original application and we went back to the drawing board if you will and came up with what we thought was a very lower modest dense plan with a mixed use of commercial of up to 150,000 square feet. Of course, now only 170 single-family detached units and also preserving over 133 acres of open space. So, there's significant differences between what you had seen before and obviously what's here today. In addition to that, this project, as we had stated before, just some key highlights, will generate at full build-out, annual tax revenues are approximately \$739,000. We have addressed, in our opinion, and mitigated many of the airport additional review standards in this application, certainly lowering the density from our prior application, lowering the square-footage of the commercial footprint, and preserving the open space, providing the significant transportation infrastructure, and in addition to that, providing additional... under the additional review standards, proffers for the airport, we believe that we have satisfied those requirements in regards to compatibility. Yes, this particular area under the Stafford Central Business District does not encourage residential uses, but the Business District does allow residential uses; in fact, quite a bit, both single-family attached and other uses. So, we take the position that the Comprehensive Plan does not encourage any residential uses is not accurate. The fact that we have mitigated I believe those potential impacts and certainly for purposes of the airport including our distance from the center runway, our notice requirements, our noise abatement for the construction purposes, and also in addition to that to ensure that successor buyers of the property are aware of the airport's location, I think address many of those additional review standard issues. In addition to that, from a density in a population concentration perspective just utilizing the appendix in the Comprehensive Plan for purposes of airport compatibility, we're very low on the scale of dense population. In fact, we're on the lower end of the scale if you will, which is again another analysis to be taken into account regarding density. So I just wanted to address those airport compatibility questions. And again, when looking at a project I believe in this district, it's a totality of the project in my opinion. And not only is one factor to be evaluated, but all the factors. So the factors, including the commercial use, which I know the airport supports, and the open space which I believe the airport supports, and the infrastructure that we're providing, transportation infrastructure that not only benefits us but it benefits all our neighbors in that particular area. And one of the key ingredients if you will for the success of that Stafford Central Business District is going to be infrastructure. And to my knowledge the County is doing its best to encourage investment and infrastructure in that area, but if you have a commercial business, you don't have to proffer infrastructure, you don't have to proffer cash to address that, you don't have to proffer impact fees. So, what we have done in our revised proffer statement is to clarify a couple of things. One, that the \$200,000 will be paid whether the light intersection warrants or not, so we have proffered that. And then the County can utilize those funds for the new intersection or they can use them for some other transportation purpose. We've also made it clear that we're not going to ask for tax... I'm sorry, transportation impact fee credits. So, I'm sure you know how it works, if we provide in-kind offsite transportation proffers and cash, we can offset that against the transportation impact fees for 170 units. Well, 170 units times \$2,999 is about \$509,000. So we could easily take a credit; but we have proffered that we would not take a credit. So we're actually going to pay the impact fee. So that's an additional \$509,000 that will be on the table in cash in addition to the \$215,000 that we have proffered. So, the VDOT comments regarding the desire for \$350,000 versus \$200,000 at that intersection, remembering that there's other property owners that benefit from that and we're paying for two-thirds of it, plus there's cash there from the impact fees which is paid as you know at the submission and approval of the subdivision plan, that money is going to be there. So I just wanted to make that clear. In regards to the other comment that Mr. Apicella had raves about, the issues with Route 1 and VDOT questions, I'm going to have our transportation consultant real quickly come up and address that because I think that issue's been resolved. But Vern, if you could address that real quick. State your name for the record.

Mr. Torney: Yes, hi, good evening. For the record, Vern Torney, Vettra Company, traffic consultant for the applicant. With regards to Route 1 and Centreport Parkway, yes, there was a comment made back in February by VDOT about the shifting of the timings of that. What we did in the TIA is that we shifted a small amount of green time from Route 1 to the side street, which is Centreport Parkway, and which gave us better Levels of Service conditions than it would without. VDOT made a comment that they didn't want Route 1 to suffer any Levels of Service with regards to any shift. We responded back to them last month verifying that yes, there was a very small shift. Of the 80 seconds of green time on Route 1, all we did was shift one and a half seconds, which is about 1% of the total cycle length of that signal. And we shifted that from Route 1 to Centreport which gave us the best Levels of Service overall for the entire

intersection. With our without that shift of one and half seconds, you still have the same Levels of Service on Route 1, so it really doesn't make any difference on Route 1. VDOT did not comment when we received our comments yesterday; on the last round of comments, they didn't comment on that. So I assume since they have not made any further comments, that they satisfied with that. So, if there's any further questions, I'd be glad to answer.

Mr. Coen: Anyone have a question for Mr. Torney? Mr. Apicella.

Mr. Apicella: I'm not sure if it's a question for the speaker, but there are additional comments? I haven't seen those. Can we get a copy of those?

Mr. Payne: We just received them yesterday.

Mr. Torney: Yeah, I think the date was April 17th on this.

Mr. Payne: April 21st.

Mr. Torney: The 21st, I'm sorry. But anyway, they did make a few comments but that was not one of them

Mr. Coen: Okay, if we could get that, that would be helpful.

Mr. Torney: Okay.

Mr. Payne: And as part of my presentation, I addressed the first comment in that response. When you get a chance to look at it, you'll see that. And Mr. Chairman, just to continue real quick, and just a reminder of the project, again, the preservation of 133 acres I think is a real asset to this project and also to the surrounding properties and community. That preservation area will be maintained by us but open to the public. There will be trails, etcetera, and other within that area. We intend to either dedicate it to the County if it does deem to accept it or encumber it by restrictive covenants so that it cannot be developed and, of course, it's not part of this rezoning so it's going to stay A-1. But, again, there are covenants and the proffers will run with that land so it cannot be developed except for the intended purposes that we have, which is basically to be able to extend utility lines. And then in addition to that, that area being near the airport I think is a real asset as well. Certainly, if a safety concern of our project is being raised, that open space area is a benefit for that purpose. Let's not forget there's some cash in this deal as well. Just for purposes of cash, there's \$3,146,425. With in-kind we've got over \$3.5 million invested obviously in this project. And preserving that open space does come with a cost. I mean, that is a cost of acquisition, there's a cost to maintain it, there's a cost for preservation purposes, and you know, that's around \$4 million. So, there's some real investment here from my client from that perspective and I think we hear a lot of developers talk about making transportation improvements. But there's a real need in this particular area for transportation improvements and these offsite improvements will benefit immediately the surrounding properties, which I think is an asset. And Mr. English also had asked a question about the DBIZ zones, and I just want to just reiterate a couple things. There are three zones in a particular area. The DBIZ Potomac Creek 2 area doesn't affect this project at all. The DBIZ Lake Curtis affects a few lots, not many; just the lots on the southern end, maybe four or five. And then the Potomac Creek #1 does affect most of the project. But, as a reminder, Potomac 1 and Potomac 2 are maintained and owned by the County, and the third is maintained by the Virginia Department of Game and Inland Fisheries. These particular... this project, for purposes of DBIZ, has no impact on the spillway whatsoever for the spillway design flood standards on any of the three dams. In addition to that, DCR has reviewed this plan and has had no issues with us developing on that site. So, that process has been reviewed and my opinion vetted both by the County and by DCR, although there's a final process that has to occur through the site plan process which will finalize that component. So, with that I am happy to answer any questions you may have. I think I've addressed the issues that were raised during Mr. Zuraf's presentation that you had. But with that, I'm happy to answer any questions.

Mr. Coen: Alright, any questions for Mr. Payne? Seeing none, thank you sir.

Mr. Payne: Thank you sir.

Mr. Coen: When this first had come before us, Mr. English had asked to continue the public hearing so that you, the members of the public, would have an opportunity to comment at this stage as well. The public hearing process is similar to that at the beginning of the meeting. You come down, state your name and your address. Then, when you start talking, remember you're addressing the Commission as a whole. When you start talking the green light comes on in front of you. You have 3 minutes to talk. When it hits the yellow light then you're at 1 minute left. And then when you see the red light blinking we ask that you... yes, Ms. Clifton, I agree with that... we ask that you wrap up your comments. Alright, and so if anyone would like to come forward, you can come up to the podium now and, if you want, just line up behind people. And so we open up the public hearing part. Ms. Clifton.

Ms. Clifton: Good evening Mr. Chairman and members of the Commission, my name is Irma Clifton. Having been before the Planning Commission and the Board of Supervisors many times in the past on items such as the Counting House, the Falmouth Commercial Overlay District, and now this rezoning, it has finally dawned on me that traffic and parking in Falmouth are not issues of overriding concern to the County. That's not a complaint, that's just a fact. Now, having said that, in other concerns that I have had about this rezoning such as the restaurant, the sidewalk...

Mr. Coen: Oh, Ms. Clifton, this is on the Sycamore Grove. This is Sycamore Grove, not the Falmouth Commercial.

Ms. Clifton: Right. I'm getting to that.

Mr. Coen: We'll have the commercial in a minute.

Ms. Clifton: I'm getting to that now, okay. I'm getting to the rezoning right now, okay.

Mr. Coen: Alright.

Ms. Clifton: Now, having said that, the other concerns that I have had about this rezoning, such as the restaurant, the sidewalk, the archeological study, parking in front of the Dunbar Kitchen, all of that seems to have been addressed. Other concerns that I have with this project such as scale, proportion, architectural design, and landscaping and any other changes in the properties can most likely be addressed at the time of the submission of the plan. Therefore, although I cannot wholeheartedly support this reclassification, I do not oppose it. But I think the County should monitor the progress of this project as it should anything in Falmouth. And to ensure that the cultural and historical integrity remain intact and it is protected for the future. Thank you very much.

Mr. Coen: Okay, thank you. Alright, and we're on the Sycamore Grove. Does anyone have any comments on the Sycamore Grove public hearing item? Thank you. Thank you sir.

Mr. Kirkland: Thank you Mr. Chairman. My name is Lindy Kirkland and currently serving as the Vice Chairman of the Stafford Regional Airport Authority, and I very much appreciate the time to address the Sycamore Grove issue. First of all, just to clarify the earlier question from Mr. English, the H-1 zone is essentially the traffic pattern for the smaller piston airplanes, and this project sits directly beneath that particular traffic pattern. So, essentially most aircraft approaching the airport, small piston engine airplanes approaching the airport, would overfly this particular area on the downwind leg of the traffic pattern. So that's where this resides. I would like to say, first of all, just to acknowledge that Mr. Payne and the applicant have done a great job moving towards something that is much more compatible with the airport and its operations there in the area. As he said, they have addressed many of the issues. But one issue still remains and that is the actual density of homes in this particular project. As you know, we spent considerable time and effort developing the densities and the land use standards, and those were incorporated by the Board of Supervisors in the Comprehensive Plan. And I'd just like to reiterate that this project exceeds that by a fair amount, and that is in fact our main concern from the airport perspective. So, with that, thank you very much.

Mr. Coen: Thank you Mr. Kirkland. Is there anyone else who would like to speak on this proposal? Alright, seeing none, we'll close the public hearing. The applicant has a chance to, so if Mr. Payne, the representative for the applicant would like to come up and speak, he certainly may.

Mr. Payne: Thank you Mr. Chairman and other members of the Planning Commission. Again, Charlie Payne with the law firm Hirschler Fleischer and I represent the applicant. Appreciate the airport's position on this. Obviously, density, residential density near the airport is a concern of theirs. Again, this project was a fairly large project at one time at 650 units and quite a bit of commercial space in that area; 250,000 square feet and basically no preservation of open space. Again, a totality of the project is what we're asking the Planning Commission to look at, not just one element of that. Just remember, in the H-1 zone, it does not per se prohibit residential development. It just advises that the Planning Commission take a look at additional review, which we have addressed in my opinion. The density although exceeding the recommendations in the Comprehensive Plan, if you took what we believe our by-right allowance would be of 105 units, we're at 157, using that one and a half times if you will component that's in the Comprehensive Plan. If you use the County's position of 77 units, we're at 115. So, this is not a super dense project. You know, with our numbers we're 13 more and with the other, just a little less than 50... about 55. So, again, we took a very conscious review of the density issue and again of the airport's concerns in that regard, but that's one element again of this project. It's not the totality of the project. The totality of this project, in my opinion, is very positive, both from a commercial perspective, an infrastructure perspective, and a low density perspective for that matter, and a preservation perspective. All of those factors and the mitigating components that we're proffering for purposes of consciously thinking about the airport, I think all in all are more positive on the balance than negative. So, again with that I'm happy to answer any questions you may have. But I wanted you to know the applicant consciously looked at and designed this project taking all those factors into account, especially what your position has been for that Central Business District and also the airport's. Thank you.

Mr. Coen: Thank you. Any questions for Mr. Payne? Alright, seeing none, thank you sir.

Mr. Payne: Thank you.

Mr. Coen: Alright, Mr. English, this is in your district...

Mr. Apicella: Mr. Chairman, I'm sorry. Before Mr. English goes, can we... I've gotten kind of mixed signals on this from the applicant versus staff about the airport. So, the applicant believes that residential is permissible. I thought I heard staff say that the plan, the airport plan recommends against residential and the additional review elements would not necessarily apply here. So, I'm just trying to find out what the right answer is.

Mr. Zuraf: The Comp Plan Land Use recommendations on the Land Use Map, that discourages and does not support residential. The Airport Plan does recognize... the Airport Plan reflects and addresses every potential use and it does recognize that if residential is supported in the H-1 zone, the additional review standards would apply.

Mr. Apicella: I thought the plan said for H-1 that residential is not...

Mr. Zuraf: There's a statement about it being discouraged but then it does say if additional review standards are met, it could be considered.

Mr. Apicella: Do you have that in front on you? Can you show that to us?

Mr. Zuraf: No, I don't.

Mr. Apicella: No. Because I thought it said otherwise.

Mr. Coen: Right, well actually the other member of the subcommittee that worked on it is saying that was his impression as well.

Mr. Zuraf: Okay.

Mr. Coen: Okay. Alright, thank you sir. Alright, now Mr. English.

Mr. English: Okay. Mr. Chairman, I recommend denial of this project because several negatives that I feel is part of...

Mr. Coen: Okay, one second. Is there a second for denial?

Mrs. Vanuch: I'll second.

Mr. Coen: Alright, we have a motion for denial by Mr. English, second by Mrs. Vanuch. Go ahead now Mr. English.

Mr. English: Okay. The reason I'm denying it is because it's inconsistent with the Stafford Business Planning Area and also inconsistent with the Airport Land Use Compatibility that we worked on. So that was my reason for denial.

Mr. Coen: Okay, Mrs. Vanuch?

Mrs. Vanuch: No further comment.

Mr. Coen: Alright, anyone else any further comments? Mr. Rhodes.

Mr. Rhodes: I just have to admit, we've had several in this area and I'm just... there is a part of me that's a little bit torn on it. It is an opportunity to bring in several million dollars. It is not significantly more than it would be by-right. I wonder if we will really be able to develop that entire area with absolutely no residential, which seems to be a perspective for this. Certainly it is discouraged; one of the reasons is concerns for encroachment and complaints. But we had one other, the Oakenwold previously that set a very high standard for the mitigation of sound thing which this one does as well. I'm just not sure that we'll be able to go forward continually and forever and just have absolutely no residential in that area. I just... but as we go forward with newer opportunities, they will come without any resource of mitigation of funding at all, so it'll all be on the state or the local jurisdiction to be funding that. So, it just seems like we're just a little off and sustainable way ahead in the long run, and that's just a feeling I have. Thank you Mr. Chairman.

Mr. Coen: Thank you Mr. Rhodes. Anyone else? Mr. Apicella.

Mr. Apicella: Mr. Chairman, I think both Mr. English and Mr. Rhodes make good points. If it does happen to get denied, what I thought I heard the applicant's agent say is that they also have a cluster plan in place. I don't know what number of residential they're proposing there but I don't think that would... I think that would be approved administratively by staff if it meets other requirements. I'm also torn on this one. I think there is something to like about this project; it's certainly must better in terms of density compared to the original Oakenwold application that was in front of us. I do like that it includes some commercial uses. Having served on the Airport Land Use subcommittee, I think there's probably a disconnect, at least in my mind, about what it says should happen in an H-1 zone. What I know with certainty is that small aircraft will be flying over these houses, and whatever number of houses are there, they're probably going to get complaints because it's going to happen every day. And to the extent that any project that goes there minimizes the number or is laid out in a way that moves houses around so it's lessened, I think that would be better or the best case scenario. And it is what it is. I mean, not every piece of property in Stafford County is going to merit the amount of zoning or amount of density that an applicant wants. So I think there is a conflict with the Airport Land Use Plan and so, primarily for that reason and the issues that the residential houses would have with respect to the airport, I don't want to exacerbate a problem by approving this amount of density. So, for that reason, I'm going to support the motion.

Mr. Coen: Okay, thank you Mr. Apicella. Anyone else? Alright. I'm going to support this motion for numerous reasons; one, clearly the airport, Mr. English and Mr. Apicella addressed that very well. I'm just going to add that when we had that earlier one that Mr. Rhodes eluded to, I had grave concerns that that would become the new measure. That if we went for the idea that if they do noise abatement and they do notice and they do x, y, and z, that will now come back to future applicants saying that's the new measure. And unfortunately I was right. On the retail, while there has been some analysis, I asked a very straightforward question last time which was I was trying to wrap my head around which type of commercial size and shape and scope were we looking at. And for those of you in my end of the County, in my mindset I was trying to decide is this the Giant side of Town and Country where almost everything's rented out or right across the street which is smaller but of the entire strip mall there's only one thing left. And so I'm trying to wrap my head over what it was they were envisioning and never really got that. I have grave concerns about the scholarship. I appreciate that they pulled some of those items that were not supposed to be in here as a proffer out, and I appreciate that. But the scholarship

aspect remains and, again, staff was pretty clear about that type of activity being in there. I'm concerned about the impact on the County. I know I have been stressing and dealing with the idea of the preservation and the eagles, and we keep hearing that we're preserving 133 acres. But then we're also hearing that there's going to be trails and community gardens and etcetera and it will be open to the community. So, logic would say, you open it up to community, you need parking. And so therefore no longer are you preserving 133 acres, you are now doing something that is going to impact those 133 acres. So, I'm leery on that part. I thought, and I believe it's in my notes somewhere, there was the word easement being thrown out there, but it's not now. It's just we promise not to do anything on it, but put gardens and trails and whatnot. I like the idea of moving to the 660-foot area, but then I wonder if you've already built some of the homes and then you get that, what do you do with the homes that you've already built? So, and on the map of the GDP that we were provided, down on the bottom near the Potomac Creek it says potential swim and then there's a slash and it's a little hard to read and the last two letters are amp area. I'm not quite sure what that was, but my mindset would be if you're going to have a swim area in that part of the Potomac Creek which is where the eagles are, that's going to disturb the area and the fishing which sort of destroys the whole idea of what you're saying in the first part. So, and I thought, and I'm not going to ask Mr. Rhodes about this again, but I could have sworn when they first came we asked Mr. Rhodes if we had received definitive word from the school system as to their view of the project. And at that point I thought he said we hadn't received anything official yet. And I didn't see anything in here either that we've received anything official as to whether the school system approved it. So, for all those various reasons, I'm going to support Mr. English and his motion. Alright, so now we'll vote on the motion for denial. Alright, and so the motion for denial has passed unanimously. Thank you.

