

# Development Special Use Permit #2018-00030 1000 St. Stephen's Road – St. Stephen's & St. Agnes High School Upper School Expansion

Application	General Data		
	PC Hearing:	February 02, 2021	
<b>Project Name:</b>	CC Hearing:	February 20, 2021	
St. Stephen's & St. Agnes	If approved, DSUP Expiration:	February 20, 2024	
Upper School Expansion	Project Site Acreage:	2.83-acres	
-	Total Parcel Acreage:	29.4-acres	
<b>Location:</b> 1000 St. Stephen's Road	Current Zone:	R-8/R-12	
	Proposed Zone:	R-8/R-12	
	Proposed Use:	Private School	
	Dwelling Units:	N/A	
	Gross Floor Area: ( <i>Proposed Addition Only</i> )	41,805 square feet	
Applicant:	Small Area Plan:	Seminary Hill/Strawberry Hill	
Church Schools in the	Historic District:	N/A	
Diocese of Virginia, represented by Duncan Blair, Esq.	Green Building:	LEED Silver Equivalent (2009 Green Building Policy)	

### **Purpose of Application:**

Public hearing and consideration of a request for a Development Special Use Permit, with site plan to expand an existing private school, amending SUP#2016-0103.

#### **SUPs Requested:**

- An SUP to expand an existing private school and increase enrollment to 520; and,
- An SUP to allow temporary classroom trailers.

### Staff Recommendation: APPROVAL WITH CONDITIONS

#### **Staff Reviewers:**

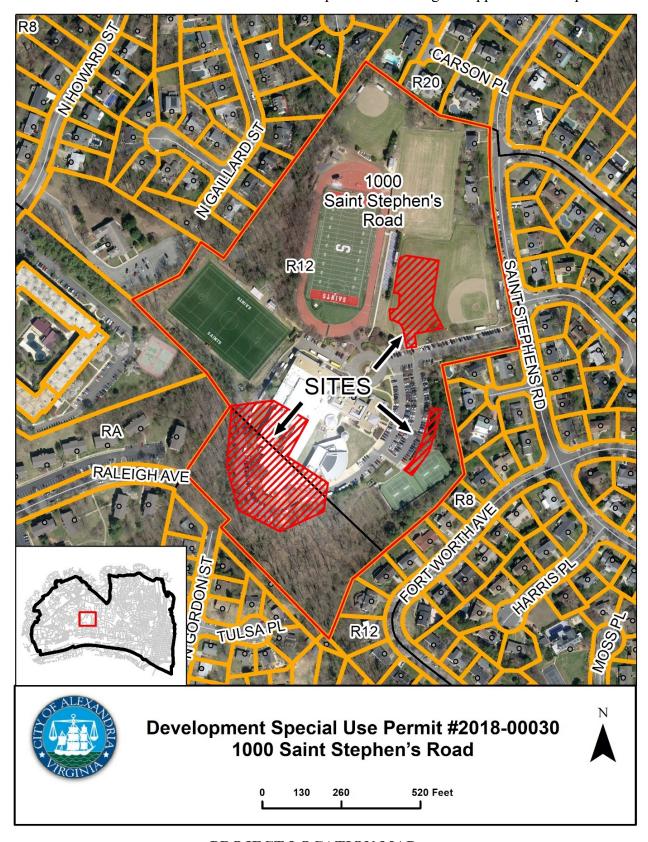
Robert Kerns, AICP Division Chief, Planning & Zoning, <a href="mailto:robert.kerns@alexandriava.gov">robert.kerns@alexandriava.gov</a>
Dirk Geratz, AICP, Principal Planner, Planning & Zoning <a href="mailto:dirk.geratz@alexandriava.gov">dirk.geratz@alexandriava.gov</a>
Carson C. Lucarelli, Urban Planner II, Planning & Zoning <a href="mailto:carson.lucarelli@alexandriava.gov">carson.lucarelli@alexandriava.gov</a>

<u>PLANNING COMMISSION ACTION, FEBRUARY 2, 2021</u>: On a motion by Commissioner McMahon, seconded by Commissioner Lyle, the Planning Commission moved to recommend approval of the request, subject to compliance with all applicable codes, ordinances and staff recommendations. The motion carried on a vote of 7 to 0 – there were no abstentions.

<u>Reason:</u> The Commission declined a presentation from Staff and the Chair opened the item up for discussion and questions. Commissioner Brown asked Staff to clarify whether or not the school would need to seek a separate approval if they desired to permanently store school buses

on the campus. Staff clarified that the school buses (7 mini and 12 full sized) are currently stored at Landmark Mall (the "mall") on a yearlong lease. Staff also clarified that there are no requirements in the Zoning Ordinance that would preclude them from storing the buses on their property once the lease expires/the mall site redevelops. Staff also clarified that prior to obtaining the lease for storage at the nearby mall, the buses were stored amongst the various school campuses, which are distributed around the City.

<u>Speakers</u>: Duncan Blair, the Applicant's Attorney, spoke following the question raised by Commissioner Brown. Blair clarified the number of school buses and the lease with Landmark Mall. He also stated that the storage of said buses is contingent upon redevelopment plans for the mall.



### **PROJECT LOCATION MAP**

### I. **SUMMARY**

#### A. Recommendation

Staff recommends granting approval of the Development Special Use Permit with Site Plan to expand the existing private school with a 41,805-square foot classroom /dining facility addition and related site improvements. Staff also supports the increase in student enrollment to 520 and the request to allow 10,000 square foot of temporary classroom and dining space proposed on the campus's athletic fields. The new addition would provide state-of-the-art learning facilities and enhanced outdoor open space for students and faculty.

The project contains a number of benefits, including:

- A new LEED-Silver equivalent building addition with state of the art educational and dining facilities that would allow for increased enrollment and learning opportunities.
- Two dedicated electric vehicle charging stations within two years of substantial completion of the building; and,
- A 3,306 square foot green roof and other sustainable site features to reduce the environmental impacts of the building over its lifetime.

### B. General Project Description & Summary of Issues

The Applicant, the Church Schools in the Diocese of Virginia, doing business as St. Stephen's and St. Agnes School, is proposing to modernize and increase the size of their existing school facility. The school currently serves 480 students, grades 9<sup>th</sup> through 12<sup>th</sup>, with a campus operating on the site since 1957. The proposal includes new science, art and dining facilities as well as a 13,000 square foot exterior courtyard that is split between two levels. To accommodate the new addition, a portion of the existing school will be removed and the new wing will be built within its footprint. A small parking lot, along with 16 tandem spaces near in the existing parking lot will also be constructed – amounting to 20 additional parking spaces on campus.

Temporary classrooms and a dining hall will be erected to accommodate school operations during construction. The trailers will be served by a temporary road and a parking lot with 30 spaces to replace the 23 impacted by the construction. These facilities will be removed following completion of the addition. Accordingly, the project will be completed in two primary phases, as described in more detail below.

The following key issues were evaluated as part of the staff analysis and are addressed within this report:

- Conformance with the Master Plan and Other City Policies
- Special Use Permits:
  - o To expand an existing private school; and,
  - To allow temporary classroom and dining trailers
- Site Design and Building Architecture
- Open-Space and Tree Preservation

- Parking, Loading, and Site Circulation
- Community Outreach

### II. BACKGROUND

### A. Procedural Background

St. Stephen's and St. Agnes Upper School is a private, college preparatory school serving grades 9<sup>th</sup> – 12<sup>th</sup> and has operated a campus on the site since 1957. The school was created by the merger of two entities in 1991 and has been granted numerous development and land use approvals over the years for building additions and increases in enrollment. Most recently, SUP#2016-0103 granted an increase in enrollment from 450 to 480 student. Subsequent to the 2016 SUP, a development approval was granted in 2001 (DSUP#2000-0049) to approve construction of a new auditorium and to increase in enrollment from 430 to 450 students. Staff have only carried forward a select number of conditions from the foregoing approvals.

#### B. Site Context

The subject property is approximately 29-acres and split-zoned R-8 / R-12. It is bounded by St. Stephen's Road to the east, a church and condominium property to the west and singlefamily on all remaining sides. The property is accessed from St. Stephen's Road via a long, narrow driveway with angled-parking on either side. The access drive is flanked to the north by the school's athletic fields and is the



only vehicular access point into the property. The drive travels south-westerly for 350-feet before opening to a large, radial parking lot to the south. The drive continues beyond the radial lot where it encounters a roundabout in front of the school's main entrance. The drive then snakes south, making a loop around the school and connecting once again with the radial parking lot.

The school itself is situated within this loop and sits several stories above the neighboring properties to the south and west due to the topography. Given the significant change in grade along these edges of the site, the landscape remains feral and largely wooded. The building itself is an architectural collection of various additions ranging from the 1950s to the early aughts.

There is a total of 139,771 gross square feet of floor area and the school ascends to a height of 40-feet, which is the maximum allowable per the Zoning Ordinance. The school's auditorium (DSUP#00-0049) was completed in 2003 and is the only free-standing academic structure on campus. It abuts the project site to the northwest, near the tennis courts, and recalls the radial form of the parking lot in plan.

As an academic campus, the school also offers a number of recreational opportunities for students. The majority of these facilities are situated to the north and northwest of the project site and include a football field, two baseball diamonds and a soccer pitch. There are also tennis courts situated to the southeast, adjacent to the radial parking lot.

### C. Detailed Project Description

The Applicant wishes to demolish a portion of the existing school and construct a 42,000 square foot addition, with outdoor courtyard and parking in its place. The first phase involves demolition of the portions

highlighted



Figure Above: Axonometric rendering depicting portions of existing building to be removed.

above in *green*. More specifically, the existing two-story science wing, the dining hall, a 3,300 square foot interior courtyard as well as the maintenance annex and loading areas are to be demolished and the temporary campus on the athletic fields will be erected nearby on the athletic fields. The second phase involves site work and construction of the new addition. The new addition would include state of the art facilities for art, science and dining, as well as a 13,000 square foot courtyard that is split between two levels, approximately 7-10' in grade separation. The existing topography on site will require a significant amount of earth to be removed, which helps to soften the transition of the building as it traverses over the landscape. As noted, the resulting grade changes account for a subtle (7-10-feet) bifurcation the exterior courtyard, which is situated to the west of the addition. The lower level is separated by a small stair and opens up to an expansive outdoor dining area that's nestled behind a stair tower and framed by shade trees.

The project scope also includes various site improvements, including additional parking (20 new spaces) along the looping road. The Applicant will remove the head-in parking along contained

along the road and consolidate it with a small parking lot within the footprint of the old maintenance annex. The Applicant will also construct tandem spaces for students in the radial parking lot, near the tennis courts.

# III. ZONING

Table 1: Zoning In	formation					
Property Address:	1000 St. Stephen's Road					
Total Lot Area:	29.4-Acres	29.4-Acres				
Total Project Area:	2.83-Acres	2.83-Acres				
Current Zone:	R-8/R-12 S	Single-Family	<b>y</b>			
Proposed Zone:	R-8/R-12 S	Single-Family	<b>y</b>			
Current Use:	Private Scl	nool				
Proposed Use:	Private School					
	Existing		Permitted / Required		Proposed	
	R-8:	R-12:	R-8:	R-12:	R-8:	R-12:
FAR	0.08 /	0.10 /	0.35**	0.30**	0.11/	0.11 /
	16,791SF	111,502SF			23,089SF	113,269SF
Setbacks	Front: 575-	feet	R-8 Front:	R-12 Front:	Front: 575	-feet
o Front				35-feet*		
o Side	Side: 161-f	eet	R-8/R-12 Si	ide:	Side: 118-	feet
o Rear			1:1; 25-feet	*		
	Rear: 437-	feet	R-8/R-12 R		Rear: 437-	feet
			1:1; 25-feet	*		
Parking	230 Spaces	;	54 Spaces		250 Spaces	S
			(1 per 10 Cl	assroom		
			Seats)			
<b>Loading Spaces:</b>	2-Loading Spaces		N/A		2-Loading Spaces	
<b>Open Space</b>	30,218SF (		N/A		30,018SF	`
	Project Site)				Project Sit	/
Height	R-8/R-12: 40-feet**		R-8/R-12: 4	0-feet**	R-8/R-12:	40-feet

<sup>\*</sup>Minimum Allowable per the Zoning Ordinance; \*\*Maximum Allowable per the Zoning Ordinance

# IV. STAFF ANALYSIS

# A. Conformance with the Small Area Plan

The site is located within the boundaries of the Seminary Hill/Strawberry Hill Small Area Plan ("SAP"). The neighborhood is specifically identified within the plan is Seminary Hill and is characterized by a mix of churches, schools (ACPS and Private) and single-family detached homes on large lots. The SAP was adopted in 1992 and has been amended eight times over the

last 29-years. The plan serves as the basis for future policy initiatives and actions affecting land use, zoning, capital improvements within the Plan area. Within the SAP's land use goals and recommendations is the desire that the St. Stephen's & St. Agnes Upper Campus be used for institutional purposes. Accordingly, a campus has operated on the site since the 1950s and the Applicant is not proposing any other uses on the property that would be inconsistent with the Plan's goals and objectives. Furthermore, the Applicant does not seek to increase the scale or height as allowed by the zone and the project will be built in compliance with all applicable site planning provisions of 11-400 of the Zoning Code. For the foregoing reasons, the project is found to be in conformance with the City's Master Plan.

### B. Conformance with City Policies

### **Green Building Policy**

The St. Stephen's & St. Agnes Upper School expansion is one of the last remaining development projects to fall under the City's 2009 Green Building Policy, as the submission predates the new requirements adopted in 2019. Nevertheless, for non-residential developments such as this expansion, the 2009 policy requires a certification level of LEED Silver or equivalent. The Applicant is pursuing a unique approach, using a *LEEDv4 School's Scorecard* which is being independently orchestrated through a third-party LEED Consultant. The consultant has prepared a scorecard amounting to 53 points, or LEED-Silver equivalent, but will stop short of fully registering the project with the Green Building Council due to the associated costs. Accordingly, Staff and the Applicant worked closely to create conditions that meet the spirit of the City's former Policy while being respectful of the institution's nature as a non-profit. Therefore, Staff are allowing full installation of the two (2) EV Charging stations to be delayed up to two years following substantial completion of the building addition. This allows the school added time to fund the improvements and complete the entire development in a timely manner.

#### Public Art and Affordable Housing Policies

Private schools are exempt from the City's Public Art and Affordable Housing Policies.

### C. Special Use Permits

Section 11-500 of the Zoning Ordinance gives authority to the City Council to approve special use permits, several of which are requested with this application. The Zoning Ordinance requires the following provisions be met for approval of an SUP:

- 1. Will not adversely affect the health or safety of persons residing or working in the neighborhood of the proposed use;
- 2. Will not be detrimental to the public welfare or injurious to property or improvements in the neighborhood; and
- 3. Will substantially conform to the master plan of the city.

A summary of the SUPs requested with this application, along with a rationale for approval, are provided below:

### **Temporary Trailers 7-1103 (C)**

In order to accommodate the operations of the school during construction, the Applicant seeks approval of a special use permit to allow temporary trailers for dining and classroom purposes (13,080 square feet). The temporary classrooms and dining trailers would be erected on the school's baseball diamond and be vehicularly accessible from the internal driveway via a temporary access road with turnaround. The temporary road ensures vehicular access to the facilities and associated parking, which serves the interim use. The trailers will be removed following completion of the building and the site will return to normal operations.

- 1. Will not adversely affect the health or safety of persons residing or working in the neighborhood of the proposed use;

  The temporary trailers for dining and learning will not adversely affect the health or safety of persons residing or working in the neighborhood. Given the size of the property, the trailers will be situated deep into to the site, approximately 250-feet from the nearest public street. The trailers are only accessible from the internal private drive; therefore, the Applicant is not requesting any additional vehicular access points, temporary or otherwise, along St. Stephen's Road which could potentially disrupt pedestrian and vehicular travel in the neighborhood.
- 2. Will not be detrimental to the public welfare or injurious to property or improvements in the neighborhood; and
  The temporary trailers will not be detrimental to the public welfare nor injurious to property or improvements in the neighborhood. The trailers would be located internal to the site, approximately 250-feet from the nearest public right-of-way. The Applicant will construct accessible pathways to the trailers which integrate into the existing pedestrian fabric and will also construct a temporary road with emergency turn-around to further serve the buildings.
- 3. Will substantially conform to the master plan of the city.

  The request complies with the City's Master Plan as is supports continued use of the site for private institutional purposes.

### To Increase enrollment to 520 Students (Amending SUP#2016-0103)

A special use permit is also necessary to amend an existing condition of SUP2016-0103, which limited the school enrollment to 480 students.

Will not adversely affect the health or safety of persons residing or working in the neighborhood of the proposed use;
 The 8% increase in enrollment will not adversely affect the health or safety of persons residing or working in the neighborhood as the school will continue to operate in a

manner that is focused on limiting any impacts. The Applicant intends to construct larger facilities for dining and learning in order to accommodate the increase in students. Additional off-street parking for students and faculty will also be constructed to account for the increase in enrollment. Based on the attached transportation study performed by the Applicant, the temporary and proposed parking are sufficient. The study notes that no more than 85% of the parking is occupied at any one time during normal operational hours, and the Applicant intends to continue the same arrival and dismissal patterns currently adopted, post-construction. Staff have received few complaints over the years regarding the Applicant's traffic management. The report goes on to state that if the school continues its current transportation polices, there should be no impacts on the surrounding roadway and transportation network.

- 2. Will not be detrimental to the public welfare or injurious to property or improvements in the neighborhood; and
  The increase in student enrollment will not be detrimental to the public welfare or injurious to property or improvements in the neighborhood. The Applicant will construct all the foregoing improvements within the envelope of the property and will not encroach closer towards the neighboring properties largely due to the substantial topography separating the school site from the adjacent neighbors to the south and west. The school is situated within a residential area and has proven to be a good neighborhood. The City has received very few complaints over the years about their operations Additionally, Staff have carried forward all conditions for the athletic fields and auditoriums which limit the use, hours of operation and loudspeakers.
- 3. Will substantially conform to the master plan of the city.

  The increase in enrollment by 8% will confirm to the spirit of the City's Master Plan. The Applicant wishes to continue use of the property as a private educational institution, in accordance with the plan's land use goals and recommendations and seeks to replace outdated learning and outdate dining spaces with larger and state-of-the-art facilities of same. The school as operated at this site since the 1950's and has become an integral part of the surrounding community.

# D. Site Design, Building Architecture and Sustainable Features

#### Site Design

The school building is an amalgam of multiple additions dating back to 1955. The portion of the building being removed is from a mid-century addition from the 1960s and includes a two-level science wing, an interior courtyard, the dining hall and kitchen, and the maintenance wing. The 41,805 square foot addition will conjoin to the remainder of the school and reaches a maximum height of 40-feet. A 13,000 square foot courtyard will be situated on the western side of the addition, adjacent to the looped road, and a small parking lot will be constructed in the location of the former dining hall.

A significant portion of the site will be regraded in order to accommodate the new building addition. Given the steepness of the topography in the rear, approximately 10-feet of earth will be removed in order to minimize the transition of the building over the terrain. As a result, the

new science and art wing, along with the abutting portions of the courtyard, sit several feet above the new dining hall and lower courtyard. The resulting embankment adjacent to the upper courtyard will be landscaped with shade trees and pedestrian scaled lighting. A stair will provide access to the road at the north of the courtyard to provide access to a new 5-foot sidewalk leading to the lower courtyard level.

### **Building Architecture**

The building addition is bold and modern and designed with the microclimate in mind. The palette of the entire addition is uniform and comprised of a simple system of masonry, metal panel and glass. The Applicant has opted for a simple expression of the new wing by recalling earthy and naturals tones from the surrounding landscape and campus buildings. The dining hall will be glazed from floor to ceiling and is noted by a system of tall and intermittent vertically oriented metal fins to diffuse the sun's rays - thus reducing cooling energy demand. An expansive linear skylight will also be constructed above the student commons to flood the space with natural lighting. An expansive transom overlooks the top of the new science and art wing, along with a 3,306-square foot green roof and small outdoor deck.

#### Sustainable Features

The Applicant desires to be more carbon conscience and have chosen a design that integrates numerous sustainable features aimed at optimizing the building's energy performance over time. The most notable feature is the 3,306 square foot green roof, which will sit above the new science and art wing in the northwest corner of the project site. Rooftop greening is sustainable design feature that helps mitigate stormwater runoff through native vegetation situated at the roof level. Green roofs are also well documented for their ability to mitigate the urban heat island effect by cooling the atmosphere through a process known as evapotranspiration - by which water is transferred from the land to the atmosphere by evaporation from the soil and other surfaces. The added insulation provided by the green roof will also reduce building energy demand during winter months. The school has used solar water heaters for many years and will continue the practice on the new addition by installing additional, pitched solar water heater arrays to further reduce the energy demand of the building.

# E. Parking and Site Circulation

**Table 2:** Parking Requirements & Proposed Parking

Use	Ordinance Ratio	Proposed Seats	Existing Parking	Parking Requirement
Private School	1 space per 10 classroom seats	540 seats	230 Spaces	54 Spaces
TOTAL				54 spaces – required. 250 spaces - provided

#### Parking

The Zoning Ordinance requires 54 parking spaces for the private school, or 1 parking space for every 10 classroom seats. Currently, there are 230 spaces on site, as per the table to the right. With this request, the Applicant seeks to increase the total number of paces on site, post-construction, by 20. The new parking will be a combination of tandem spaces (adjacent to the existing tennis courts) as well as traditional head-in spaces in the rear. More information on

Parking designation	Existing	Proposed during construction	Proposed after construction
Staff	119	96	123
Student	67	83	83
Unassigned	44	44	44
Temporary	0	30	0
Total	230	253	250

**Table Above**: Existing and Proposed Parking Supply Table from traffic study prepared by Gorove Slade Associates Inc.

the current parking arrangements can be found in "Section VII – Graphics" of this report. The Applicant will also construct 30 temporary parking spaces, as well as a driveway with turnaround on the school's baseball diamond, for the interim classroom and dining trailers. These 30-spaces will replace the 23 existing ones removed by the construction. Based on the observations noted in the report, no more than 85% of the total parking spaces on campus were occupied at any given time during the day. Thus, the 30 provided in the temporary lot are sufficient to replace the ones impacted by the construction. As noted, the temporary parking and school trailers are designed to only serve as an interim use during construction and will be removed following completion of the building addition.

#### Site Circulation

The site is vehicularly accessible by a single driveway off of St. Stephen's Road. As described in the *Site Context* section of this report, this driveway serves as the only access point into the site and leads to a parking lot and road that loop around the school.

For normal school operations, St. Stephen's & St. Agnes utilize a staggered dismissal pattern (2:45pm and 3:30pm), which softens the length of the queue on nearby roads. The attached Transportation Statement supports the approach. It states: "Due to efficient and orderly arrival and dismissal operations that will continue during and after construction, off-site impacts of typical arrival and dismissal operations are not expected to worsen as a result of the proposed improvements to the St. Stephen's and St. Agnes Upper School site."

For more information on site circulation and parking, please refer to "Section VII - Graphics" of this report.

# F. Open-Space & Tree Preservation

### Open-Space

The 29-acre property is zoned R-8 and R-12 (single-family) and does not have an open-space requirement for private schools other than the resulting spaces created by the minimum setbacks.

Given the clustering of the building in the center of the site, the school itself is buffered by densely wooded areas with steep topography to the south and to the west and the athletic fields to the north. As described in the above Zoning Table, 36% of the project site (30,018 square feet) is dedicated to open space – which includes a new elaborate outdoor plaza that replaces an existing interior dining courtyard.

As noted, the project will deliver a 3,306 square foot green roof. While the roof itself does not contribute to the site's "open-space" calculation, it is worth noting its other benefits, which include improving stormwater run-off, reducing building energy demand, and mitigating the urban heat island effect – all of which complement the City's on-going environmental action commitments.

#### Tree Preservation

Tree preservation is an important component of the project. The project is infill in nature as the addition and related site improvements will be constructed within the existing site envelope. Accordingly, fewer trees are be disturbed as the project encroaches only slightly into the steeply forested perimeters of the site.

<b>Canopy Coverage Analysis</b>	Subtotal (SF)
Total Site Area	1,280,506
Tree Cover Required	320.127
Existing Canopy Cover	346,750 (27.08%)
Removed Tree Canopy	-26,500
Preserved Tree Canopy	320,700
Proposed Canopy Cover	+ 27,500
<b>Total Canopy Cover</b>	348,200 (27.19%)

Figure Above: Canopy Coverage Analysis Table

# V. <u>COMMUNITY</u>

Community engagement is an important component of the project. The Applicant initiated conversations with the community beginning in February of 2019. The school's Chief Financial Officer attends the monthly meetings with the Seminary Ridge Civic association and the Seminary Hill Association and provides routine updates on the project to the respective association Boards. At these meetings, questions were raised about traffic operations, staging and construction duration. To date, Staff have not received any objections to the proposal.

Open public meetings were held on the following dates:

- February 12, 2019 7:00 pm
- February 13, 2019 8:00 am
- August 29, 2019 7:00 pm
- November 12, 2019 7:00 pm

- March 31, 2020 meeting cancelled due to school closure
- SRCA Board meetings held at SSSAS throughout 2019-2020
- Annual Board meetings in September 2019 & 2020

# VI. CONCLUSION

Staff recommends **APPROVAL** of the Development Special Use Permit, and all associated applications subject to compliance with City codes, ordinances and staff recommendations below.

<u>Staff:</u> Karl Moritz, AICP, Director, Planning & Zoning
 Robert Kerns, AICP, Division Chief, Planning & Zoning
 Dirk Geratz, AICP, Principal Planner, Planning & Zoning
 Carson C. Lucarelli, Urban Planner, Planning & Zoning

# VII. GRAPHICS

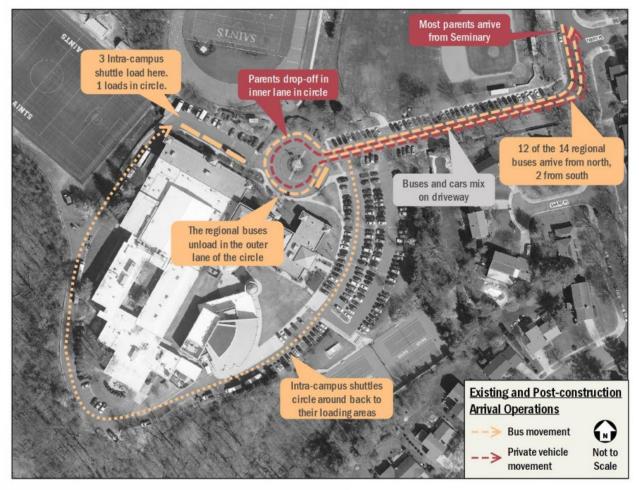
### **#1 - Perspective View from Southwest Corner**



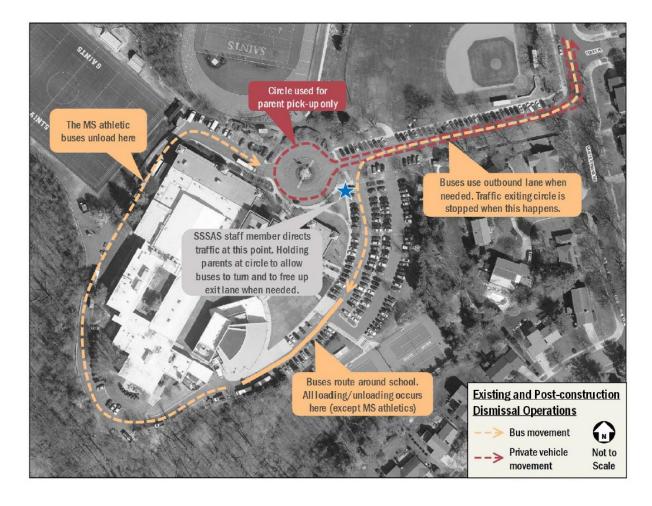
#2 - Perspective View from Western Corner



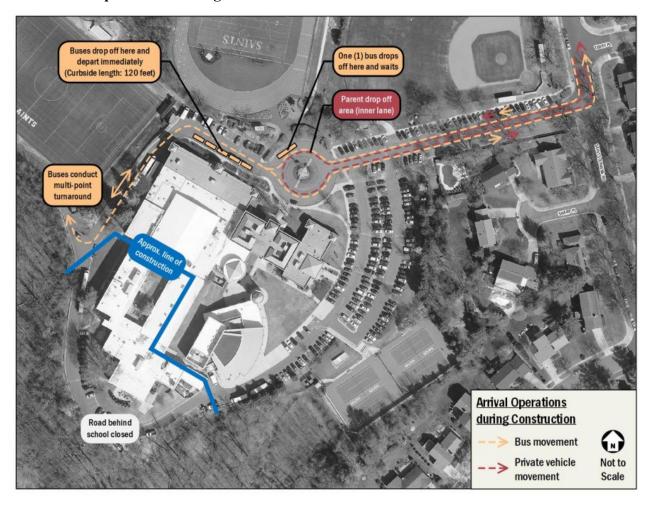
# **#3 - Existing and Post-Construction Arrival Operations**



### #4 - Existing and Post-Construction Dismissal Operations

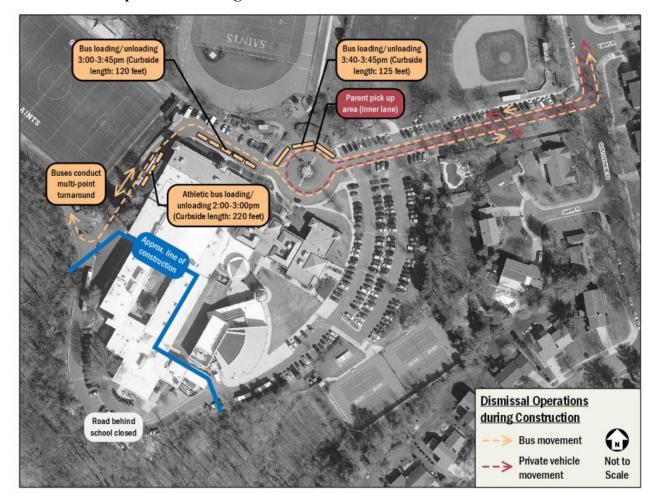


# **#5 - Arrival Operations During Construction**

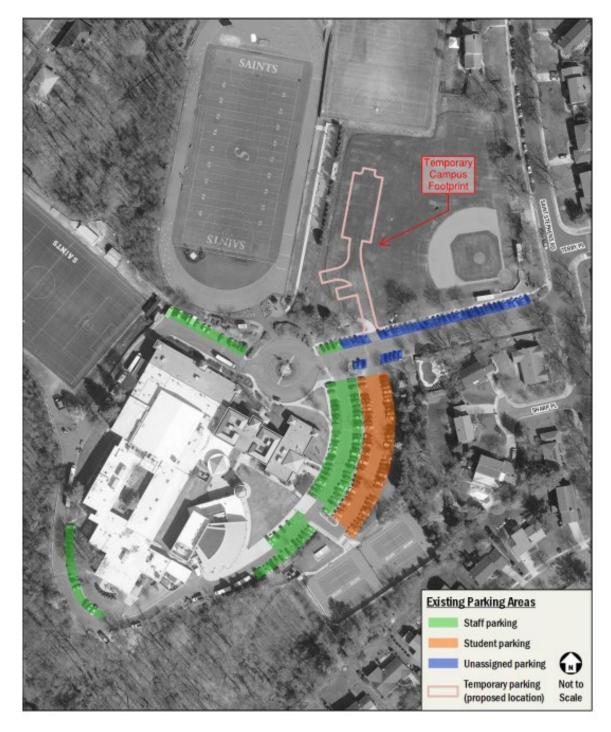


St. Stephen's and St. Agnes Upper School Expansion

# **#6 - Dismissal Operations During Construction**







### **VIII. STAFF RECOMMENDATIONS:**

Note #1: Conditions running with the foregoing approval (SUP#2016-0103) and the site as a whole which have either been amended, satisfied and deleted, or carried forward are identified as: #3, #9, #20-22, #38, #39, #52, #53, #62, #64, #65, #67-69, and #89-97.

\*Please note the new numbering of the conditions.

- 1. The Final Site Plan shall be in substantial conformance with the revised preliminary plan submitted in August of 2020 and dated January 2020 and comply with the following conditions of approval.
- 2. Per Section 11-418 of the Zoning Ordinance, the development special use permit shall expire and become null and void, unless substantial construction of the project is commenced within 60 months after initial approval (plus any extensions per the October 6, 2020 City Council Docket Item 19 due to the COVID-19 emergency) and such construction is thereafter pursued with due diligence. The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status if substantial construction has not commenced at such time. The period of validity may be extended upon petition by the applicant and after adequate notice and public hearing. (P&Z)

### A. SITE PLAN

- 3. **FORMER CONDITION #1 AMENDED BY STAFF:** This **development** special use permit shall supersede all prior SUP and DSUP approvals (SUP#2193D, SUP#95-0081, DSUP#99-0007, and DSUP#99-0058) involving the subject site. (P&Z) (SUP#2016-0103) (SUP#95-0081) (DSUP#99-0007)
- 4. Per Section 11-418 of the Zoning Ordinance, the development special use permit with site plan shall expire and become null and void, unless substantial construction of the project is commenced within 60 months after initial approval and such construction is thereafter pursued with due diligence. The applicant shall provide a written status report to staff 18 months after initial approval to update the City Council on the project status if substantial construction has not commenced at such time. The period of validity may be extended upon petition by the applicant and after adequate notice and public hearing. (P&Z)
- 5. Submit the plat and all applicable easements prior to the Final Site Plan submission. The plat(s) shall be approved prior to or concurrently with the release of the Final Site Plan. (P&Z) (T&ES) \*
- 6. The final subdivision plat and deed of consolidation and plat consolidating Lot 501 of the abutting St. Andrew's property (Map-Block-Lot Number: 040.03-02-17) shall be recorded by June 5, 2022 and a copy of the recorded plat, dedications

and deeds shall be submitted with the first request for a building permit. (P&Z) (T&ES)\*\*

- 7. Coordinate location of all new site utilities with other site conditions to the satisfaction of the Directors of P&Z and T&ES. These items include:
  - a. Location of site utilities including above grade service openings and required clearances for items such as transformers, telephone, HVAC units and cable boxes.
  - b. Minimize conflicts with plantings, pedestrian areas and major view sheds.
  - c. Do not locate above grade utilities in dedicated open space areas and tree wells.
  - d. If applicable, all utilities shall be screened from the public ROW to the satisfaction of the Director of P&Z. (P&Z) (T&ES) (BAR)
- 8. Provide a lighting plan with the Final Site Plan to verify that lighting within the Limits of Disturbance of the project area meet City standards. The plan shall be to the satisfaction of the Directors of T&ES and/or P&Z in consultation with the Chief of Police and shall include the following:
  - a. Clearly show location of all existing and proposed street lights and site lights, shading back less relevant information.
  - b. A lighting schedule that identifies each type and number of all fixtures, mounting height, and strength of fixture in Lumens or Watts.
  - c. Manufacturer's specifications and details for all proposed fixtures including site, landscape, pedestrian, sign(s) and security lighting.
  - d. A photometric plan with lighting calculations that include all existing and proposed light fixtures, including parking lots and sidewalks.
  - e. Photometric site lighting plan shall be coordinated with architectural/building mounted lights, site lighting, street trees and street lights to minimize light spill into adjacent residential areas.
  - f. If site lights are included in the photometric plan to comply with City's lighting standards, then these lights shall be put on photovoltaic switches.
  - g. Detail information indicating proposed light pole and any footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view or light poles shall be direct bury.
  - h. The lighting for the areas not covered by the City of Alexandria's standards shall be designed to the satisfaction of Directors of T&ES and P&Z.
  - i. Provide numeric summary for various areas (i.e., roadway, walkway/ sidewalk, alley, and parking lot, etc.) in the proposed development.
  - j. Upon installation of all exterior light fixtures for the site/building, the applicant shall provide photographs of the site demonstrating compliance with this condition.
  - k. Full cut-off lighting shall be used as applicable at the development site to prevent light spill onto adjacent properties.

    (P&Z) (T&ES) (Police)(BAR)(Code)

- 9. **FORMER CONDITION #27:** Lighting in the parking lot, drop-off loop and walkways shall be maintained to the satisfaction of the Director of T&ES and shall not shine into residential areas. (SUP#2016-0103)
- 10. The existing EVE that runs under the auditorium shall be vacated and the new alignment shall be coordinated during the Final Site Plan and shown on the approved subdivision plat.\*

#### **BUILDING:**

- 11. The building design, including the appearance, color and quality of materials, final detailing, three-dimensional expression shall be consistent with the elevations on the revised drawings submitted August 2020, and which are dated January 2020 and the following conditions. (P&Z)
- 12. Building materials, finishes, and relationships shall be subject to review and approval by the Department of Planning and Zoning for substantial conformance to the Preliminary Plan and as set forth in the associated *Guidelines for Preparations of Mock-Up Panels* Memo to Industry, effective May 16, 2013. The following submissions shall be provided to review the materials, finishes and architectural details, prior to selection of final building materials:
  - a. Provide a materials board that includes all proposed materials and finishes at first Final Site Plan. \*
  - b. The materials board shall remain with the Department of Planning and Zoning until the final certificate of occupancy, upon which all samples shall be returned to the applicant. \*\*\*
  - c. Provide drawings of a mock-up panel that depict all proposed materials, finishes, and relationships as part of the first Final Site Plan. \*
  - d. Construct an on-site, mock-up panel of proposed materials, finishes, and relationships for review and approval prior to final selection of building materials. The mock-up panel requires a building permit and shall be constructed and approved prior to vertical (above-grade) construction and prior to ordering final building materials. \*\*
  - e. The mock-up panel shall be located such that it shall remain on-site in the same location through the duration of construction until the first certificate of occupancy. \*\*\* (P&Z) (Code)
- 13. Pursuant to the City's 2009 Green Building Policy the project shall achieve a green building certification level of LEED Silver or an equivalent within two years of substantial completion of the new addition,. Diligent pursuance and achievement of this certification shall be monitored through the following:
  - a. Provide the project's Design Submission prepared by an Independent Third Party Certifier describing in detail the measures to be taken to achieve compliance with the City's 2009 Green Building Policy with the submission of the first Final Site Plan and provide a draft LEED Scorecard

St. Stephen's and St. Agnes Upper School Expansion showing how the project plans to achieve LEED Silver equivalent. For the purpose of this condition 13, a Design Submission means a summary of the design related documents to note how the project is achieving the LEED requirements for each prerequisite and credit being pursued \*

- b. Provide submission of materials for Design Phase credits, an updated LEED Scorecard, and a verification letter from the Project's Third Party Certifying Consultant to the City prior to issuance of a certificate of occupancy \*\*\*
- c. Provide submission of materials for Construction Phase credits, and updated LEED Scorecard, and an updated verification letter from the Project's Independent Third Party Certifier to the City, within six months of obtaining a final certificate of occupancy.
- d. Provide documentation of certification in the form of a final verification letter from the Project's Independent Third Party Certifier, and final LEED Scorecard for the project within two (2) years of substantial completion of the new addition.
- e. Failure to achieve compliance with the City's 2009 Green Building Policy will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve the certification level, then any City-wide Green Building policies existing at the time of staffs' release of Final Site Plan will apply.
- 14. The applicant shall recycle and/or reuse the existing building materials as part of the demolition process, including leftover, unused, and/or discarded building materials. (T&ES) (P&Z)
- 15. Provide two (2) level-2 electric vehicle charging infrastructure for 2 percent of the required new parking spaces within two (2) years of substantial completion of the new addition.
- 16. In order to provide a more sustainable use of natural resources, the applicant shall use EPA-labeled WaterSense or equivalent low flow fixtures throughout the new building additon. Furthermore, the applicant is encouraged to explore the possibilities of adopting water reduction strategies (such as the use of a gray water system on-site) and other measures that could reduce the consumption of potable water on this location. A list of applicable mechanisms can be found at: <a href="https://www.epa.gov/waterSense">www.epa.gov/waterSense</a>. (T&ES)

#### **OPEN SPACE/LANDSCAPING:**

17. Develop, provide, install and maintain an integrated Landscape Plan for area of the limits of disturbance of the project with the Final Site Plan that is coordinated

with other associated site conditions to the satisfaction of the Director of P&Z. Landscape plans shall be submitted in accordance with the City of Alexandria's Landscape Guidelines, available online at:

 $\underline{www.alexandriava.gov/uploadedFiles/recreation/ParkPlanning/LandscapeGuidelinesFinalv2Final.pdf}$ 

- 18. Provide the following modifications to the landscape plan and supporting drawings:
  - a. Update sheet **L3.03 Product Information** to include all palettes, finishes, lighting and materials to be included with the new addition.
  - b. Provide alternative, non-invasive, ornamental tree, other than the <u>Natchez</u> <u>Crape Myrtle</u> currently proposed.
  - c. Coordinate with staff during the final plan process on replacing the additional trees proposed for demolition as a result of the changes to the limits of disturbance, to the satisfaction of the Director's of P&Z and RP&CA. (P&Z)(RPCA)
- 19. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls, including the retaining wall proposed adjacent to the tandem parking. Indicate methods for grade transitions, handrails if required by code, directional changes, above and below grade conditions. Coordinate with adjacent conditions. Design and construction of all walls shall be to the satisfaction of the Directors of P&Z and T&ES. (P&Z) (T&ES) (Code) \*
- 20. FORMER CONDITION #11 SATISFIED AND DELETED BY STAFF: All landscaping and screening shall be maintained in good condition. (P&Z) (SUP#95-0081) (DSU#99-0007) (SUP#2016-0103)
- 21. **FORMER CONDITION #42**: Any proposed building or structure adjacent to the property lines of 3970, 4000, 4004 Ft. Worth Avenue shall be setback a minimum of one hundred and fifty (150) feet from the property line. (CC) (DS#2000-00049) (SUP#2016-0103)
- 22. FORMER CONDITION AMENDED BY STAFF #43: The applicant Sshall maintain the additional landscaping (mounds and planting), as needed, adjacent to the existing tennis courts, in order to continue screening the parking lot and the headlights of care within the parking and driveway area from the adjacent single family homes on Sharp Place and Ft. Worth Avenue. The landscaping is to be to the satisfaction of the Director of P&Z and the City Landscape Architect. The identififeation of any specific landscaping treatments will be determined during review of the Final Site Plan. take place in cooperation with the affected home owners and in consultation with representations from RP&CA. (PC) (DSUP#2000-00049) (SUP#2016-0103)

### TREE PROTECTION AND PRESERVATION:

23. Provide, implement and follow a *Tree and Vegetation Protection Plan* for area of the limits of disturbance of the project per the 2007 City of Alexandria Landscape Guidelines (P&Z) (RP&CA)

#### PEDESTRIAN/STREETSCAPE:

- 24. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z and T&ES:
  - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
  - b. Construct all concrete sidewalks to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 5 feet for new sidewalks on frontages or around the outside of the site and 5 feet for internal or existing paths.
  - c. Sidewalks shall be flush across all driveway crossings.
  - d. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to current VDOT standardsAll crosswalks shall be standard, 6 inches wide, white thermoplastic parallel lines with reflective material, with 10 feet in width between interior lines. High-visibility crosswalks [white, thermoplastic ladder crosswalks as shown in the Manual on Uniform Traffic Control Devices (MUTCD)] may be required as directed by staff at Final Site Plan. All other crosswalk treatments must be approved by the Director of T&ES. The applicant shall remove the parking space near St. Stephen's Street which is adjacent to an existing sidewalk ramp and upgrade the ramp to be ADA compliant.
- 25. The applicant shall incorporate the ADA improvements the accessible route from the new proposed parking south of the loading docks, and; the sidewalk ramp reconfiguration near St. Stephens Road depicted in the exhibits received via email on 10.1.2020 and 10.14.2020 with first Final Site Plan submission. (P&Z) (T&ES)

#### **PARKING:**

- 26. Parking provided shall be consistent with the requirements of the Zoning Ordinance in effect at the time of approval by City Council and/or Planning Commission. (P&Z) (T&ES)
- 27. Provide 2 ADA accessible parking spaces for the temporary classroom building with an ADA accessible route to the temporary classroom building and temporary dining building entrances. (T&ES)
- 28. For any new parking spaces within the limits of disturbance of the project: Provide wheel stops all 90-degree and angled vehicle parking spaces adjacent to a

sidewalk if the back of the sidewalk distance is less than seven (7) feet from the curb. (T&ES).

- 29. Provide a Parking Management Plan with the Final Site Plan submission. The Parking Management Plan shall be approved by the Departments of P&Z and T&ES prior to the release of the Final Site Plan and comply with the requirements of the Parking Management Plan Template provided in Memo to Industry 01-19. In addition to the requirements of the Memo to Industry, provide plans a narrative of the temporary parking locations and operations during construction. (P&Z) (T&ES)
- 30. Provide 4 additional biycle parking spaces for the additional student generation proposed. Acceptable rack types for short- and long-term parking and details for allowable locations are available at: www.alexandriava.gov/bicycleparking. Details on location and type of bicycle parking shall be provided on the Final Site Plan. Bicycle parking must be installed and operational prior to first CO. (T&ES) \*\*\*

### **B.** TRANSPORTATION

### **STREETS/TRAFFIC:**

- 31. Provide traffic calming such as speed cushion within the designated travel-lanes internal to the site and within the limits of disturbance of the project with the first final site plan submission. Speed Cushions should be no less than 250 FT from each other and no less than 150 FT from a curved alignment.
- 32. If the City's existing public infrastructure is damaged during construction, or patch work required for utility installation then the applicant shall be responsible for construction/ installation or repair of the same as per the City of Alexandria standards and specifications and to the satisfaction of Director, Transportation and Environmental Services. (T&ES)
- 33. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction & Inspection staff and Code Administration staff to document existing conditions prior to any land disturbing activities. (T&ES) (Code)
- 34. Show turning movements of standard vehicles in the parking structure and/or parking lots. Show turning movement of school buses maneuvering throughout the site. Show turning movements of the largest delivery vehicle projected to use the loading dock. Turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. (T&ES)
- 35. A Circulation Plan for student drop-off and pick-up during and post-construction shall be included with the Final Site Plan. This Plan should include the route and

designated drop-off/pick up areas for bus and passenger vehicles, as well as any queuing area. In addition, the plan shall include staffing and/or personnel's locations that would offer assistance during these times. If conditions on in accordance to the Circulation Plan prove to interfere with acceptable drop-off and pick-up operation, staff should adjust plans as appropriate in an effort to improve operation. (T&ES)

36. Asphalt patches larger than 20% of the total asphalt surface, measured along the length of the road adjacent to the property frontage and/or extending to the centerline of the street, will require full curb to curb restoration. (T&ES)

### C. PUBLIC WORKS

### **UTILITIES:**

37. Locate all private utilities without a franchise agreement outside of the public right-of-way and public utility easements. (T&ES)

#### **SOLID WASTE:**

- 38. **FORMER CONDITION #15:** School grounds staff shall police and control trash and litter from students on school grounds. (P&Z) (SUP#2016-0103)
- 39. **FORMER CONDITION #16:** Garbage, trash and litter generated by the school shall be collected Monday through Friday. (P&Z) (SUP#2016-0103)

### D. ENVIRONMENTAL

### **STORMWATER MANAGEMENT:**

- 40. The City of Alexandria's stormwater management regulations regarding water quality are two-fold: 1) state phosphorus removal requirement and 2) Alexandria Water Quality Volume Default. Compliance with the state phosphorus reduction requirement does not relieve the applicant from the Alexandria Water Quality Default requirement. The Alexandria Water Quality Volume Default, as determined by the site's post-development impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
- 41. Provide BMP narrative and complete pre and post development drainage maps that include areas outside that contribute surface runoff from beyond project boundaries to include adequate topographic information, locations of existing and proposed storm drainage systems affected by the development, all proposed BMPs and a completed Virginia Runoff Reduction Method (VRMM) worksheet showing project compliance. The project must use hydrologic soil group "D" in the spreadsheet unless a soils report from a soil scientist or geotechnical engineer delineates onsite soils otherwise. (T&ES)

- 42. All stormwater Best Management Practices (BMPs) must be designed to comply with the most recent standards and specifications published in the Virginia Stormwater BMP Clearinghouse. Provide complete design details for all BMPs. This includes site specific plan views, cross sections, planting plans, and complete design calculations for each BMP. (T&ES)
- 43. Provide a BMP table with a separate listing for each individual BMP that includes the name of the practice, total area treated (acres), pervious area treated (acres), impervious area treated (acres), phosphorous removal efficiency (percentage), phosphorous removal efficiency (percentage), phosphorous removed by the practice (lbs.), and latitude and longitude in decimal degrees (NAD83). (T&ES)
- 44. All areas designated on the site plan as temporary limits of disturbance must be returned to existing conditions at the time of site plan approval immediately upon completion of the project. (T&ES)
- 45. Construction inspection checklists and associated photographic documentation must be completed for each stormwater best management practice (BMP) and detention facility during construction. Prior to the release of the performance bond, the applicant must submit all documents required by *The City of Alexandria As-Built Stormwater Requirements* to the City including as built plans, CAD data, BMP certifications and completed construction inspection checklists. (T&ES)
- 46. The stormwater Best Management Practices (BMPs) required for this project shall be constructed and installed under the direct supervision of the design professional or his designated representative. Prior to release of the performance bond, the design professional shall submit a written certification to the Director of T&ES that the BMPs are:
  - a. Constructed and installed as designed and in accordance with the released Final Site Plan.
  - b. Clean and free of debris, soil, and litter by either having been installed or brought into service after the site was stabilized. (T&ES) \*\*\*\*
- 47. Surface-installed stormwater Best Management Practice (BMP) measures, i.e. Bio-Retention Filters, Vegetated Swales, etc. that are employed for this site, require installation of descriptive signage to the satisfaction of the Director of T&ES. (T&ES)
- 48. Submit two (2) originals of the stormwater quality BMP Maintenance Agreement, to include the BMP Schedule and Guidelines Addendum with the City to be reviewed as part of the Final #2 Plan. The agreement must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the Final Site Plan. (T&ES) \*

- 49. The Applicant/Owner shall be responsible for installing and maintaining stormwater Best Management Practices (BMPs). The Applicant/Owner shall execute a maintenance service contract with a qualified private contractor for a minimum of three (3) years and develop an Owner's Operation and Maintenance Manual for all Best Management Practices (BMPs) on the project. The manual shall include at a minimum: an explanation of the functions and operations of the BMP(s); drawings and diagrams of the BMP(s) and any supporting utilities; catalog cuts on maintenance requirements including mechanical or electrical equipment; manufacturer contact names and phone numbers; a copy of the executed maintenance service contract; and a copy of the maintenance agreement with the City. A copy of the contract shall also be placed in the BMP Operation and Maintenance Manual. Prior to release of the performance bond, a copy of the maintenance contract shall be submitted to the City. (T&ES) \*\*\*\*
- 50. Submit a copy of the Operation and Maintenance Manual to the T&ES Stormwater Management Division on digital media prior to release of the performance bond. (T&ES) \*\*\*\*
- 51. Prior to release of the performance bond, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing stormwater management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations. If maintenance of the facility or systems were required in order to make this certification, provide a description of the maintenance measures performed. (T&ES) \*\*\*\*
- 52. FORMER CONDITION #31 SATISFIED AND DELETED BY STAFF: The Applicant shall comply with the peak flow requirements of Article XIII of the City's Zoning Ordinance. (T&ES) (DSUP#2000-0049) (SUP#2016-0103)
- 53. FORMER CONDITION #34 SATISFIED AND DELETED BY STAFF: Plan must demonstrate to the satisfaction of the Director of T&ES that adequate stormwater outfall is available to the site or else developer of to design and build any on of off site improvements to discharge to an adequate outfall. (T&ES) (DSUP#2000-00004) (SUP#2016-0103)

#### WATERSHED, WETLANDS, & RPAs:

- 54. The stormwater collection system is located within the Cameron Run watershed. All on-site stormwater curb inlets and public curb inlets within 50 feet of the property line shall be duly marked using standard City markers, or to the satisfaction of the Director of T&ES. (T&ES)
- 55. Provide Environmental Site Assessment Notes that clearly delineate the individual components of the RPA (where applicable) as well as the total geographic extent of the RPA, to include the appropriate buffer, in a method

approved by the Director of Transportation and Environmental Services. The Environmental Site Assessment shall also clearly describe, map or explain intermittent streams and associated buffer; highly erodible and highly permeable soils; steep slopes greater than 15 percent in grade; known areas of contamination; springs, seeps or related features; and a listing of all wetlands permits required by law. (T&ES)

### **CONTAMINATED LAND:**

- 56. Indicate whether there is any known soil and groundwater contamination present on the plan. The applicant must submit supporting reports for associated environmental investigations or assessments performed to substantiate this determination. (T&ES)
- 57. If environmental site assessments or investigations discover the presence of contamination on site, the final [site plan/demo plan/grading plan] shall not be released, and no construction activity shall take place until the following has been submitted and approved by the Director of T&ES:
  - a. Submit a Site Characterization Report/Extent of Contamination Study detailing the location, applicable contaminants, and the estimated quantity of any contaminated soils and/or groundwater at or in the immediate vicinity of the site.
  - b. Submit a Risk Assessment indicating any risks associated with the contamination.
  - c. Submit a Remediation Plan detailing how any contaminated soils and/or groundwater will be dealt with, including plans to remediate utility corridors. Utility corridors in contaminated soil shall be over excavated by 2 feet and backfilled with "clean" soil. Include description of environmentally sound methods of off-site transport and disposal of contaminated soils and debris (including, but not limited to types of vehicles appropriate for handling specific materials and ensuring vehicle loads are covered).
  - d. Submit a Health and Safety Plan indicating measures to be taken during remediation and/or construction activities to minimize the potential risks to workers, the neighborhood, and the environment. Initial Air Monitoring may be required during site activities to demonstrate acceptable levels of volatiles and/or airborne particles. The determination whether air monitoring is needed must be adequately addressed in the Health and Safety Plan submitted for review.
  - e. The applicant shall screen for PCBs as part of the site characterization if any of the past uses are within the identified high risk category sites for potential sources of residual PCBs, which includes the following SICs: 26&27 (Paper and Allied Products), 30 (Rubber and Misc. Plastics), 33 (Primary Metal Industries), 34 (Fabricated Metal Products), 37 (Transportation Equipment), 49 (Electrical, Gas, and Sanitary Services), 5093 (Scrap Metal Recycling), and 1221&1222 (Bituminous Coal).

- f. Applicant shall submit three (3) electronic and two (2) hard copies of the above. The remediation plan must be included in the Final Site Plan. (T&ES) \*
- 58. Should any unanticipated contamination, underground storage tanks, drums or containers be encountered at the site during construction, the Applicant must immediately notify the City of Alexandria Department of Transportation and Environmental Services, Office of Environmental Quality. Should unanticipated conditions warrant, construction within the impacted area shall be stopped until the appropriate environmental reports identified in a. through f. above are submitted and approved at the discretion of the Director of Transportation and Environmental Services. This shall be included as a note on the Final Site Plan. (T&ES) (Code)
- 59. If warranted by a Site Characterization report, design and install a vapor barrier and ventilation system for buildings and parking areas in order to prevent the migration or accumulation of methane or other gases, or conduct a study and provide a report signed by a professional engineer showing that such measures are not required to the satisfaction of Directors of T&ES and Code Administration. The installed vapor barrier and ventilation system must include a passive ventilation system that can be converted to an active ventilation system if warranted. (T&ES)

### **SOILS:**

60. Provide a geotechnical report, including recommendations from a geotechnical professional for proposed cut slopes and embankments. (T&ES)

### **NOISE:**

- 61. The temporary class room trailers and the HVAC equipment for these trailers shall have appropriate noise attenuation measures so as not to create a noise issue for surrounding residences.
- 62. FORMER CONDITION #8 AMENDED BY STAFF: All exterior building-mounted loudspeakers shall be prohibited, with the exception of those speakers intended solely for the broadcasting of emergency information, and no No music or amplified sound shall be heard audible at the property line between the hours of after 9:00PM and 7:00AM. At other times, amplified sound shall be operated so as to minimize the impact of sound on adjoining property owners and used in strict accordance with the City of Alexandria's Noise Ordinance. (T&ES) (PC) (SUP#2016-0103)
- 63. Supply deliveries, loading, and unloading activities shall not occur between the hours of 11:00pm and 7:00am. (T&ES)

- 64. **FORMER CONDITION #17:** The applicant shall have a school employee or contract employee monitor all parking areas after late evening events in or to keep down the noise level by students and visitors. (P&Z) (SUP#95-0081) (DSUP#99-0007)
- 65. **FORMER CONDITION #22 AMENDED BY STAFF:** All roof-top heating, ventilation & air conditioning HVAC equipment, shall remain located away from the adjacent residential properties and screened to the satisfaction of the Director of T&ES. All new permanent roof-top and outdoor HVAC, emergency generator and other mechanical equipment shall be enclosed by appropriate noise reduction enclosures to the satisfaction of the Director of T&ES.
- 66. No vehicles associated with this project shall be permitted to idle for more than 10 minutes when parked. This includes a prohibition on idling for longer than 10 minutes in the loading dock area. The applicant shall post of minimum of two no idling for greater than 10 minutes signs in the loading dock area in plain view. (T&ES)
- 67. FORMER CONDITION # 5: The use of any kind of sound system on the soccer field is prohibited. (CC) (SUP#2016-0103) (SUP#1234) (SUP#95-0081) (DSUP#99-0007)
- 68. **FORMER CONDITION #6:** The applicant shall not enlarge the existing bleachers on the athletic field. (P&Z) (SUP#2016-0103)
- 69. **FORMER CONDITION #7:** No sports activities are permitted o the athletic field after 9:00PM nightly. (P&Z) (SUP#2016-0103)

### **AIR POLLUTION:**

- 70. Kitchen equipment shall not be cleaned outside, nor shall any cooking residue be washed into any street, alley, or storm sewer. (T&ES)
- 71. No material may be disposed of by venting into the atmosphere. (T&ES)
- 72. Control odors and any other air pollution sources resulting from operations at the site and prevent them from leaving the property or becoming a nuisance to neighboring properties, as determined by the Director of Transportation and Environmental Services. (T&ES)

### E. CONSTRUCTION MANAGEMENT

73. Submit a construction phasing plan to the satisfaction of the Director of T&ES, for review, approval and partial release of Erosion and Sediment Control for the Final Site Plan. All the requirements of Article XIII Environmental Management Ordinance for quality improvement, quantity control, and the development of

Storm Water Pollution Prevention Plan (SWPPP) must be complied with prior to the partial release of the site plan. (T&ES) \*

- 74. Submit a separate construction management plan to the Directors of P&Z, T&ES and Code Administration prior to Final Site Plan release. The plan shall:
  - a. No street lights shall be removed without authorization from the City of Alexandria.
  - b. If street lights are to be removed from the public right of way, then temporary lights shall be provided until the installation and commissioning of new lights.
  - c. Include an analysis as to whether temporary street or site lighting is needed for safety during the construction on the site and how it is to be installed.
  - d. Provide a detailed sequence of demolition and construction of improvements in the public right of way along with an overall proposed schedule for demolition and construction;
  - e. Include an overall proposed schedule for construction;
  - f. Include a plan for temporary pedestrian circulation;
  - g. Include the location and size of proposed construction trailers, if any;
  - h. Include a preliminary Maintenance of Traffic Plan (MOT) as part of the construction management plan for informational purposes only, to include proposed controls for traffic movement, lane closures, construction entrances and storage of materials.
  - i. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work. (P&Z) (T&ES)
- 75. Provide off-street parking for all construction workers without charge to the construction workers. The applicant shall be responsible for ensuring that all contractors use the off-street parking provided. For the construction workers who use Metro, DASH, or another form of mass transit to the site, the applicant shall subsidize a minimum of 50% of the fees for mass transit. Compliance with this condition shall be a component of the construction management plan, which shall be submitted to the Department of P&Z and T&ES prior to Final Site Plan release. This plan shall:
  - a. Establish the location of the parking to be provided at various stages of construction, how many spaces will be provided, how many construction workers will be assigned to the work site, and mechanisms which will be used to encourage the use of mass transit.
  - b. Provide for the location on the construction site at which information will be posted regarding Metro schedules and routes, bus schedules and routes.
  - c. If the off-street construction workers parking plan is found to be violated during construction, a correction notice will be issued to the developer. If the violation is not corrected within five (5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. (P&Z) (T&ES) \*

- 76. Sidewalks adjacent to the site shall remain open during construction. If sidewalks must be closed, pedestrian access shall be maintained adjacent to the site per Memo to Industry #04-18 throughout the construction of the project. The plan for maintenance of pedestrian access shall be included in the Construction Management Plan for approval by T&ES. (T&ES)
- 77. No major construction staging shall be allowed within the public right-of-way. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. (T&ES) \*\*
- 78. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Infrastructure Right of Way prior to any land disturbing activities. If the CLD changes during the project, that change must be noted in a letter to the Division Chief. A note to this effect shall be placed on the Phase I Erosion and Sediment Control sheets on the site plan. (T&ES)
- 79. Prior to commencing clearing and grading of the site, the applicant shall hold a meeting with notice to all adjoining property owners and civic associations to review the location of construction worker parking, plan for temporary pedestrian and vehicular circulation, and hours and overall schedule for construction. The Departments of P&Z and T&ES shall be notified a minimum of 14 calendar days prior to the meeting date, and the meeting must be held before any permits are issued. (P&Z) (T&ES)
- 80. Prior to commencement of landscape installation/planting operations, a preinstallation/construction meeting will be scheduled with the project planner in the Department of P&Z to review the scope of installation procedures and processes. This is in addition to the pre-construction meeting required above. (P&Z)
- 81. Identify a person who will serve as a liaison to the community throughout the duration of construction. The name and telephone number, including an emergency contact number, of this individual shall be provided in writing to residents, property managers and business owners whose property abuts the site and shall be placed on the project sign, to the satisfaction of the Directors of P&Z, and/or and T&ES. (P&Z) (T&ES)
- 82. Install a temporary informational sign on the site prior to approval of the Final Site Plan for the project. The sign shall notify the public of the nature of the project and shall include the name and telephone number of the community liaison, including an emergency contact number for public questions regarding the project. The sign shall be displayed until construction is complete. (P&Z) (T&ES)
- 83. Implement a waste and refuse control program during the construction phase of this development. This program shall control wastes such as discarded building materials, concrete truck washout, chemicals, litter or trash, trash generated by

construction workers or mobile food vendor businesses serving them, and all sanitary waste at the construction site and prevent offsite migration that may cause adverse impacts to neighboring properties or to the environment to the satisfaction of Directors of T&ES and Code Administration. All wastes shall be properly disposed offsite in accordance with all applicable federal, state and local laws. Provide information on the program in construction management plan. If program is implemented in coordination with green building certification, include documentation as appropriate per the City's Green Building Policy and conditions herein. (T&ES)

- 84. Temporary construction and/or on-site sales trailer(s) shall be permitted and be subject to the approval of the Director of P&Z. The trailer(s) shall be removed prior to the issuance of a final certificate of occupancy permit. (P&Z) (Code) \*\*\*
- 85. Submit a wall check prior to the commencement of construction of the first floor above grade framing for the building(s). The wall check shall include the building footprint, as depicted in the released Final Site Plan, the top-of-slab elevation and the first-floor elevation. The wall check shall be prepared and sealed by a registered engineer or surveyor and submitted to Planning & Zoning. Approval of the wall check by Planning & Zoning is required prior to commencement of framing. (P&Z)
- 86. Submit an as-built development site plan survey, pursuant to the requirements outlined in the initial as-built submission for occupancy portion of the as-built development site plan survey checklist to the Department of Transportation and Environmental Services Site Plan Coordinator prior to requesting a certificate of occupancy permit. The as-built development site plan survey shall be prepared and sealed by a registered architect, engineer, or surveyor. Include a note which states that the height was calculated based on all applicable provisions of the Zoning Ordinance. (P&Z) (T&ES) \*\*\*
- 87. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
- 88. If there are outstanding performance, completion or other bonds for the benefit of the City in effect for the property at such time as it may be conveyed or sold to a party other than the applicant, a substitute bond and associated documents must be provided by that party or, in the alternative, an assignment or other documentation from the bonding company indicating that the existing bond remains in effect despite the change in ownership may be provided. The bond(s) shall be maintained until such time that all requirements are met, and the bond(s) released by the City. (T&ES)

# F. USES AND SIGNS

## **USES:**

- 89. **FORMER CONDITION #2**: The special use permit shall be granted to the applicant only or to any business or entity in which the applicant has a controlling interest. (SUP#2016-0103).
- 90. FORMER CONDITION #3 AMENDED BY STAFF: Student enrollment shall be limited to four hundred eighty (480) five-hundred and twenty (520) students. (PC) (SUP#2016-0103)
- 91. **FORMER CONDITION #12:** Use of the proposed auditorium building shall be limited to St. Stephen's and St. Agnes school related activities, including, but not limited to, academic, religious, and cultural uses, as requested by the applicant. The proposed auditorium building shall not be rented or used for commercial activities. (P&Z) (PC) (SUP#95-0081) (DSUP#99-0007) (SUP#2016-0103)
- 92. **FORMER CONDITION #13:** Evening uses of the proposed auditorium shall end no later than 11:00PM. (SUP#95-0082) (DSUP#99-0007) (SUP#2016-0103)
- 93. FORMER CONDITION #14 AMENDED BY STAFF: St. Stephen's and St. Agnes school will notify the President of the Seminary Ridge at Civic Association at least thirty (30) day prior to all scheduled evening activities in the proposed auditorium building, and will not schedule the use of the auditorium building on evenings on which other activities are scheduled on the upper school campus. (PC) (SUP#95-0082) (DSUP#99-0007) (SUP#2016-0103)
- 94. FORMER CONDITION #23 SATISFIED AND DELETED: All trash dumpsters shall be screened from adjacent properties to the satisfaction of the Director of P&Z. (P&Z) (SU#95-0081) (DSUP#99-0007) (SUP#2016-0103)
- 95. **FORMER CONDITION #45:** The applicant shall encourage its employees who drive to use off-street parking. (T&ES) (SUP#2016-0103)
- 96. **FORMER CONDITION #46:** The applicant shall encourage its employees to use public transportation to travel to and from work. The business shall contact Go Alex at <a href="mailto:goalex@alexandriava.gov">goalex@alexandriava.gov</a> for information on establishing an employee transportation benefits program. (T&ES)
- 97. **FORMER CONDITION #47:** The applicant shall provide information about alternative forms of transportation to access the site, including but not limited to printed and electronic business promotional material, posting on the business website, and other similar methods. Contact Go Alex at **goalex@alexandriava.gov** for more information about available resources. (T&ES)

## **SIGNAGE:**

- 98. Design and develop a sign plan for wayfinding and directional signage. The plan shall be included as part of the Final Site Plan and shall coordinate the location, scale, massing and character of all proposed signage to the satisfaction of the Director of T&ES. Installation of building mounted signage shall not damage the building and signage shall comply with all applicable codes and ordinances \* (T&ES)
- 99. Any freestanding monument signage must comply with Article IX of the Zoning Ordinance. Adjacent plantings should be coordinated with the proposed sign. (P&Z)

# IX. CITY DEPARTMENT CODE COMMENTS

Legend: C - Code Requirement R - Recommendation S - Suggestion F - Finding

# Planning and Zoning (P&Z)

- C 1 As-built documents for all landscape and irrigation installations are required to be submitted with the Site as-built and request for Performance Bond release. Refer to City of Alexandria Landscape Guidelines, Section III A & B. (P&Z) (T&ES) \*\*\*\*
- C 2 Tree conservation and protection plans shall identify all trees to be removed, and all trees to be protected / preserved. Construction methods to reduce disturbance within driplines shall also be identified. An on-site inspection of existing conditions shall be held with the City Arborist and Natural Resources Division Staff prior to the preparation of the Tree Conservation and Protection Plan.
- C 3 The landscape elements of this development shall be subject to the Performance and Maintenance bonds, based on criteria established by the City and available through T&ES. Release of Performance and Maintenance Bonds are subject to inspections by City staff per City Code requirements. A final inspection for landscaping is also required three (3) years after completion. (P&Z) (T&ES) \*\*\*\*
  - No permits shall be issued prior to the release of the Certificate of Appropriateness from the Board of Architectural Review. (BAR)
- C 4 Internally illuminated box signs are prohibited. (P&Z)

# **Code Administration (Building Code)**

- F 1 The review by Code Administration is a preliminary review only. Once the applicant has filed for a building permit, code requirements will be based upon the building permit plans. A preconstruction conference is recommended for large projects. If there are any questions, the applicant may contact the Code Administration Office, Plan Review Supervisor at 703-746-4200.
- C 1 New construction or alterations to existing structures must comply with the current edition of the Uniform Statewide Building Code (USBC).
- C 2 The developer shall provide a building code analysis with the following building code data on the plan: a) use group; b) number of stories; c) type of construction; d) total floor area per floor; e) height of structure f) non-separated or separated mixed use g) fire protection system requirements.
- C 3 A soils report must be submitted with the building permit application for all new and existing building structures.

- C 4 The most restrictive type of construction shall apply to the structure for height and area limitations for non-separated uses.
- C 5 Where required per the current edition Virginia Uniform Statewide Building Code exits, parking, and facilities shall be accessible for persons with disabilities.
- C 6 All proposed buildings where an occupied floor exceeds 75 feet above the lowest level of fire department vehicle access shall meet the Virginia Uniform Statewide Building Code for HIGH-RISE buildings.
- C 7 Prior to the issuance of a demolition permit or land disturbance permit, a rodent abatement plan shall be submitted to the Department of Code Administration that will outline the steps that will be taken to prevent the spread of rodents from the construction site to the surrounding community and sewers.
- C 8 Sheeting and shoring shall not extend beyond the property line; except when the developer has obtained a written release from adjacent property owners which has been recorded in the land records; or through an approved encroachment process.
- C 9 A wall location plat prepared by a land surveyor is required to be submitted to the Department of Code Administration prior to any building framing inspection.

# **Archaeology**

- F 1 The school is near a Civil War rifle pit line that connected Fort Ward on the north with Fort Worth to the south. A small portion of the rifle pit crosses the school property on its northeast. Since this proposed project will impact the southwest section of the school property, it is unlikely that significant archaeological resources will be impacted. Nevertheless, the school property in general continues to retain the potential to yield archaeological information that pertains to the occupation of Alexandria during the Civil War.
- R 1. The applicant/developer shall call Alexandria Archaeology immediately (703-746-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of historic or prehistoric artifacts are discovered during development. Work must cease in the area of the discovery until a City archaeologist comes to the site and records the finds.
- R 2. \*The applicant/developer shall not allow any metal detection to be conducted on the property, unless authorized by Alexandria Archaeology.
- R 3. \*All required archaeological preservation measures shall be completed in compliance with Section 11-411 of the Zoning Ordinance.
- R 4. The statements in archaeology conditions above marked with an asterisk (\*) shall appear in the General Notes of all site plans and on grading plans so that on-site contractors are

aware of the requirements.

### Transportation and Environmental Services (T&ES)

- F 1 Since the record drawings, maps, and other documents of the City of Alexandria, State, and Federal agencies show the true north pointing upwards, therefore, the Site Plan shall show the true north arrow pointing upward as is customary; however, for the sake of putting the plan together and/or ease of understanding, the project north arrow pointing upward, preferably east, or west may be shown provided it is consistently shown in the same direction on all the sheets with no exception at all. The north arrow shall show the source of meridian. The project north arrow pointing downward will not be acceptable even if, it is shown consistently on all the sheets. (T&ES)
- F 2 The Final Site Plan must be prepared per the requirements of Memorandum to Industry 02-09 dated December 3, 2009, Design Guidelines for Site Plan Preparation, which is available at the City's website: http://alexandriava.gov/uploadedFiles/tes/info/Memo%20to%20Industry%20No.%2002-09%20December%203,%202009.pdf
- F 3 The plan shall show sanitary and storm sewer, and water line in plan and profile in the first final submission and cross reference the sheets on which the plan and profile is shown, if plan and profile is not shown on the same sheet. Clearly label the sanitary and storm sewer, or water line plans and profiles. Provide existing and proposed grade elevations along with the rim and invert elevations of all the existing and proposed sanitary and storm sewer at manholes, and water line piping at gate wells on the respective profiles. Use distinctive stationing for various sanitary and storm sewers (if applicable or required by the plan), and water line in plan and use the corresponding stationing in respective profiles. (T&ES)
- F 4 The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F 5 Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F 6 All storm sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter for storm sewers shall be 18" in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead is 15". The acceptable pipe materials will be Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. Alternatively, AWWA C-151 (ANSI A21.51) Class 52 may be used if approved by the Director of T&ES. For roof drainage system, Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps and 15 fps, respectively. The storm sewers immediately upstream of the first manhole in the public Right of Way shall be owned and maintained privately (i.e., all storm drains not shown within an easement or in a public Right of Way shall be owned and maintained privately). (T&ES)

- F 7 All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10 inches in the public Right of Way and sanitary lateral 6 inches for all commercial and institutional developments; however, a 4-inch sanitary lateral will be acceptable for single family residences. The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM D-3034-77 SDR 26, ASTM 1785-76 Schedule 40, Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52, or reinforced concrete pipe ASTM C-76 Class IV (For 12 inch or larger diameters); Class III may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Laterals shall be connected to the sanitary sewer through a manufactured "Y" or "T" or approved sewer saddle. Where the laterals are being connected to existing Terracotta pipes, replace the section of main and provide manufactured "Y" or "T", or else install a manhole. (T&ES)
- F 8 Lateral Separation of Sewers and Water Mains: A horizontal separation of 10 feet (edge to edge) shall be provided between a storm or sanitary sewer and a water line; however, if this horizontal separation cannot be achieved then the sewer and water main shall be installed in separate trenches and the bottom of the water main shall be at least 18 inches above of the top of the sewer. If both the horizontal and vertical separations cannot be achieved, then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 and pressure tested in place without leakage prior to installation. (T&ES)
- F 9 Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary / storm sewer then the vertical separation between the bottom of one (i.e., sanitary / storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18 inches for sanitary sewer and 12 inches for storm sewer; however, if this cannot be achieved then both the water main and the sanitary / storm sewer shall be constructed of Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 with joints that are equivalent to water main standards for a distance of 10 feet on each side of the point of crossing. A section of water main pipe shall be centered at the point of crossing and the pipes shall be pressure tested in place without leakage prior to installation. Sewers crossing over the water main shall have adequate structural support (concrete pier support and/or concrete encasement) to prevent damage to the water main. Sanitary sewers under creeks and storm sewer pipe crossings with less than 6-inch clearance shall be encased in concrete. (T&ES)
- F 10 No water main pipe shall pass through or come in contact with any part of sanitary / storm sewer manhole. Manholes shall be placed at least 10 feet horizontally from the water main whenever possible. When local conditions prohibit this horizontal separation, the manhole shall be of watertight construction and tested in place. (T&ES)
- F 11 Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12 inches of separation or clearance with water main, sanitary, or storm sewers. If this separation cannot be achieved, then the sewer pipe material shall be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 for a distance of 10 feet on each side of the point of crossing

- and pressure tested in place without leakage prior to installation. Sanitary / storm sewers and water main crossing over the utilities shall have adequate structural support (pier support and/or concrete encasement) to prevent damage to the utilities. (T&ES)
- F 12 Any rip rap shall be designed as per the requirements of Virginia Erosion and Sediment Control Handbook, Latest Edition. (T&ES)
- F 13 Dimensions of parking spaces, aisle widths, etc. within the parking garage shall be provided on the plan. Note that dimensions shall not include column widths. (T&ES)
- F 14 Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains. (T&ES)
- F 15 Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F 16 All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F 17 A Maintenance of Traffic Plan shall be provided within the Construction Management Plan and shall replicate the existing vehicular and pedestrian routes as nearly as practical. Pedestrian and bike access shall be maintained adjacent to the site per Memo to Industry #04-18. These sheets are to be provided as "Information Only." (T&ES)
- F 18 The following notes shall be included on all Maintenance of Traffic Plan Sheets: (T&ES)
  - a. The prepared drawings shall include a statement "FOR INFORMATION ONLY" on all MOT Sheets.
  - b. Sidewalk closures will not be permitted for the duration of the project. Temporary sidewalk closures are subject to separate approval from Transportation and Environmental Services (T&ES) at the time of permit application.
  - c. Contractor shall apply for all necessary permits for uses of the City Right of Way and shall submit MOT Plans with the T&ES Application for final approval at that time. \*
- F 19 Update the complete streets tabulation on the cover sheet with the Final 1 submission. (T&ES)
- C 1 Per the requirements of the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a drainage study and adequate outfall analysis for the total drainage area to the receiving sewer that serves the site. If the existing storm system is determined to be inadequate, then the applicant shall design and build on-site or off-site improvements to discharge to an adequate outfall; even if the post development stormwater flow from the site is reduced from the pre-development flow. The Plan shall demonstrate to the satisfaction of the Director of T&ES that a non-erosive stormwater outfall is present. (T&ES)

- C 2 Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, Environmental Management Ordinance, the applicant shall comply with the stormwater quality and quantity requirements and provide channel protection and flood protection in accordance with these requirements. If combined uncontrolled and controlled stormwater outfall is proposed, the peak flow requirements of the Zoning Ordinance shall be met. If the project site lies within the Braddock-West watershed or known flooding area, then the applicant shall provide an additional 10 percent storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C 3 Per the requirements of Article 13-114 (f) of the AZO, all stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and stormwater flow conveyance systems shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. The design of storm sewer shall include the adequate outfall, inlet, and hydraulic grade line (HGL) analyses that shall be completed to the satisfaction of the Director of T&ES. Provide appropriate reference and/or source used to complete these analyses. (T&ES)
- C 4 If it is determined that the site is not in compliance with Section 13-1-3 of the City Code, then the applicant shall make additional improvements to adjust lighting levels to the satisfaction of the Director of T&ES to comply with the Code. (T&ES)
- C 5 Location of customer utility services and installation of transmission, distribution and main lines in the public rights of way by any public service company shall be governed by franchise agreement with the City in accordance with Title 5, Chapter 3, Section 5-3-2 and Section 5-3-3, respectively. The transformers, switch gears, and boxes shall be located outside of the public right of way. (T&ES)
- C 6 (a) Per the requirements of Section 5-3-2, Article A, Chapter 3 of the City of Alexandria Code, all new customer utility services, extensions of existing customer utility services and existing overhead customer utility services supplied by any existing overhead facilities which are relocated underground shall, after October 15, 1971 be installed below the surface of the ground except otherwise exempted by the City Code and to the satisfaction of the Director, Department of Transportation and Environmental Services. (b) Per the requirements of Section 5-3-3, Article A, Chapter 3 of the City of Alexandria Code, all new installation or relocation of poles, towers, wires, lines, cables, conduits, pipes, mains, and appurtenances used or intended to be used to transmit or distribute any service such as electric current, telephone, telegraph, cable television, traffic control, fire alarm, police communication, gas, water, steam or petroleum, whether or not on the streets, alleys, or other public places of the City shall, after October 15, 1971, be installed below the surface of the ground or below the surface in the case of bridges and elevated highways except otherwise exempted by the City Code and to the satisfaction of Director, Department of Transportation and Environmental Services. (T&ES)
- C 7 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to Industry 05-14 that is available on the City of Alexandria's web site. The downspouts and sump pump discharges shall be

piped to the storm sewer outfall, where applicable after treating for water quality as per the requirements of Article XIII of Alexandria Zoning Ordinance (AZO). (T&ES)

- C-8 CODE REQUIREMENT REMOVED BY STAFF (DSUP#2018-0030): In compliance with Title 5: Transportation and Environmental Services, Section 5-1-2(12b) of the City Charter and Code, the City of Alexandria shall provide solid waste collection services to the condominium townhomes portion of the development. All refuse / recycling receptacles shall be placed at the City Right-of-Way. (T&ES)
- C 9 Per the requirements of Title 4, Chapter 2, Article B, Section 4-2-21, Appendix A, Section A 106(6), Figure A 106.1 Minimum Standards for Emergency Vehicle Access: provide a total turning radius of 25 feet to the satisfaction of Directors of T&ES and Office of Building and Fire Code Administration and show turning movements of standard vehicles in the parking lot as per the latest AASHTO vehicular guidelines. (T&ES)
- C 10 The applicant shall provide required storage space for both trash and recycling materials containers as outlined in the City's "Solid Waste and Recyclable Materials Storage Space Guidelines", or to the satisfaction of the Director of Transportation & Environmental Services. The plan shall show the turning movements of the collection trucks and the trucks shall not back up to collect trash or recycling. The City's storage space guidelines are available online at: www.alexandriava.gov/solidwaste or by contacting the City's Solid Waste Division at 703-746-4410, or via email at commercialrecycling@alexandriava.gov. (T&ES)
- C 11 The applicant shall be responsible to deliver all solid waste, as defined by the City Charter and Code of the City of Alexandria, to the Covanta Energy Waste Facility located at 5301 Eisenhower Avenue. A note to that effect shall be included on the plan. The developer further agrees to stipulate in any future lease or property sales agreement that all tenants and/or property owners shall also comply with this requirement. (T&ES)
- C 12 The applicants shall submit a Recycling Implementation Plan (RIP) form to the Solid Waste Division, as outlined in Article H of Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle. Instructions for how to obtain a RIP form can be found at: <a href="www.alexandriava.gov/solidwaste">www.alexandriava.gov/solidwaste</a> or by calling the Solid Waste Division at 703.746.4410 or by e-mailing <a href="mailto:CommercialRecycling@alexandriava.gov">CommercialRecycling@alexandriava.gov</a>. (T&ES)
- C 13 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C 14 Bond for the public improvements must be posted prior to release of the site plan. (T&ES)\*
- C 15 Plans and profiles of utilities and roads in public easements and/or public Right of Way must be approved prior to release of the plan. (T&ES) \*

- C 16 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (T&ES)
- C 17 Per the Memorandum to Industry, dated July 20, 2005, the applicant is advised regarding a requirement that applicants provide as-built sewer data as part of the final as-built process. Upon consultation with engineering firms, it has been determined that initial site survey work and plans will need to be prepared using Virginia State Plane (North Zone) coordinates based on NAD 83 and NAVD 88. Control points/Benchmarks which were used to establish these coordinates should be referenced on the plans. To ensure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (T&ES)
- C 18 The thickness of sub-base, base, and wearing course shall be designed using "California Method" as set forth on page 3-76 of the second edition of a book entitled, "Data Book for Civil Engineers, Volume One, Design" written by Elwyn E. Seelye. Values of California Bearing Ratios used in the design shall be determined by field and/or laboratory tests. An alternate pavement section for Emergency Vehicle Easements (EVE) to support H-20 loading designed using California Bearing Ratio (CBR) determined through geotechnical investigation and using Virginia Department of Transportation (VDOT) method (Vaswani Method) and standard material specifications designed to the satisfaction of the Director of Transportation and Environmental Services (T&ES) will be acceptable. (T&ES)
- C 19 All pedestrian, traffic, and way finding signage shall be provided in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), latest edition to the satisfaction of the Director of T&ES. (T&ES)
- C 20 No overhangs (decks, bays, columns, post or other obstructions) shall protrude into public Right of Ways, public easements, and pedestrian or vehicular travelways unless otherwise permitted by the City Code. (T&ES)
- C 21 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C 22 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C 23 The applicant shall comply with the City of Alexandria's Noise Control Code, Title 11, Chapter 5, which sets the maximum permissible noise level as measured at the property line. (T&ES)
- C 24 All construction activities must comply with the Alexandria Noise Control Code Title 11, Chapter 5, Section 11-5-4(b)(15), which permits construction activities to occur between the following hours:
  - a. Monday Through Friday from 7 AM To 6 PM and

- b. Saturdays from 9 AM to 6 PM.
- c. No construction activities are permitted on Sundays and holidays. Section 11-5-4(b)(19) further restricts the Pile Driving to the following hours:
- d. Monday Through Friday from 9 AM To 6 PM and
- e. Saturdays from 10 AM To 4 PM
- f. No pile driving is permitted on Sundays and holidays. Section 11-5-109 restricts work in the right of way for excavation to the following:
- g. Monday through Saturday 7 AM to 5 pm
- h. No excavation in the right of way is permitted on Sundays. (T&ES)
- C 25 The applicant shall comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for stormwater pollutant load reduction, treatment of the Alexandria Water Quality Volume Default and stormwater quantity management. (T&ES)
- C 26 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C 27 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, and/or Virginia Marine Resources shall be in place for all project construction and mitigation work prior to release of the Final Site Plan. This includes the state requirement for a state General VPDES Permit for Discharges of Stormwater from Construction Activities (general permit) and associated Stormwater Pollution Prevention Plan (SWPPP)\_for land disturbing activities equal to or greater than one acre. See memo to industry 08-14 which can be found on-line here: <a href="http://alexandriava.gov/tes/info/default.aspx?id=3522">http://alexandriava.gov/tes/info/default.aspx?id=3522</a>. (T&ES) \*
- C 28 The applicant must provide a Stormwater Pollution Prevention Plan (SWPP) Book with the Final 1 submission. The project's stormwater management (SWM) plan and the erosion and sediment control (E&SC) plan must be approved prior to the SWPPP being deemed approved and processed to receive coverage under the VPDES Construction General Permit. Upon approval, an electronic copy of the approved SWPPP Book must be provided with the Mylar submission and the coverage letter must copied onto the plan sheet containing the stormwater management calculations. An electronic copy and a hardcopy of the SWPPP Binder Book must be included in the released site plans, and the approved hardcopy SWPPP Binder Book must accompany the construction drawings onsite. Separate parcel owners will be required to seek separate VPDES Construction General Permit Coverage unless a blanket entity incorporated in Virginia has control of the entire project. (T&ES-Storm)

#### **AlexRenew Comments**

- 1. Applicant to include the following notes on the DSP plans and the plans issued for construction:
  - a. Contractor shall ensure all discharges are in accordance with City of Alexandria Code Title 5, Chapter 6, Article B.

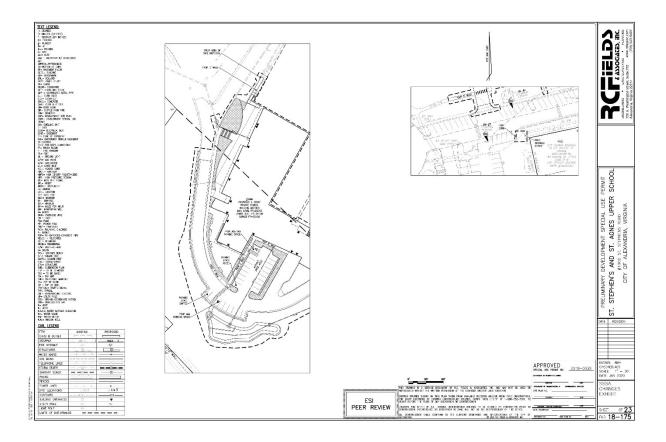
b. Dewatering and other construction related discharge limits to the sewer system are regulated by AlexRenew Pretreatment. Contractor is required to contact AlexRenew's Pretreatment Coordinator at 703-549-3381 x2020.

# **Asterisks denote the following:**

- \* Condition must be fulfilled prior to release of the Final Site Plan
- \*\* Condition must be fulfilled prior to release of the building permit
- \*\*\* Condition must be fulfilled prior to release of the certificate of occupancy
- \*\*\*\* Condition must be fulfilled prior to release of the bond

# X. ATTACHMENTS

1. Upper School Site Accessibility Changes to Southern Parking Lot



# **APPLICATION**

# DEVELOPMENT SPECIAL USE PERMIT with SITE PLAN

DS	UP #_2018-	-0030 P	Project Name: St.Stephen's & St. A	ignes School - Upper School
		1000 Saint Stepher	ns Road, Alexandria 22304	
PROPERTY L		40.00 02 17	ZONE.	D 9 8 D 20
TAX MAP REI	PEKENCE;	10,000 02 17	ZONE:	R-8 & R-20
APPLICANT: Name:	Church So	chools in the Dioces	se of Virginia DBA St. Stephen's and S	t. Agnes School
Address:	1000 Saint	t Stephens Road, Ale	exandria, Virginia 22304	
PROPERTY O		chools in the Dioces	se of Virginia DBA St. Stephen's and S	t. Agnes School
Name: Address:	1000 Sain	nt Stephens Road, A	lexandria, Virginia 22304	
SUMMARY OF	F PROPOSA g new site in	AL Î	Special Use Permit to construct a 42,00	
MODIFICATIO				The CAMP was a supplier
sup's REQUE to construct a	OILU		o expand the existing private school go ed site improvements and to amend S	
			Section 7-1101 $\overline{(C)}$ SUP to permit temp	• •
			evelopment Site Plan with Special Use Permit a inance of the City of Alexandria, Virginia.	approval in accordance
Alexandria to post	placard notice		nission from the property owner, hereby grants ich this application is requested, pursuant to A ria, Virginia.	
	quired of the ap	oplicant are true, correct	f the information herein provided and specifical transfer and appropriate or mis/her knowledge.	
Print Name of Appli 524 King Stre	icant or Agent et		Signature 703 836-1000 703 549	9-3335
Mailing/Street Addr Alexandria, V		304	Telephone # Fax # dblair@landcarroll.com	
City and State		Zip Code	Email address 1/16/2020	
			Date	
	CAR IN TO	DO NOT WRITE IN	THIS SPACE - OFFICE USE ONLY	A TOTAL DESIGNATION OF THE
			Received Plans for Completeness:	
Fee Paid and Dat	e: -		Received Plans for Preliminary:	
ACTION - PLANN	IING COMMISS	ION:		
ACTION - CITY C	OUNCIL:			

Development SUP	#	•

# ALL APPLICANTS MUST COMPLETE THIS FORM.

Supplemental forms are required for child care facilities, restaurants, automobile oriented uses and freestanding signs requiring special use permit approval.

1.	The applican	The applicant is: (check one)					
	The Owner	Contract Purchaser	CLessee or	Other:	0		
	the subject prop	perty.					

State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership in which case identify each owner of more than three percent.

Church Schools in the Diocese of Virginia is a Virginia nonstock corporation (CSDV) controlled by the Protestant Episcopal Church in Diocese of Virginia, 110 Franklin Street, Richmond, Virginia. St. Stephen's and St Agnes School is one of the independent school owned by CSDV. St. Stephen's and St. Agnes School is governed by a 25 person board of Governors.

If property owner or applicant is being represented by an authorized agent, such as an attorney, realtor, or other person for which there is some form of compensation, does this agent or the business in which the agent is employed have a business license to operate in the City of Alexandria, Virginia?

- Yes. Provide proof of current City business license.
- No. The agent shall obtain a business license prior to filing application, if required by the City Code.

# OWNERSHIP AND DISCLOSURE STATEMENT

Use additional sheets if necessary

1. Applicant. State the name, address and percent of ownership of any person or entity owning an interest in the applicant, unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. See attached		100%
2.		
3.		

<u>2. Property.</u> State the name, address and percent of ownership of any person or entity owning an interest in the property located at <u>1000 Saint Stephens Road</u> (address), unless the entity is a corporation or partnership, in which case identify each owner of more than three percent. The term ownership interest shall include any legal or equitable interest held at the time of the application in the real property which is the subject of the application.

Name	Address	Percent of Ownership
1. See attached		100%
2.		
3.		

3. BusinessorFinancialRelationships. Each person or entity listed above (1 and 2), with an ownership interest in the applicant or in the subject property is required to disclose any business or financial relationship, as defined by Section 11-350 of the Zoning Ordinance, existing at the time of this application, or within the12-month period prior to the submission of this application with any member of the Alexandria City Council, Planning Commission, Board of Zoning Appeals or either Boards of Architectural Review.

Name of person or entity	Relationship as defined by Section 11-350 of the Zoning Ordinance	Member of the Approving Body (i.e. City Council, Planning Commission, etc.)
1. CSDV and SSSAS	None	
2.		
3.		

NOTE: Business or financial relationships of the type described in Sec. 11-350 that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings.

As the applicant or the applicant's authorized agent, I hereby attest	to the	best of my
ability that the information provided above is true and porrect		2.010

1/16/2020	Duncan W. Blair, Attorney	Uivillet W   Willially		
Date	Printed Name	Signature		

# OWNERSHIP AND DISCLOSURE STATEMENT

# **APPLICANT:**

Church Schools in the Diocese of Virginia, Inc. a Virginia Nonstock corporation, DBA St. Stephen's & St. Agnes School 1000 Saint Stephens Road Alexandria Virginia 22304

# **OWNER:**

Church Schools in the Diocese of Virginia, Inc. a Virginia Nonstock corporation C/O St. Stephen's & St. Agnes School 1000 Saint Stephens Road Alexandria Virginia 22304

Development SUP	o #	

2. Narrative description. The applicant shall describe below the nature of the request in detail so that the Planning Commission and City Council can understand the nature of the operation and the use, including such items as the nature of the activity, the number and type of patrons, the number of employees, the hours, how parking is to be provided for employees and patrons, and whether the use will generate any noise. If not appropriate to the request, delete pages 6-9. (Attach additional sheets if necessary.)

See attached.

#### **Campus Planning**

After nearly a century of delivering an Episcopal education second to none, the school's recently completed Strategic Plan recommitted us to a thorough reflection on and fulfillment of our enduring mission: "To help our students succeed in a complex and changing world, we seek to inspire a passion for learning, an enthusiasm for athletic and artistic endeavor, a striving for excellence, a celebration of diversity, and a commitment to service. Our mission is to pursue goodness as well as knowledge and to honor the unique value of each of our members as a child of God in a caring community."

We look now to transforming the spaces and student experiences which will bring to life the ideals of our mission and embrace community. The last significant investments made to our campuses were: the 2003 addition of a chapel/performing arts space at the Upper School; additions and renovations to the Upper and Middle Schools more than 20 years ago; and our last building project at the Lower School nearly 30 years ago.

Today our students receive an outstanding education. Our students—and their innovative teachers—need spaces equipped to the needs of the present, not to mention the complex needs of the future. During the last 25 years, changes in our society and advances in technology have driven how our students live, learn, and collaborate. The time has come to reimagine spaces that match how students live and learn today.

We seek to create a destination for meaningful relationship-building and community gatherings which are so pivotal to the experience of a Saint. A reimagined campus will meet the needs of a 21st century student. We envision a campus that fosters community building and gathering, enables the intersection of disciplines, and supports a student experience deeply imbedded in our values.

We seek to graduate Saints who have a sense of inquiry and wonder, and who are analytical thinkers, innovative team-based problem solvers, and scientifically literate citizens. These students will have the tools necessary for any future career path. Modernized facilities will provide better educational experiences for our students and will help us to continue to recruit and retain master teachers.

Development SUP #
-------------------

3.	How many patrons, clients, pupils and other such users do you expect	?
	Describe times required (i.e., deve becomes a biff)	

Specify time period (i.e., day, hour, or shift).

The current enrollment of the St. Stephen's & St. Agnes School upper school (SSSAS) is 480 students. SSSAS is requesting an increase of the enrollment to 520 students. The increase will be phased in over several academnic years.

#### 4. How many employees, staff and other personnel do you expect?

Specify time period (i.e. day, hour, or shift).

SSSAS has a full or part time Faculty, Admistrative and support staff of 120 on campus Monday -Friday. SSSAS outsources its food servcices in the morning and early afternoon for lunch and custodial services in the evenings for an additional 10 people on campus.

<b>5.</b> De	scribe the	proposed ho	rs and day	s of op	eration of th	e proposed use
--------------	------------	-------------	------------	---------	---------------	----------------

Day	Hours	Day	Hours	
No change	from SUP #2016-0103.			
		-		
	-			_
				_
		-		

#### 6. Describe any potential noise emanating from the proposed use:

- A. Describe the noise levels anticipated from all mechanical equipment and patrons. SUP #2016-0103 contains conditions to control and mitigate potential negative noise impacts emanating from the school. It is not anticipated that the requested changes to the school building, campus and enrollment will result in an increase of the noise levels emanating from the property. How will the noise from patrons be controlled?
- B.

SUP #2016-0103 contains conditions to control and mitigate potential negative noise impacts emanating from the school. It is not anticipated that the requested changes to the school building, campus and enrollment will result in an increase of the noise levels emanating from the property.

#### 7. Describe any potential odors emanating from the proposed use and plans to control them:

It is not anticipated that the requested changes to the school building, campus and enrollment will result in an increase of the offensive odors emanating from the property.

Development SUP # _	

# 8. Provide information regarding trash and litter generated by the use:

- A. What type of trash and garbage will be generated by the use?

  The type of trash, garbage and recylable material generally associated with an academic high school.
- B. How much trash and garbage will be generated by the use?

  One eight yard compactor for trash and garbage is collected MondayFriday in the Morning; one two yard recycling container is collected on
  Tuesdays and Fridays; and 3 one yard cardboard toter is collected on
  Monday.
- C. How often will trash be collected?

□ No.

accordance with all applicable regulations.

SUP #2016-0103 Condition 16 requires that trash be collected Monday through Friday. It is not anticipated that the collection schedule be modified.

- D. How will you prevent littering on the property, streets and nearby properties? It is not anticipated that the requested changes to the school building, campus or enrollment will result in increase littering. SUP #2016-0103 contains conditions pertaining to the maintenance of the campus.
- 9. Will any hazardous materials, as defined by the state or federal government, be handled, stored, or generated on the property?

If yes, provide the name, monthly quantity, and specific	disposal method below:
Small quantities of material considered hazardous appr	opriate for use in academi
schools may be used. All such materials will be stored,	used and disposed of in

10. Will any organic compounds (for example: paint, ink, lacquer thinner, or cleaning or degreasing solvent) be handled, stored, or generated on the

 ٦Yes.	□ No.

property?

✓ Yes.

If yes, provide the name, monthly quantity, and specific disposal method below:

Small quantities of organic compounds appropriate for use in academic schools may be used. All such materials will be stored, used and disposed of in accordance with all applicable regulations.

Development SUP #	

# 11. What methods are proposed to ensure the safety of residents, employees and patrons?

The SSSAS Administration has established protocols and practices in place to ensure the safety of all individuals are on campus.

#### **ALCOHOL SALES**

12.	Will the	proposed use include the sale of beer, wine or mixed drinks?
	Yes.	✓ No.

If yes, describe alcohol sales below, including if the ABC license will include on-premises and/ or off-premises sales. Existing uses must describe their existing alcohol sales and/or service and identify any proposed changes in that aspect of the operation.

#### PARKING AND ACCESS REQUIREMENTS

# 13. Provide information regarding the availability of off-street parking:

- A. How many parking spaces are required for the proposed use pursuant to section
   8-200 (A) of the zoning ordinance?
   54 parking spaces are required based on one space for each ten classroom seats.
- B. How many parking spaces of each type are provided for the proposed use:

22	Standard spaces Required
32	Compact spaces Required
	_ Handicapped accessible spaces
207	Other additional nonregired spaces.
261	Total spaces. 20 more spaces than currently on the campus.

	Development SUP #
C.	Where is required parking located? (check one)  on-site  off-site
	If the required parking will be located off-site, where will it be located?
	Pursuant to section 8-200 (C) of the zoning ordinance, commercial and industrial uses may provide off-site parking within 500 feet of the proposed use, provided that the off-site parking is located on land zoned for commercial or industrial uses. All other uses must provide parking on-site, except that off-street parking may be provided within 300 feet of the use with a special use permit.
D.	If a reduction in the required parking is requested, pursuant to section 8-100 (A) (4) or (5) of the zoning ordinance, complete the <b>Parking Reduction Supplemental</b> Application

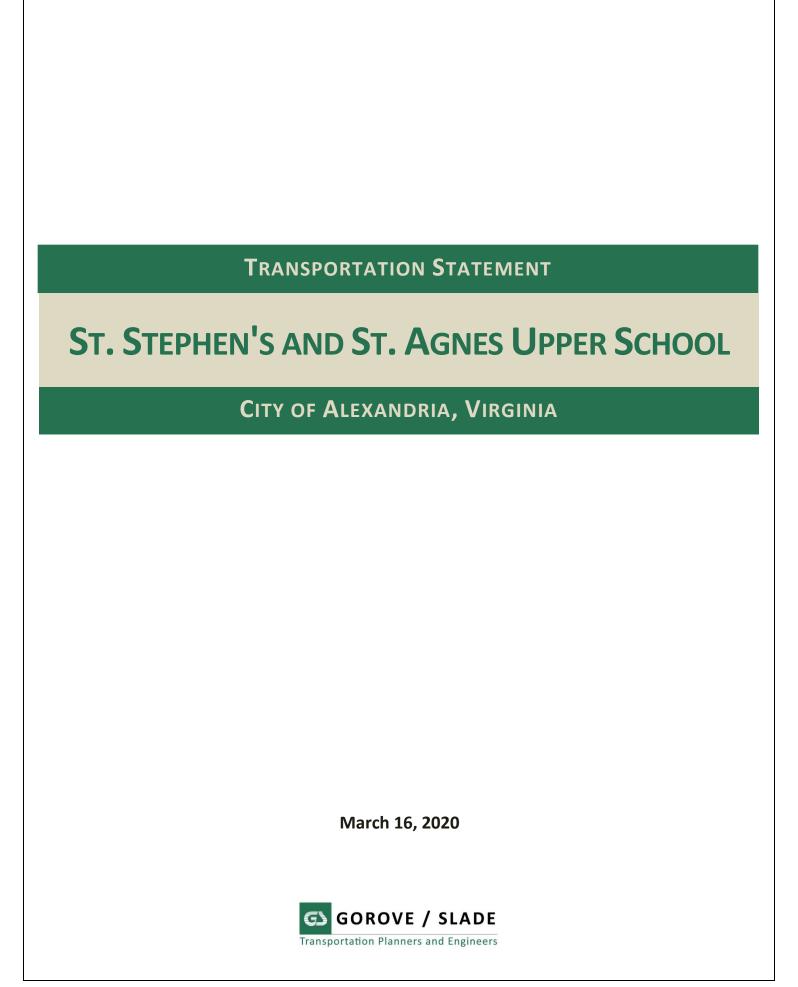
# 14. Provide information regarding loading and unloading facilities for the use:

- A. How many loading spaces are required for the use, per section 8-200 (B) of the zoning ordinance? None
- B. How many loading spaces are available for the use? There are two designated loading areas.
- C. Where are off-street loading facilities located?

  The loading area are located at the rear of the building as shown on the DSUP development plan.
- D. During what hours of the day do you expect loading/unloading operations to occur?

  It is anticipated that loading/unloading operations will occur on weekdays during hours that the school is operating.
- E. How frequently are loading/unloading operations expected to occur, per day or per week, as appropriate? It is anticipated that there will be 5-10 loading and unloading operations Monday Friday.
- 15. Is street access to the subject property adequate or are any street improvements, such as a new turning lane, necessary to minimize impacts on traffic flow?

Street and site access and internal circulation are adequate.



# **Prepared by:**



1140 Connecticut Avenue NW Suite 600 Washington, DC 20036 Tel: 202.296.8625

Fax: 202.785.1276

3914 Centreville Road Suite 330 Chantilly, VA 20151 Tel: 703.787.9595

Fax: 703.787.9905

15125 Washington Street Suite 136 Haymarket, VA 20169 Tel: 703.787.9595

Fax: 703.787.9905

www.goroveslade.com

This document, together with the concepts and designs presented herein, as an instrument of services, is intended for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization by Gorove/Slade Associates, Inc., shall be without liability to Gorove/Slade Associates, Inc.

# **Contents**

Executive Summary1	
Project Summary1	
Site Access2	
Transportation Sustainability and Quality of Life2	
Introduction3	
Purpose of Study3	
Study Tasks3	
Contents of Study3	
Study Area Overview4	
Site Location4	
Parcel Information4	
Zoning Information4	
Major Transportation Features4	
In-process and Future Projects11	
Project Design14	
Project Overview14	
Site Access and Parking14	
Student Arrival and Dismissal14	
Site Observations24	,
Arrival and Dismissal Driveway Queues24	
On-site Parking Occupancy24	
Off-site Parking Occupancy24	
Pedestrian and Bicycle Safety24	
Travel Demand Assumptions30	j
Trip Generation30	ı
Trip Distribution30	ı
Summary of Traffic Impacts30	1
Parking34	,
Pedestrian Facilities	,
Existing Pedestrian Facilities Review36	
Proposed Pedestrian Facilities36	,
Bicycle Facilities	j
Existing Bicycle Facilities Review38	
Proposed Bicycle Facilities38	
Transportation Sustainability and Quality of Life40	j

Summary and Conclusion	41
Project Summary	41
Transportation Sustainability and Quality of Life	41
Conclusion	41

# **Figures**

Figure 1: Walk Score & Bike Score5
Figure 2: Site Location6
Figure 3: Tax Map7
Figure 4: Zoning Map8
Figure 5: Major Regional Transportation Facilities9
Figure 6: Major Local Transportation Facilities10
Figure 7: Existing Parking Areas17
Figure 8: Existing Arrival Timeline
Figure 9: Existing and Post-construction Arrival Operations .19
Figure 10: Arrival Operations During Construction20
Figure 11: Existing Dismissal Timeline21
Figure 12: Existing and Post-Construction Dismissal Operations
Figure 13: Dismissal Operations During Construction23
Figure 14: Arrival peak vehicle queue, looking west down school driveway25
Figure 15: Arrival peak vehicle queue, looking south on St. Stephens Road towards school25
Figure 16: Dismissal peak vehicle queue, looking west down school driveway26
Figure 17: Recently upgraded crosswalks and bicycle lanes on Seminary Road26
Figure 18: Typical sidewalk along St. Stephens Road27
Figure 19: Sidewalk along school driveway27
Figure 20: Peak Parking Occupancy28
Figure 21: Peak Vehicle Queues during Arrival and Dismissal
Figure 22: Inbound Trip Distribution31
Figure 23: Outbound Trip Distribution32
Figure 24: Net New Site-Generated Peak Hour Volumes33
Figure 25: Existing Pedestrian Facilities37
Figure 26: Existing Bicycle Facilities39

# **Tables**

Table 1: Existing and Proposed Parking Supply1
Table 2: Existing and Proposed Parking Supply14
Table 3: Existing On- and Off-site Parking Occupancy24
Table 4: Trip Generation Summary30
Table 5: Existing and Proposed Parking Supply and Demand 35
Table 6: Sidewalk Requirements36



# EXECUTIVE SUMMARY

The following report is a Transportation Statement for the proposed improvements to the St. Stephen's and St. Agnes Upper School, located in Alexandria, Virginia. The project consists of a building renovation and addition, gradually increasing student and staff populations, and increasing the onsite parking supply.

The purpose of this report is to review existing and future transportation facilities in the area surrounding the project site, project transportation demand needs of the project, and determine if the new transportation demand generated by the project would have negative impacts on the surrounding transportation network.

This report concludes that the St. Stephen's and St. Agnes Upper School site improvements will not have a negative impact on the surrounding transportation and roadway network as long as the school continues the transportation policies it has in place today, including:

- Four (4) carpool-only spaces in the student parking lot;
- Orderly, efficient arrival and dismissal procedures assisted by a traffic control officer;
- A staggered dismissal pattern beginning at 2:45pm and ending at 3:30pm, which on most days allows the dismissal vehicle queue to remain fully within the school driveway; and
- An on-site parking supply that meets typical school day demand, containing most parking impacts within the school site in existing conditions, construction conditions, and post-construction conditions.

#### **PROJECT SUMMARY**

The project consists of a building renovation and addition to the existing school, reconfiguring the existing drive aisle and parking facilities, increasing on-site parking supply from 230 to 250 spaces, gradually increasing the school's enrollment from 480 to 520 students, and adding approximately three (3) new staff members. Changes to parking and arrival/dismissal operations during construction and post-construction are as follows:

#### **Parking**

230 parking spaces currently exist on site. In proposed conditions, parking supply will increase to 253 spaces during

construction, and 250 spaces after construction. A breakdown of existing and proposed parking supply by designation is shown on Table 1.

**Table 1: Existing and Proposed Parking Supply** 

Parking designation	Existing	Proposed during construction	Proposed after construction
Staff	119	96	123
Student	67	83	83
Unassigned	44	44	44
Temporary	0	30	0
Total	230	253	250

#### **Arrival/Dismissal Operations**

Arrival and dismissal operations will remain as-is upon completion of the addition and renovation. During construction an interim operations plan will be implemented.

Due to efficient and orderly arrival and dismissal operations that will continue during and after construction, off-site impacts of typical arrival and dismissal operations are not expected to worsen as a result of the proposed improvements to the St. Stephen's and St. Agnes Upper School site.

#### Private Vehicle Student Pick-up/Drop-off

The private vehicle student pick-up/drop-off area is located in the inner lane of the traffic circle in front of the school's main entrance, with vehicles queuing down the school driveway.

During arrival, the queue occasionally spills onto St. Stephens Road. Due to a staggered dismissal process which begins at 2:45pm and ends at 3:30pm, the vehicle queue length stays constant as students exit the school, find their vehicle, and the vehicle exits the queue. On a typical school day, the maximum vehicle queue extends about halfway down the driveway during dismissal.

#### Bus

During arrival, regional buses unload in the outer lane of the traffic circle in front the school's main entrance. Intra-campus shuttles travel south/clockwise through the main parking lot and around the loop behind the school, loading in the small parking lot at the school's northern edge.

During dismissal, all buses turn south through the main parking lot. All buses except the athletic buses load and unload in the parking lot drive aisle at the southeast corner of the school building. Athletic buses unload in the loop driveway at the school's northwestern corner.



#### **Temporary Operations**

While the school addition is under construction, temporary arrival/dismissal operations are proposed. During both arrival and dismissal, private vehicle drop-off operations will remain the same. However, buses will not be able to travel around the loop as the loop's rear half will be closed to traffic.

#### SITE ACCESS

The St. Stephen's and St. Agnes Upper School site has ample access to regional vehicular, transit, and bicycle transportation options. It is accessible from local roads connecting to state and interstate highways. The site is also served by one (1) local bus route which connects to the King Street-Old Town and Braddock Road Metrorail stations. The site is also located 0.3 miles from the bicycle lanes on Seminary Road.

## TRANSPORTATION SUSTAINABILITY AND QUALITY OF LIFE

This report highlights certain measures St. Stephen's and St. Agnes Upper School is undertaking to reduce vehicle trips and reduce the impact of site-generated vehicle trips on the transportation network.



# **INTRODUCTION**

This report is a Transportation Statement for the proposed improvements to the St. Stephen's and St. Agnes Upper School, located in Alexandria, Virginia. The project consists of a building renovation and addition to the existing school, reconfiguring the existing drive aisle and parking facilities, increasing the onsite parking supply from 230 to 250 spaces, gradually increasing the school's enrollment from 480 to 520 students over several years, and adding approximately three (3) new staff members. This report is based on site observations and the conceptual plans for the project. Figure 2 shows the site's location.

#### **PURPOSE OF STUDY**

The purpose of this report is to:

- 1. Review existing and future transportation facilities in the area surrounding the project site.
- 2. Project the transportation demand needs of the proposed project.
- Determine if the new transportation demand generated by the project would have negative impacts on the surrounding transportation network.
- 4. Present recommendations to minimize the negative impact from the proposed project.

#### **STUDY TASKS**

The following tasks were completed as part of this study:

- A scoping meeting was held with representatives from the City of Alexandria Department of Transportation and Environmental Services on October 23, 2019. This meeting reviewed assumptions and methodologies for this report.
- A scoping form based on the meeting with City staff was submitted to the City and subsequently approved.
- Field observations were performed at the St. Stephen's and St. Agnes Upper School site regarding current arrival and dismissal procedures, vehicle queueing, pedestrian and bicycle safety, and overall impact of school operations on neighborhood streets.

 The analysis findings and recommendations were documented in this report.

#### CONTENTS OF STUDY

This report contains seven (7) sections as follows:

#### Study Area Overview

This section reviews the area near and adjacent to the proposed project and includes an overview of the site location and local initiatives within the study area.

#### Project Design

This section reviews the transportation components of the project, including the site plan and access. Included is a review of vehicle parking and student arrival and dismissal operations.

#### Site Observations

This section presents the findings of observations conducted at the school site on a typical weekday.

#### Travel Demand Assumptions

This section outlines the travel demand of the proposed project. It includes a review of vehicular trip generation, vehicular trip distribution, and parking demand.

#### Pedestrian Facilities

This section summarizes existing pedestrian access to the site, reviews proposed pedestrian infrastructure improvements near the site, and presents recommendations as needed.

#### Bicycle Facilities

This section summarizes existing bicycle access to the site, reviews proposed bicycle infrastructure improvements near the site, and presents recommendations as needed.

#### Transportation Sustainability and Quality of Life

This section outlines various efforts St. Stephen's and St. Agnes Upper School is undertaking to reduce vehicle trips and reduce the impact of site-generated vehicle trips on the transportation network.

#### Summary and Conclusion

This section presents a summary overall report findings and conclusions.



# STUDY AREA OVERVIEW

This section reviews the study area and includes an overview of the site location, including a summary of the major transportation characteristics of the area and of future regional projects.

The following conclusions are reached within this chapter:

- The site is surrounded by an extensive regional and local transportation system that will connect students, staff, and visitors of the project to the rest of the City of Alexandria and surrounding areas.
- The site is served by public transportation with access to a local bus route.
- The site is served by existing bicycle infrastructure including the Seminary Road bike lanes and several shared lanes and signed routes in the vicinity of the site.
- Pedestrian facilities near the site are well-established and mostly continuous, but many facilities do not meet City of Alexandria or Virginia Department of Transportation requirements.
- Several citywide initiatives will positively impact the study area, including the City's Comprehensive Transportation Master Plan, Transit Vision Plan, and Complete Streets and Vision Zero initiatives.

#### **SITE LOCATION**

The site is located along St. Stephens Road within the Seminary Ridge neighborhood in the City of Alexandria. The site location is shown on Figure 2.

#### **PARCEL INFORMATION**

The existing property at 1000 St. Stephens Road is currently occupied by the St. Stephen's and St. Agnes Upper School campus, as seen on tax map 40.03. A tax map showing the location of the property is presented on Figure 3.

#### **ZONING INFORMATION**

The St. Stephen's and St. Agnes Upper School property is currently zoned as R12 – Single Family, 12,000 sq. ft. A zoning map showing the location of the property is presented on Figure 4.

#### **MAJOR TRANSPORTATION FEATURES**

#### **Overview of Regional Access**

The St. Stephen's and St. Agnes Upper School site has ample access to regional vehicular, transit, and bicycle transportation options, as shown in Figure 5, that connect the site to local and regional destinations.

The site is accessible from Interstates 395 and 495/95, US Highway 1 (Richmond Highway), and state routes such as VA-420 (Seminary Road) and VA-236 (Duke Street). These roadways bring vehicular traffic within a half-mile of the site, at which point local roads can be used to access the site directly.

The site is located 2.7 miles from the King Street-Old Town Metrorail station, which is served by the Blue and Yellow Lines and provides connection to areas in Virginia, the District, and Maryland. The site is also serviced by one (1) DASH bus route, which connects to the King Street-Old Town and Braddock Road Metrorail stations.

The site is located 0.3 miles from the bicycle lanes on Seminary Road, which connect to other bicycle facilities in the City of Alexandria. A detailed review of existing bicycle infrastructure is provided in a later section of this report.

Overall, the site has access to several regional roadways, transit, and bicycle options, making it convenient to travel between the site and destinations in the Virginia, the District, and Maryland.

#### **Overview of Local Access**

There are several local transportation options near the site that serve vehicular, transit, walking, and cycling trips, as shown on Figure 6.

In addition to arterials, the site is served by a local vehicular network of low volume neighborhood streets that provide connections from regional roads to the site.

DASH is a local bus system provided by the Alexandria Transit Company, operating within the City of Alexandria. DASH connects with Metrobus, Metrorail, Virginia Railway Express (VRE), and other local bus systems. As shown in Figure 6, there is one (1) DASH bus route that run near the site along Seminary Road.



The site is located 0.3 miles from the bicycle lanes on Seminary Road, which connect to other bicycle facilities in the City of Alexandria.

#### Walk, Bike, and Transit Scores

Walkscore.com is a website that provides scores and rankings for the walking, biking, and transit conditions within the City of Alexandria. Based on this website the St. Stephen's and St. Agnes Upper School site is in the Seminary Ridge neighborhood. The neighborhood has a walk score of 17 (or "car-dependent"), a bike score of 25 (or "somewhat bikeable"), and a transit score of 45 (or "some transit").

Figure 1 shows the neighborhood borders in relation to the site location and displays a heat map for walkability and bikeability.

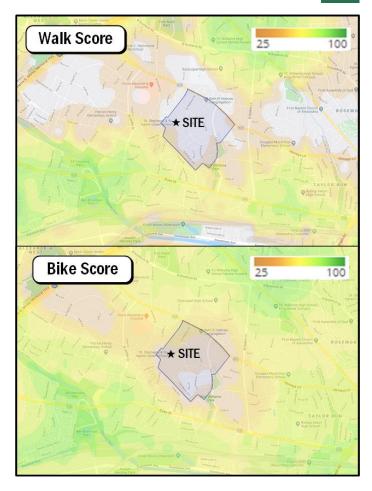


Figure 1: Walk Score & Bike Score



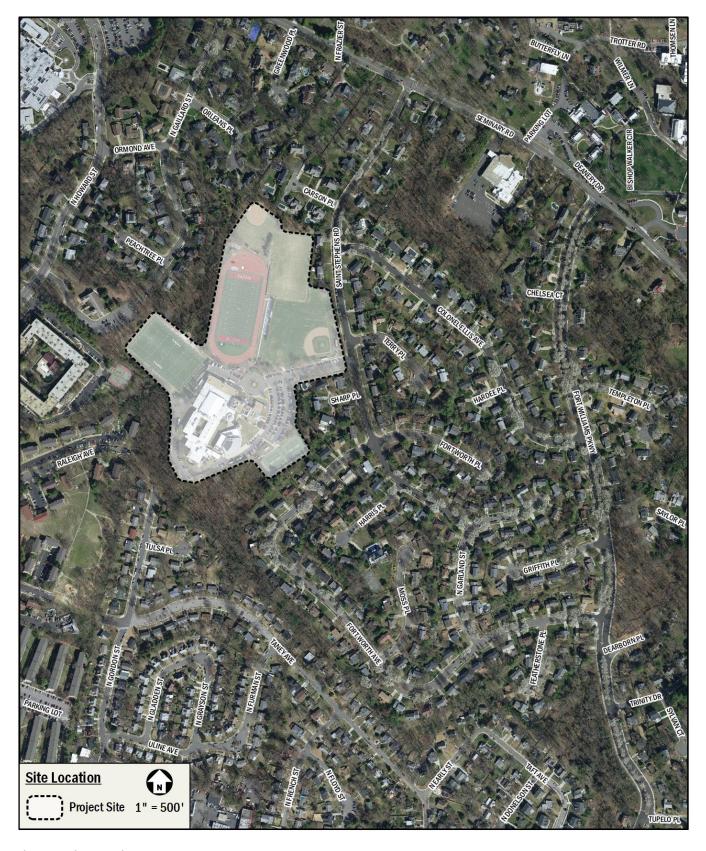


Figure 2: Site Location



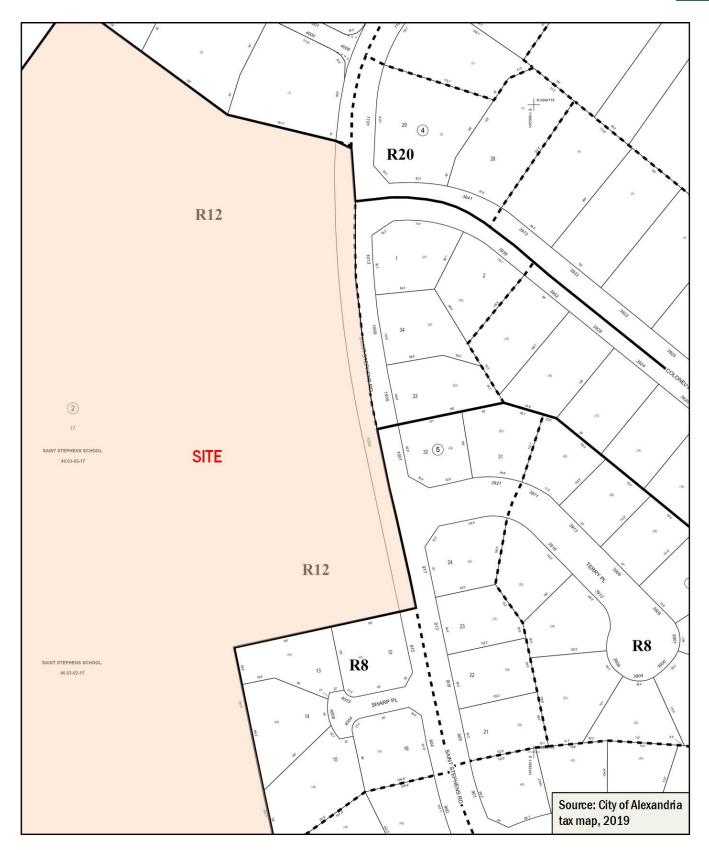


Figure 3: Tax Map



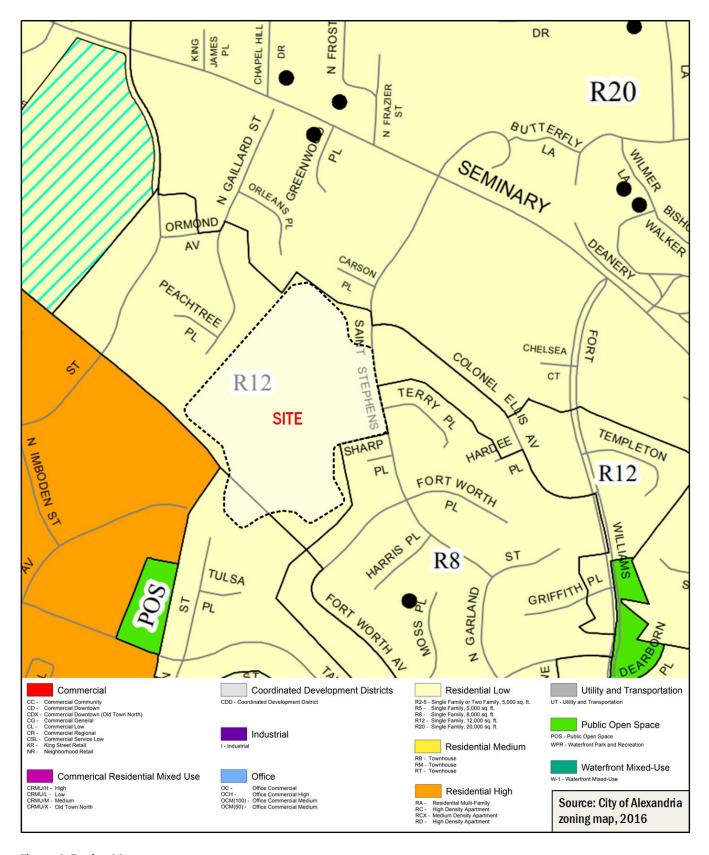
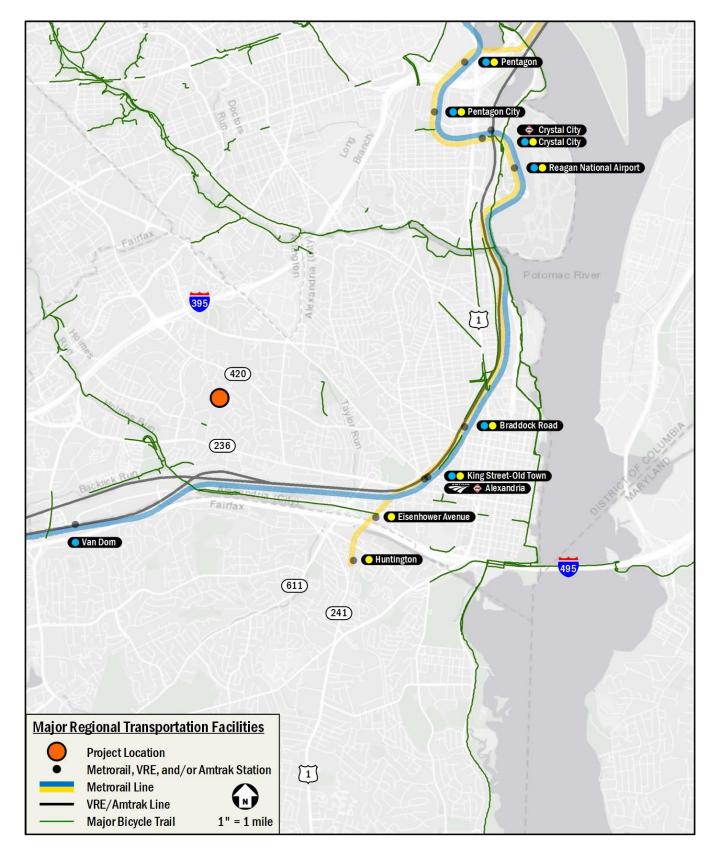


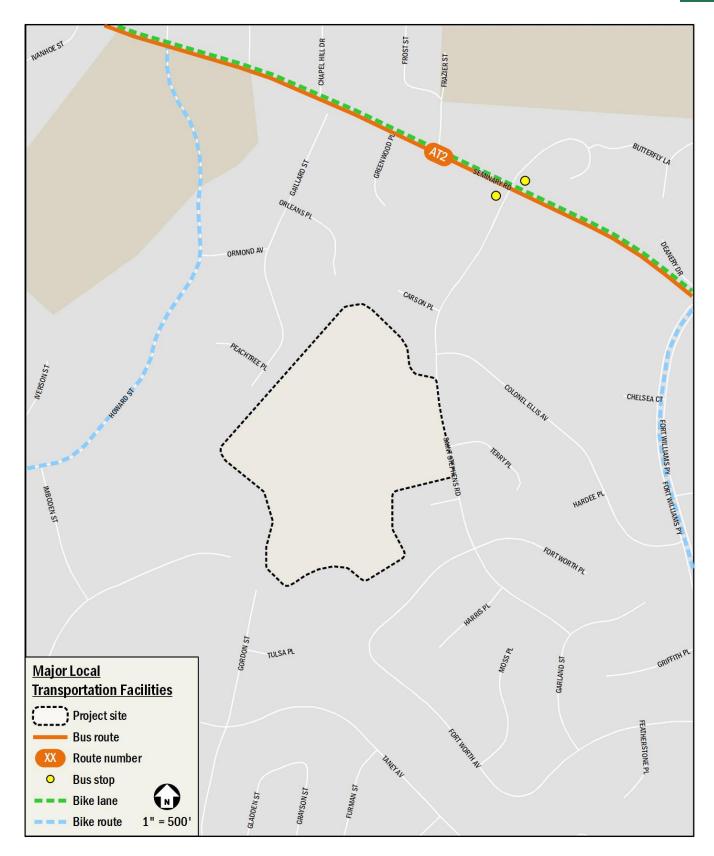
Figure 4: Zoning Map





**Figure 5: Major Regional Transportation Facilities** 





**Figure 6: Major Local Transportation Facilities** 



#### IN-PROCESS AND FUTURE PROJECTS

There are several city-wide and local transportation initiatives in the vicinity of the site. These proposed, planned, and inprocess projects are summarized below.

#### **City-wide Initiatives**

Comprehensive Transportation Master Plan (2008)

Adopted in April 2008, updated in 2016, and currently undergoing an update that will culminate in 2020, the City of Alexandria's Comprehensive Transportation Master Plan was developed to ensure wise, effective, and sustainable planning of the City's transportation future.

The Comprehensive Transportation Master Plan is driven by seven (7) guiding principles to inform transportation related decision making within the City. These guiding principles are (1) developing innovative local and regional transit options; (2) providing quality pedestrian and bicycle accommodations; (3) providing accessibility and mobility to all citizens, regardless of age or ability; (4) increasing the use of communications technology in transportation system; (5) promoting transportation policies that enhance quality of life and support livable, urban land use, and encourage neighborhood preservation; (6) leading the region in promoting environmentally friendly transportation policies; and (7) ensuring accessible, reliable, and safe transportation for older and disabled citizens.

The Comprehensive Transportation Master Plan's recommended approach to transportation in the City is outlined as follows:

Transit – The City will create a network of three (3) transit corridors within secure rights-of-way dedicated exclusively for transit use. The Comprehensive Transportation Master Plan has identified the corridors of Route 1, Van Dorn/Shirlington, and Duke Street for these projects. In doing so the City will: (1) conduct public outreach regarding the concept and process; (2) coordinate with adjacent jurisdictions to ensure integration with existing transit and explore opportunities for future connections; (3) prioritize transit corridors for investments; (4) plan for dedicated transit lanes and ensure new developments do not preclude dedicated transit lanes; (5) identify locations for smart stations that serve both new and existing transportation modes; (6) ensure development does not preclude efforts to expand public transit; (7) identify transit technologies and techniques that suit the identified corridors; (8) integrate existing DASH service with new transit system elements; (9) incorporate traffic signal priority, traffic circulation changes, and other on-street enhancements into the new system; (10) create Transportation Management Plans, Transit Overlay Zoning Districts, Parking Management Zones, etc. to coordinate efforts to support the system; (11) investigate potential funding from existing and new revenue sources; (12) develop an outreach and marketing campaign to engage citizens about the City's transportation future; and (13) coordinate with pertinent Boards and Commissions to ensure special transportation needs of all citizens are considered.

- Pedestrian The City will promote and encourage walking by creating a safe, well-maintained, comfortable and enjoyable pedestrian environment that encourages walking and is accessible for people of all ages and abilities. The City will provide a continuous, connected and accessible pedestrian network that enables people of all ages and abilities to move safely and comfortably between places and destinations. The City will promote walking as a means of improving transportation circulation, transit access, public health, environmental quality and recreation, with the goal of increasing walking trips as a percent of all travel in Alexandria. Finally, the City will educate users of all transportation modes about pedestrian safety, rights, and responsibilities.
- Bicycle The City will promote and encourage the use of bicycles by creating a safe, well-maintained bicycling environment that encourages bicycling as an enjoyable and convenient mode of travel and recreation for riders of all ages and abilities. The City will develop a connected bicycle network that includes both on-street and off-street facilities, as well as support facilities such as bicycle parking, that provide safe, enjoyable and comfortable accommodations for riders of all ages and abilities. The City will promote bicycling as a means of improving transportation circulation, transit access, public health, environmental quality and recreation, with the goal of increasing bicycling trips as a percent of all travel in Alexandria. Finally, the City will educate users of all transportation modes about bicycle safety, rights and responsibilities.
- Streets The City will comprehensively address the City's street system and enhance the transportation network by:
   (1) ensuring that streets can accommodate all users;



formally adopt a Complete Streets policy; (3) develop new and enhance existing programs regarding Transportation Demand Management (TDM); (4) improve mobility on the City's arterials though the incorporation of technology into transportation infrastructure; (5) improve safety at intersections; (6) focusing on improvements that improve the natural and human environment, preservation of historic resources, and creation of more enjoyable public street spaces; (7) developing a comprehensive design manual for City street space; and (8) exploring opportunities to enhance the use of high-occupancy vehicle (HOV) lanes as a traffic management strategy for periods of peak travel demand.

Parking – The City will comprehensively address the City's parking network by: (1) completing comprehensive studies on the City's parking supply, parking demand, and policies; (2) developing and implementing guidelines and requirements for Transit-Oriented Development (TOD); (3) ensuring parking availability with the City's commercial, residential, and tourist districts through the development of a curbside management program; (4) implementing policies to discourage the development of surface parking lots; (5) increasing the use of information technology to provide real-time parking location and availability information; (6) unbundling parking from building leases; and (7) minimizing, if not eliminating, tour bus traffic in residential areas of Old Town Alexandria.

In direct relation to the St. Stephen's and St. Agnes Upper School site, the Comprehensive Transportation Master Plan includes the following:

- Pedestrian
  - A new sidewalk is proposed along the north side of Seminary Road from west of Quaker Lane to west of Fort Williams Parkway. There are currently no sidewalks on the north side of this roadway segment.
- Bicycling
  - A Capital Bikeshare station is proposed near the intersection of Seminary Road and Fort Williams Parkway.

#### Alexandria Transit Vision Plan (2019)

The Alexandria Transit Vision Plan is a project led by the City of Alexandria and DASH to design a future bus network for the City of Alexandria. The purpose of the project is to create a

more useful and equitable bus network that encourages more people to get to more places using transit.

In December 2019, the Alexandria Transit Vision Plan bus network for 2030 and the short term 2022 "major growth" network were adopted by the Alexandria Transit Company (DASH) Board of Directors after nearly two years of planning, outreach, and discussion.

In direct relation to the St. Stephen's and St. Agnes Upper School site, the Alexandria Transit Vision Plan includes the following:

Replacement of the current DASH AT-2 route with the new N12 local route, which will run between King Street Metro and Mark Center every 30 minutes on weekdays. The routing of the new N12 route near the St. Stephen's and St. Agnes Upper School site will be similar to that of the current DASH AT-2 route, which runs along Seminary Road and Janneys Lane.

#### Complete Streets Design Guidelines (2016)

The Complete Streets Design Guidelines integrates existing City policy and design guidance related to roadway, sidewalk and trails, and incorporates new information to reflect best practices for developing a transportation system that serves the needs of people who walk, bike, ride transit or drive vehicles. The Complete Streets Design Guide identifies new street types for Alexandria and provides direction on the design of sidewalks, roadways, intersections and curbsides.

The Complete Streets Design Guidelines are used by City staff, design professionals, developers, and consultants in the planning and design of all types of street improvements. The Guidelines ensure that new roadways, intersections, sidewalks and trails are achieving the City's objectives for a safe and effective multimodal transportation system.

#### Vision Zero

Vision Zero is a multi-national initiative that aims to eliminate road deaths and serious injuries for all users, regardless of transportation mode. The City of Alexandria is one of over 20 municipalities across the United States that has adopted its own Vision Zero program.

The City of Alexandria included the development of a Vision Zero program in a 2016 amendment to its Transportation Master Plan. In January 2017, the City adopted a Vision Zero resolution instructing the City Manager to develop an action plan. The resulting action plan was adopted by the City Council in December 2017.



The City's Vision Zero Action Plan includes the following strategies:

- Improve data collection and evaluation.
- Enhance city processes and collaboration.
- Build safe streets for everyone.
- Promote a culture of safety.

While the Vision Zero Action Plan's recommendations are more related to overall strategy than individual projects, the Action Plan references several funded City programs projects that are aligned with Vision Zero principles. These include:

- City Transportation Management Technologies that improve road safety and traffic management while preparing for emerging transportation technologies, as identified in the City's Smart Mobility program.
- Complete Streets Guidelines which integrate existing City policy and design guidance related to roadway, sidewalk and trails, and incorporate new information to reflect best practices for developing a transportation system that serves the needs of people who walk, bike, ride transit or drive vehicles.
- The City's network of shared use paths which cover 20 miles within the City. Shared use paths within or near the EESAP include the Eisenhower Avenue and Mount Vernon Trails, as well as the planned Old Cameron Run Trail.
- Sidewalk maintenance, which is performed through the City's Public Works Services and replaces and repairs more than 12,000 square feet of sidewalk per year.
- The Pedestrian and Bicycle Chapter of the City's Comprehensive Transportation Master Plan, which articulates a vision of safe walking and bicycling networks for users of all ages and abilities.

#### 2019 Alexandria Mobility Plan (AMP)

The AMP is a strategic update to the 2008 Transportation Master Plan. It will integrate and advance the goals of major City of Alexandria initiatives including the Environmental Action Plan 2040, Vision Zero, and the Complete Streets Policy and Guidelines.

General policies and strategies for the AMP are currently being developed. The AMP is expected to be finalized in 2021 and updated subsequently every five to eight years.

#### **Local Initiatives**

Seminary Road Complete Streets Project (completed in 2019)

In September 2019, the Alexandria City Council approved this project, which repaved and reorganized Seminary Road between North Quaker Lane and Library Lane to include one travel lane in each direction, a center turn lane, new pedestrian crossings, and bicycle lanes.

The project's overall goals are to:

- Improve safety and accessibility for all users;
- Improve facilities for people who walk, bike, ride transit or drive cars; and
- Implement previously adopted plans, policies, and study recommendations.

The project's specific objectives are to:

- Eliminate serious injuries and fatalities on the corridor;
- Improve safety and accessibility for all roadway users by upgrading curb ramps and sidewalks;
- Provide continuous, safe, and comfortable places for people to walk;
- Introduce safer pedestrian crossings for residents, transit users, and all others walking the corridor;
- Where excess roadway capacity exists, identify ways to meet the goals set forth in the Pedestrian and Bicycle Master Plan, Vision Zero Plan, Transportation Master Plan, Environmental Action Plan, and the Central Alexandria Traffic Study; and
- Serve vehicle traffic with a roadway design that minimizes delay at intersections, and encourages speed limit compliance.



# **PROJECT DESIGN**

This section reviews the transportation components of the St. Stephen's and St. Agnes Upper School project. This includes an overview of how the site will be accessed by various users and how each mode is accommodated. This section also discusses interim construction operations.

#### **PROJECT OVERVIEW**

The project consists of a building addition to the existing school, reconfiguring the existing drive aisle and parking facilities, increasing the on-site parking supply from 230 to 250 spaces, gradually increasing the school's enrollment from 480 to 520 students over several years, and adding approximately three (3) new staff members. This report is based on a conceptual design approved by the City of Alexandria.

#### SITE ACCESS AND PARKING

This section reviews site access and parking operations related to the project. Figure 7 shows the location of the existing parking areas, including the proposed location of the temporary parking area.

#### **Staff Parking**

Under existing conditions, approximately 119 spaces across several different areas are dedicated to staff parking on site.

Under the proposed site plan, 23 staff parking spaces will be demolished and 27 new spaces added, bringing the total staff parking supply from 119 to 123 spaces.

#### **Student Parking**

Under existing conditions, there is a student parking area within the main parking lot containing approximately 67 spaces.

Under the proposed site plan, 16 new tandem spaces will be added to this parking area, bringing the total from 67 spaces to 83 spaces.

#### **Unassigned Parking**

Under existing conditions, there is an unassigned parking area along the school's driveway containing approximately 44 spaces. While unassigned, this area is used mostly by students during the school day.

This parking area will remain unchanged under the proposed site plan.

#### **Temporary Parking**

During construction, a staff parking area in the rear of the school containing approximately 23 spaces will be inaccessible. In its place, a temporary 30-space parking area will be added in the existing baseball field area, as shown on Figure 7. Once construction of the school addition is complete, the temporary parking area will be decommissioned, as the school addition will contain 27 new parking spaces replacing the original 23-space facility.

Existing and proposed parking supply by designation is summarized in Table 2.

**Table 2: Existing and Proposed Parking Supply** 

Parking designation	Existing	Proposed during construction	Proposed after construction
Staff	119	96	123
Student	67	83	83
Unassigned	44	44	44
Temporary	0	30	0
Total	230	253	250

#### STUDENT ARRIVAL AND DISMISSAL

This section reviews existing and proposed student arrival/dismissal operations, including private vehicle student pick-up/drop-off and buses.

#### **Arrival Operations**

#### Existing Operations

Under existing conditions, the private vehicle student drop-off area is located in the inner lane of the traffic circle in front of the school's main entrance. Drop-off vehicles queue down the school driveway, occasionally spilling onto St. Stephens Road. Once students are released from their vehicle, drop-off vehicles exit the school site via the driveway.

Several bus services use the St. Stephen's and St. Agnes Upper School site. Regional school buses pick up students from Alexandria, Fairfax, Arlington, and Prince William Counties in Virginia; Prince George's County in Maryland; and the District of Columbia. Intra-campus shuttles also run between the Upper School and the two other nearby St. Stephen's and St. Agnes campuses (the Lower School and the Middle School).

Regional school buses and intra-campus shuttles queue down the driveway, mixing with drop-off vehicles. Regional school buses unload in the outer lane of the traffic circle in front the school's main entrance. Intra-campus shuttles travel



south/clockwise through the main parking lot and around the loop behind the school, loading in the small parking lot at the school's northern edge.

The existing arrival timeline is shown on Figure 8. Existing dropoff operations are shown on Figure 9.

#### Proposed Operations during Construction

During construction, private vehicle drop-off operations will remain the same. However, buses will not be able to travel around the loop as the loop's rear half will be closed to traffic. Instead, buses will travel counter-clockwise around the northern half of the loop, make a multi-point turn near the bus fuel station, and return via the same path, loading in the small parking lot at the school building's northern edge as before. Due to limited space, these buses will all drop off and depart immediately. The loop driveway at this location is approximately 23 feet wide at its narrowest point, which is wide enough to allow two-way bus traffic.

The curb length available for bus operations in the small parking lot at the school building's northern edge is approximately 120 feet. The vehicles in the school's bus fleet range from 22 to 40 feet long. Assuming there would be a 5-foot gap between parked buses, the 22-foot buses would need 27 feet to park and the 40-foot buses would need 45 feet. Therefore, at any given time during arrival, no more than four (4) 22-foot buses or two (2) 40-foot buses are expected to use this area at once.

For all bus operations during construction, it is not intended that any buses navigate multi-point turns with students on board.

The above operation will apply to all buses except for one, which is too large to navigate the multi-point turn near the bus fuel station. This bus will instead unload and wait in the outer lane of the traffic circle.

Field tests have been conducted and have confirmed all other buses are able to make the multi-point turn.

Proposed arrival operations during construction are shown on Figure 10.

#### Proposed Operations after Construction

After construction is completed, arrival operations will return to pre-construction (existing) operations.

#### **Dismissal Operations**

#### **Existing Operations**

Under existing conditions, the private vehicle student pick-up area is located in the traffic circle in front of the school's main entrance. Pick-up vehicles queue down the school driveway.

Due to a staggered dismissal process which begins at 2:45pm and ends at 3:30pm, the vehicle queue length stays constant as students exit the school, find their vehicle, and the vehicle exits the queue. On a typical school day, the maximum vehicle queue extends about halfway down the driveway.

Regional, intra-campus, and athletic buses queue down the driveway, mixing with pick-up vehicles. All buses turn south through the main parking lot. All buses except the athletic buses load and unload in the parking lot drive aisle at the southeast corner of the school building, then continue around the loop behind the school. Athletic buses unload in the loop driveway at the school's northwestern corner. All buses then exit through the traffic circle and main driveway.

A traffic control staff person keeps vehicles and buses moving through the traffic circle in an orderly and safe fashion.

The existing dismissal timeline is shown on Figure 11. Existing drop-off operations are shown on Figure 12.

#### Proposed Operations during Construction

During construction, private vehicle drop-off operations will remain the same. However, buses will not be able to travel around the loop as the loop's rear half will be closed to traffic. Instead, buses will travel counter-clockwise around the northern half of the loop, make a multi-point turn near the bus fuel station, and return via the same path. The loop driveway at this location is approximately 23 feet wide at its narrowest point, which is wide enough to allow two-way bus traffic (with buses traveling in the southbound direction and loading in the northbound direction).

Athletic buses will load and unload in the loop driveway at the school's northwestern corner between 2:00pm and 3:00pm. The curb length available in this area for bus operations is approximately 220 feet. The vehicles in the school's bus fleet range from 22 to 40 feet long. Assuming there would be a 5-foot gap between parked buses, the 22-foot buses would need 27 feet to park and the 40-foot buses would need 45 feet. Therefore, at any given time during arrival, no more than eight (8) 22-foot buses or four (4) 40-foot buses are expected to use this area at once.



Regional and intra-campus buses will load and unload in the small parking lot at the school building's northern edge between 3:00pm and 3:45pm, and in the traffic circle between 3:40pm and 3:45pm. The curb lengths available in these areas for bus operations are approximately 120 feet and 125 feet, respectively. The vehicles in the school's bus fleet range from 22 to 40 feet long. Assuming there would be a 5-foot gap between parked buses, the 22-foot buses would need 27 feet to park and the 40-foot buses would need 45 feet. Therefore, at any given time during dismissal, no more than four (4) 22-foot buses or two (2) 40-foot buses at once are expected to use the small parking lot at the school building's northern edge, and no more than four (4) 22-foot buses or two (2) 40-foot buses at once are expected to use the traffic circle.

For all bus operations during construction, it is not intended that any buses navigate multi-point turns with students on board.

Field tests have been conducted and have confirmed all buses are able to make the multi-point turn.

Proposed dismissal operations during construction are shown on Figure 13.

#### Proposed Operations after Construction

Dismissal operations after construction is completed will return to pre-construction (existing) operations.

#### **Impacts of Proposed Project**

Dismissal vehicle queue lengths have decreased recently due to the school's implementation of a staggered dismissal period which keeps vehicles continuously moving out of the queue before the main dismissal events at 3:15 and 3:30pm.

Due to efficient and orderly arrival and dismissal operations that will continue during and after construction, off-site impacts of typical arrival and dismissal operations are not expected to worsen as a result of the proposed improvements to the St. Stephen's and St. Agnes Upper School site.



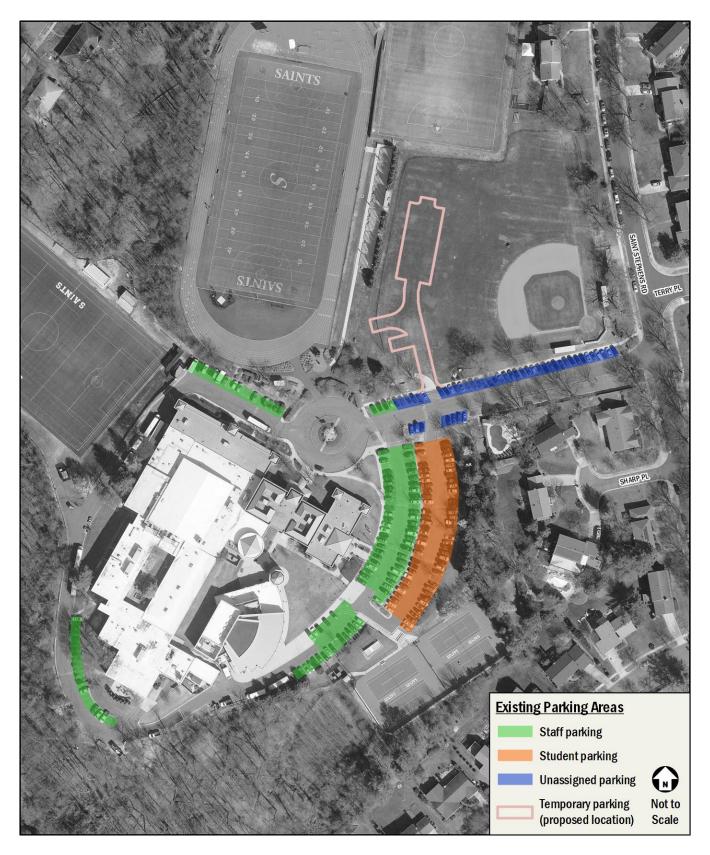
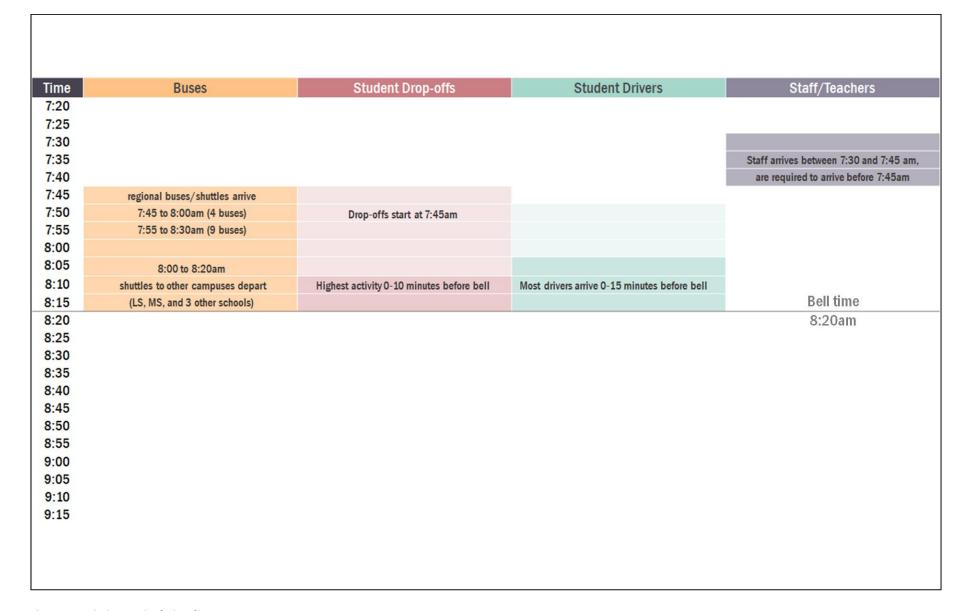


Figure 7: Existing Parking Areas





**Figure 8: Existing Arrival Timeline** 



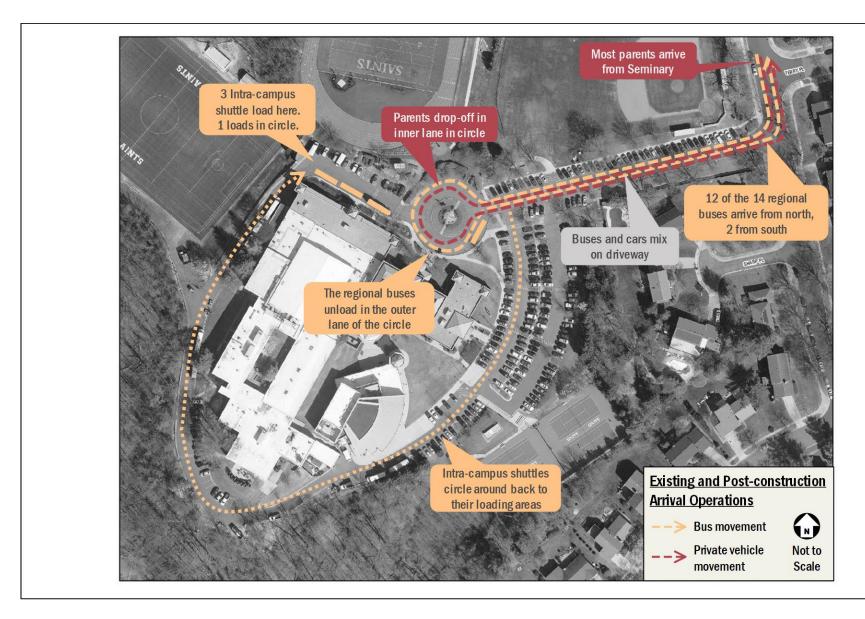
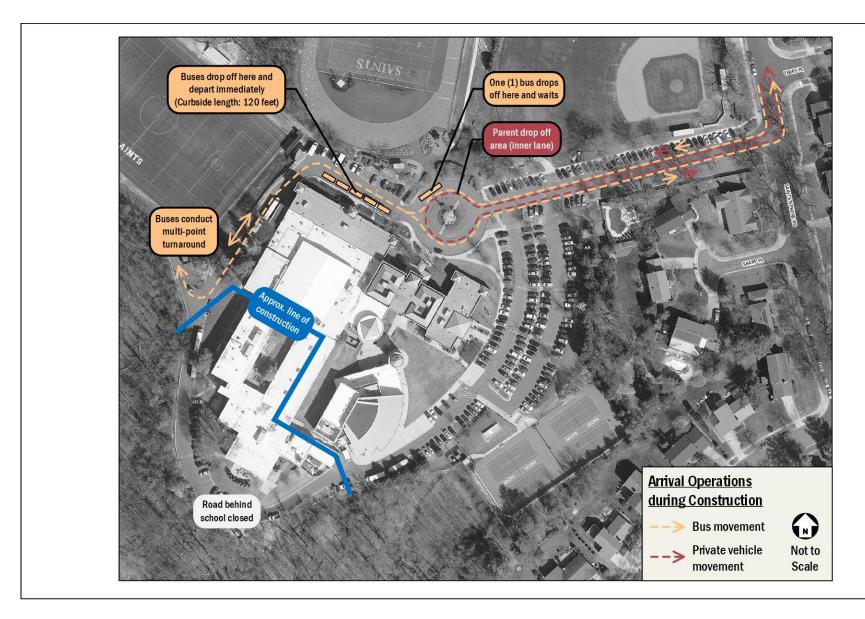


Figure 9: Existing and Post-construction Arrival Operations





**Figure 10: Arrival Operations During Construction** 



Time	Buses	Student Pick-ups	Student Drivers	Staff/Teachers
2:15	MS Athletics buses (9) arrive from			
2:20	SSSAS MS by 2:20pm (approx. 200 students)			
2:25				
2:30	2:30 to 3:00pm			
2:35	(3) Athletics buses depart			
2:40				Staggered dismissal begins
2:45		Parents start to line up		2:45pm
2:50				
2:55				
3:00	3:00 to 3:15pm	More parents line up, max queue extending		
3:05	shuttles from other campuses arrive	halfway down driveway		110 4 1 4 1 1
3:10	(LS, MS, and 3 other schools)			US students released
3:15		3:15: US students released	Most student drivers leave after bell	3:15pm
3:20	3:15 to 3:45pm			MC atrial and a value and
3:25	regional buses/shuttles depart		0 1: " " " " " " " " " " " " " " " " " "	MS students released
3:30		3:30: MS students released	Some drivers with siblings in MS need to wait	3:30pm
3:35			for MS release	
3:40			Depending on after school activities some	
3:45 3:50		by 3:50pm, main queue is clear	students depart later	
3:55		by 3.30pm, main queue is clear	statenes depart ater	
4:00	4:00pm: shuttle from US to MS departs			Teachers and staff start leaving after 4pm
4:05	4:00 to 4:15pm - (1) shuttle arrives			The state of the s
4:10	4:00pm to 6:00pm - Athletics bus arrivals			
4:15	6:00pm (1) shuttle bus arrives			
6:00	6:00 to 6:15pm - (3) shuttles depart	pick-ups continue, but at much lower levels		
	(c) similar sopure	processing and action to the letters		

Figure 11: Existing Dismissal Timeline



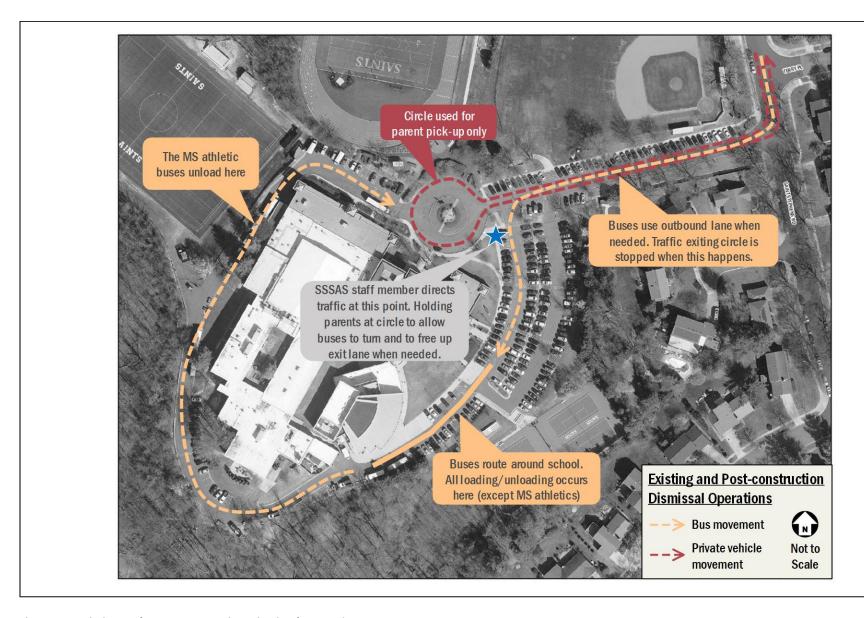


Figure 12: Existing and Post-Construction Dismissal Operations



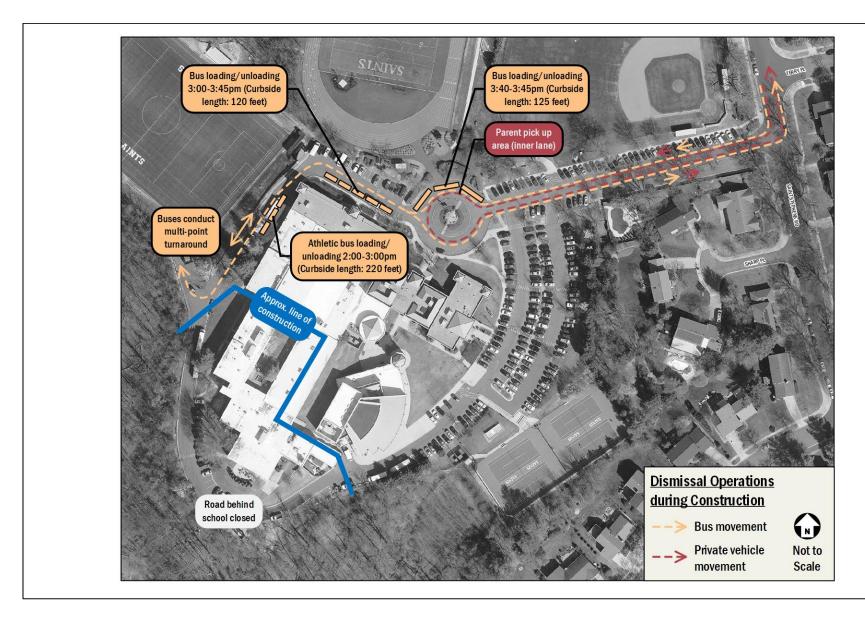


Figure 13: Dismissal Operations During Construction



# SITE OBSERVATIONS

Site observations of existing arrival and dismissal queueing, onand off-site parking occupancy, and pedestrian and bicycle safety were conducted on Tuesday, December 10 and Thursday, December 12, 2019. The observations were performed in order to determine the impacts school arrival/dismissal operations have off-site, and to observe curbside parking nearby. This section presents the findings of these observations.

#### ARRIVAL AND DISMISSAL DRIVEWAY QUEUES

During arrival, the peak vehicle queue extends all the way down the school driveway, occasionally spilling onto St. Stephens Road. Figure 14 and Figure 15 show photographs of the arrival peak vehicle queue.

During dismissal, the peak vehicle queue extends about halfway down the school driveway. Due to a staggered dismissal process which begins at 2:45pm and ends at 3:30pm, the vehicle queue length stays constant as students exit the school, find their vehicle, and the vehicle exits the queue. Figure 16 shows a photograph of the dismissal peak vehicle queue.

Peak vehicle queues for both the arrival and dismissal periods are shown on Figure 21.

#### **ON-SITE PARKING OCCUPANCY**

Occupancy counts of the school's on-site parking facilities were conducted throughout the school day, which showed a peak occupancy of 82% for staff parking, 93% for student parking, and 95% for unassigned parking.

Peak on-site parking occupancies are shown on Figure 20. Timed on-site parking occupancies are shown on Table 3.

#### **OFF-SITE PARKING OCCUPANCY**

Occupancy counts of curbside parking areas on neighborhood streets within one block of the school driveway were conducted throughout the school day. These counts showed that there is very little school-related use of curbside parking in the neighborhood, except on the western curb of St. Stephens Road adjacent to the school. A maximum of nine (9) of the approximately 17 spaces in this area were occupied during observations. The timing of the occupancy peak in this area indicated that it was used primarily by school parkers, not neighborhood residents.

Peak off-site parking occupancies are shown on Figure 20. Timed off-site parking occupancies are shown on Table 3.

#### PEDESTRIAN AND BICYCLE SAFETY

Pedestrian conditions near the school site are generally good. Although most sidewalks, curb ramps, and crosswalks near the school do not meet City of Alexandria or Virginia Department of Transportation standards, the area near the school is characterized by low-volume, low-speed residential streets with sidewalks on both sides, as well as a sidewalk along the school driveway. No major pedestrian safety issues were observed.

Bicycle conditions near the school are generally good, although no bicycle trips were observed coming to or from the school. The area near the school is characterized by low-volume, low-speed residential streets that are generally suitable for bicycling. Bicycle lanes were also recently installed on Seminary Road. No major bicycle safety issues were observed.

Figure 17, Figure 18, and Figure 19 show photographs of pedestrian and bicycle facilities on the school site and along St. Stephens Road and Seminary Road.

Table 3: Existing On- and Off-site Parking Occupancy

Parking	Total spaces	Occupied spaces				Occupancy			
designation	(incl. standard & ADA)	7:45am	8:30am	3:00pm	3:30pm	7:45am	8:30am	3:00pm	3:30pm
Staff	119	70	96	97	77	59%	81%	82%	65%
Student	67	6	48	62	30	9%	72%	93%	45%
Unassigned	44	11	40	42	33	25%	91%	95%	75%
Street parking	17	2	9	8	4	12%	53%	47%	24%
Total	247	89	193	209	144	36%	78%	85%	58%





Figure 14: Arrival peak vehicle queue, looking west down school driveway



Figure 15: Arrival peak vehicle queue, looking south on St. Stephens Road towards school





Figure 16: Dismissal peak vehicle queue, looking west down school driveway



Figure 17: Recently upgraded crosswalks and bicycle lanes on Seminary Road





Figure 18: Typical sidewalk along St. Stephens Road



Figure 19: Sidewalk along school driveway



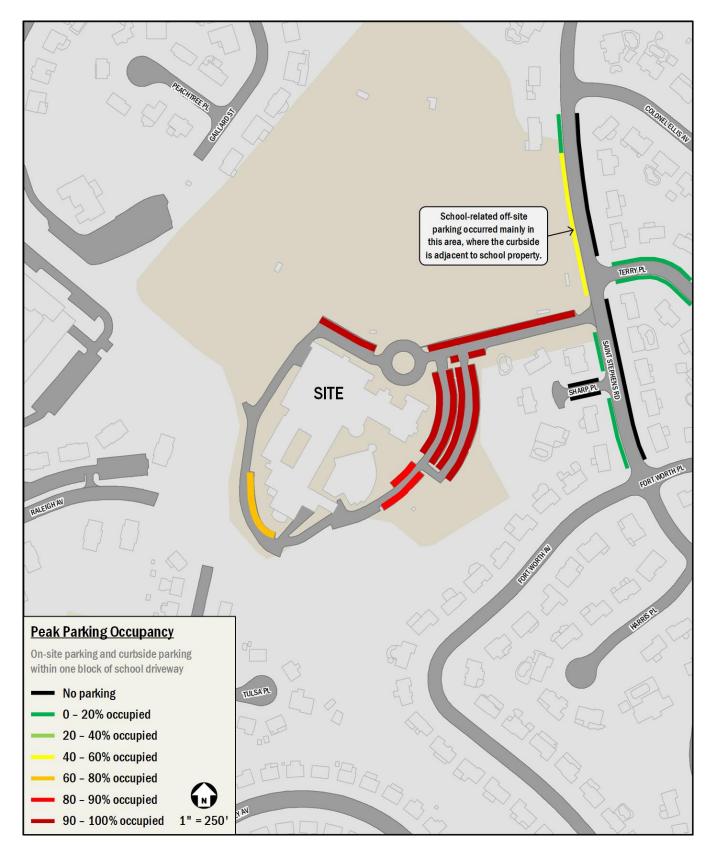


Figure 20: Peak Parking Occupancy



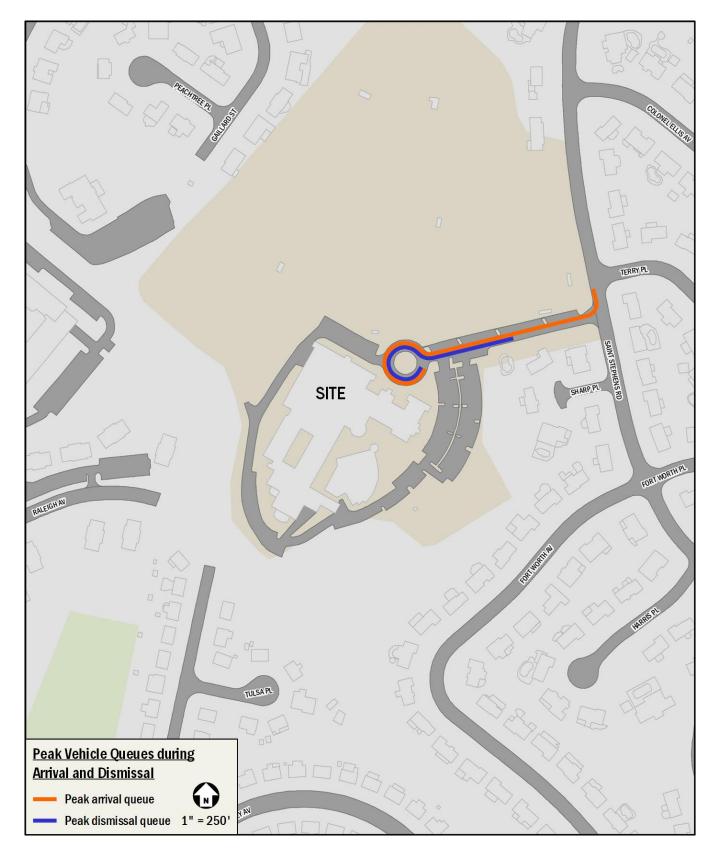


Figure 21: Peak Vehicle Queues during Arrival and Dismissal



# TRAVEL DEMAND ASSUMPTIONS

This section outlines the transportation demand of the St. Stephen's and St. Agnes Upper School improvements. This includes a review of vehicular trip generation, vehicular trip distribution, and parking demand.

#### TRIP GENERATION

Weekday peak hour trip generation is calculated based on the methodology outlined in the Institute of Transportation Engineers' (ITE) Trip Generation, 10<sup>th</sup> Edition.

Vehicular trip generation for this project considers the addition of 40 students to the school's enrollment, increasing the total number of students from 480 to 520. The school's trip generation was calculated based on ITE Land Use 530 (High School). Although the ITE methodology uses student population, not staff population, as an input, a certain number of teachers per students is assumed in the methodology. Therefore, the school's planned increase of three (3) staff members is accounted for in the methodology.

Table 4 contains a summary of the project's trip generation. Based on ITE <u>Trip Generation</u> methodology, the increase in student enrollment is expected to add 20 new vehicular trips in the AM peak hour and six (6) new trips in the PM peak hour.

#### TRIP DISTRIBUTION

Trip distribution for the project is based on site observations conducted in December 2019. For both the inbound and

outbound distributions, 60% of trips come from Seminary Road, and 40% come from Fort Williams Parkway. The inbound and outbound distributions are shown on Figure 22 and Figure 23.

The resulting net new site-generated volumes at key nearby intersections are shown on Figure 24. These are the volumes expected to be added above existing conditions as a result of the St. Stephen's and St. Agnes Upper School improvements.

#### **SUMMARY OF TRAFFIC IMPACTS**

As shown on Figure 24, the planned improvements to the St. Stephen's and St. Agnes Upper School are expected to generate an extremely low number of new peak hour vehicle trips over existing conditions.

For example, at the intersection of Seminary Road and St. Stephens Road, four (4) new eastbound rights and four (4) new westbound lefts are expected during the morning peak hour. This equals one (1) new vehicle every 15 minutes for each turning movement.

Traffic on St. Stephens Road approaching Seminary Road is expected to grow by two (2) northbound lefts and two (2) northbound rights during the morning peak hour, or one (1) new vehicle every 30 minutes for each turning movement.

Since school dismissal occurs before the afternoon peak commuting hour, expected afternoon peak hour volume increases are even lower than those of the morning peak hour.

**Table 4: Trip Generation Summary** 

Land Use	ITE Code	Students	AM Peak Hour			PM Peak Hour		
Lanu Ose		Students	In	Out	Total	In	Out	Total
<u>Existing</u>								
High School	530	480	168	82	250	32	35	67
<b>Total Existing Trips</b>			168	82	250	32	35	67
Proposed								
High School	530	520	181	89	270	35	38	73
Total Proposed Trips			181	89	270	35	38	73
Net New Site Trips			13	7	20	3	3	6



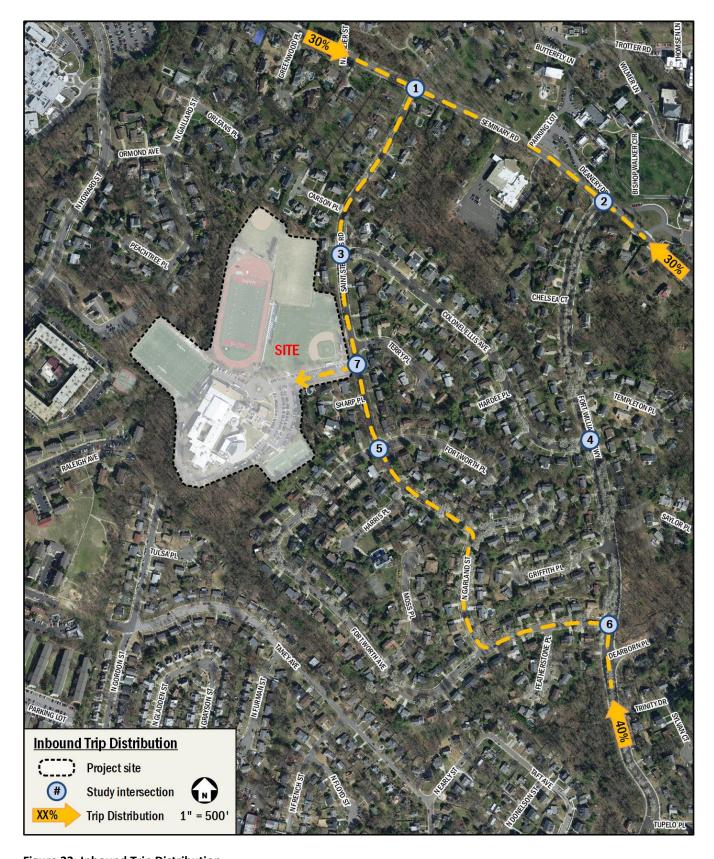


Figure 22: Inbound Trip Distribution



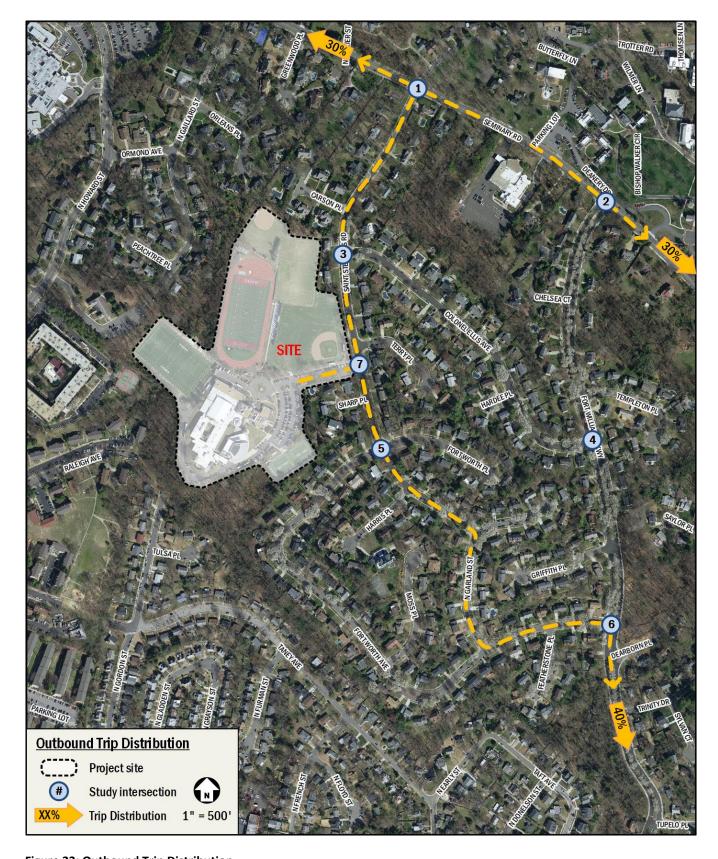


Figure 23: Outbound Trip Distribution



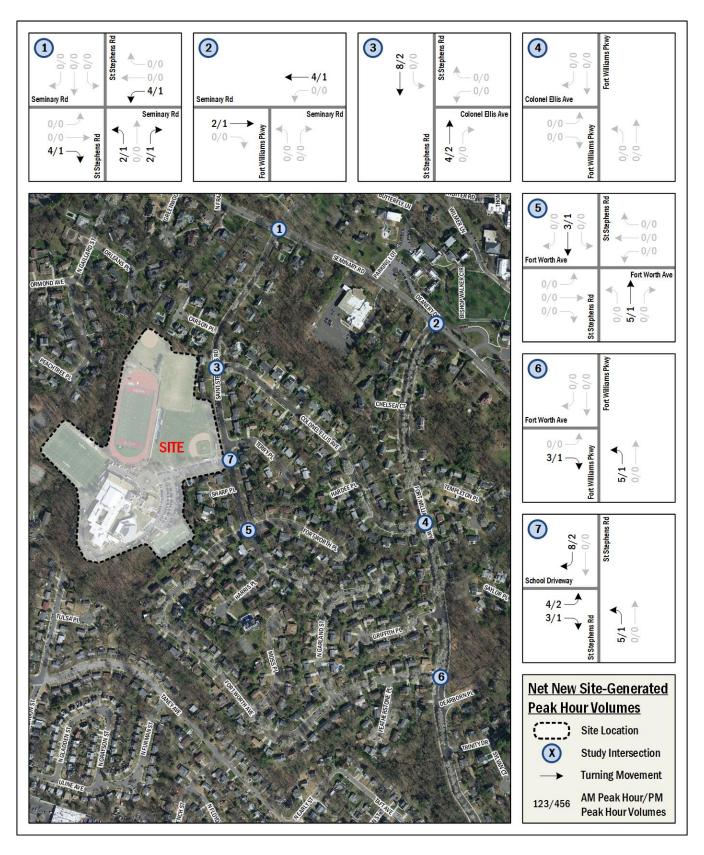


Figure 24: Net New Site-Generated Peak Hour Volumes



#### **PARKING**

This section reviews the existing parking supply, evaluates whether the school's on-site parking will still be able to accommodate typical weekday school activity under proposed conditions, and discusses any impacts.

#### **Existing Conditions**

The following parking analysis considers the existing parking supply and demand.

Parking occupancy observations were performed on a typical weekday in December 2019. As shown in Table 5, the peak occupancy was 97 of 113 spaces for staff parking, 62 of 67 spaces for student parking, and 42 of 44 spaces for unassigned parking.

About nine (9) vehicles were observed parking on neighborhood streets. These are described in the Site Observations chapter and shown on Figure 20.

#### **Proposed Conditions**

The following parking analysis considers both the proposed increase in student and staff populations as well as the proposed increase in parking supply.

Under proposed conditions, the parking supply will increase by 20 spaces, including four (4) new staff parking spaces and 16 new student parking spaces.

Along with the increase in parking supply, the student population will increase gradually from 480 to 520 students, and three (3) new staff members will be added.

In order to project the increase in student parking demand, it is assumed that the existing peak parking occupancy in student-designated areas will increase linearly by approximately 8%, matching the percentage increase in student population.

In order to project the increase in staff parking demand, three (3) occupied spaces were added to the existing numbers of peak occupied spaces in staff-designated areas. To be conservative, it was assumed that all three (3) new staff members would drive alone and park on site.

The projected supply- and demand-adjusted peak occupancy for proposed conditions is 100 of 117 spaces for staff parking, 67 of 83 spaces for student parking, and 42 of 44 spaces for unassigned parking, as shown in Table 5.

As shown, peak parking occupancy is expected to be less in proposed conditions than in existing conditions. Therefore, because the school will be more able to accommodate parking on-site than before, impacts to neighborhood street parking are expected to be very minimal. No more than one or two additional vehicles are expected to park on the street, and they would likely park in the same area students currently do, along St. Stephens Road adjacent to the school.

Existing and projected parking occupancies of both on- and offsite facilities are shown on Table 5.

#### **Conditions during Construction**

During construction, a portion of staff parking containing approximately 23 spaces will be inaccessible. In its place, a temporary 30-space parking area will be added in the existing baseball field area. Once construction of the school addition is complete, the temporary parking area will be decommissioned.

Because the temporary parking area will include more spaces than were lost during construction, parking supply is still expected to exceed parking demand during construction.

#### Conclusion

The school's existing parking supply is generally sufficient to meet demand, although some school-related parking occurs on neighborhood streets.

Under proposed conditions, peak parking occupancy is expected to be less than in existing conditions thanks to an increased parking supply that exceeds new demand.

Impacts to neighborhood street parking are expected to be very minimal.

Parking supply is expected to continue to exceed demand during construction due to a temporary parking facility that will be provided.



**Table 5: Existing and Proposed Parking Supply and Demand** 

Parking designation		Scenario	Parking supply			Parking demand (observed for existing, projected for proposed)			
			Standard	ADA	Total	7:45am	8:30am	3:00pm	3:30pm
	Staff	Existing	113	6	119	70	96	97	77
	Stall	Proposed	117	6	123	73	99	100	80
On-site	Student	Existing	67	0	67	6	48	62	30
		Proposed	83	0	83	7	52	67	33
	Unandanad	Existing	44	0	44	11	40	42	33
	Unassigned	Proposed	44	0	44	11	40	42	33
	On-site total	Existing	224	6	230	87	184	201	140
		Proposed	244	6	250	91	191	209	146
Off cite	On-street adjacent to school	Existing	17	0	17	2	9	8	4
Off-site		Proposed	17	0	17	2	11	10	5



# **PEDESTRIAN FACILITIES**

This section presents a review of pedestrian facilities near the St. Stephen's and St. Agnes Upper School site. The steps performed in this review include:

- A detailed review of existing pedestrian facilities within a quarter-mile distance of the site
- A review of pedestrian-related infrastructure improvements near the site

The following conclusions are reached within this chapter:

- Pedestrian facilities near the St. Stephen's and St. Agnes
  Upper School site are well-established and mostly
  continuous, but many facilities do not meet City of
  Alexandria or Virginia Department of Transportation
  requirements.
- Proposed pedestrian improvements along Seminary Road will improve conditions in the future.

#### **EXISTING PEDESTRIAN FACILITIES REVIEW**

The following is a review of sidewalks and other pedestrian facilities within a quarter-mile distance of the St. Stephen's and St. Agnes Upper School. Sidewalks, crosswalks, and curb ramps within the study area were evaluated based on City of Alexandria and Virginia Department of Transportation requirements, which are summarized in Table 6.

Comparisons of the pedestrian facilities within the study area to City of Alexandria and Virginia Department of Transportation standards are shown on Figure 25.

**Table 6: Sidewalk Requirements** 

Source	Minimum Sidewalk Width	Minimum Buffer Width
City of Alexandria Comprehensive Transportation Master Plan	5 ft	-
VDOT Roadway Design Manual (buffer with tree)	5 ft	6 ft
VDOT Roadway Design Manual (buffer without tree)	5 ft	3 ft
VDOT Roadway Design Manual (no buffer)	8 ft	-

#### **Sidewalks**

Most streets near the site have sidewalks on both sides. All sidewalks are at least five (5) feet wide, meeting the City of

Alexandria's minimum standard width. However, none of the nearby sidewalks meet the Virginia Department of Transportation's minimum buffer width requirements.

#### Crosswalks

There are no marked crosswalks within the pedestrian study area.

#### **Curb Ramps**

ADA standards require that all curb ramps be provided wherever an accessible route crosses a curb, that curb ramps have a detectable warning, and that curb ramps are not shared between two crosswalks. In circumstances where a there is a shared diagonal curb ramp, 48 inches of clear space is required at the bottom of the curb.

Under existing conditions within the site's quarter-mile walkshed, there are curb ramps present at most intersections. However, all of the curb ramps are shared and diagonal, none have crosswalks, and none have a detectable warning.

#### Summary

Pedestrian conditions near the school site are generally good and no improvements are needed. During site observations, pedestrians were observed safely and comfortably navigating the site area, including crossing St. Stephens Road. Although crosswalks are not present and most sidewalks and curb ramps do not meet City of Alexandria or Virginia Department of Transportation standards, the area near the school is characterized by low-volume, low-speed residential streets with sidewalks on both sides, as well as a sidewalk along the school driveway.

#### PROPOSED PEDESTRIAN FACILITIES

This section reviews proposed infrastructure improvements near the St. Stephen's and St. Agnes Upper School site that would improve pedestrian comfort levels.

# Comprehensive Transportation Master Plan – Pedestrian Element

As part of the Pedestrian Element of the City of Alexandria's Comprehensive Transportation Master Plan, a new sidewalk is proposed along the north side of Seminary Road from west of Quaker Lane to west of Fort Williams Parkway.

Adding this segment of sidewalk where there currently is none would improve pedestrian connectivity to the school site.



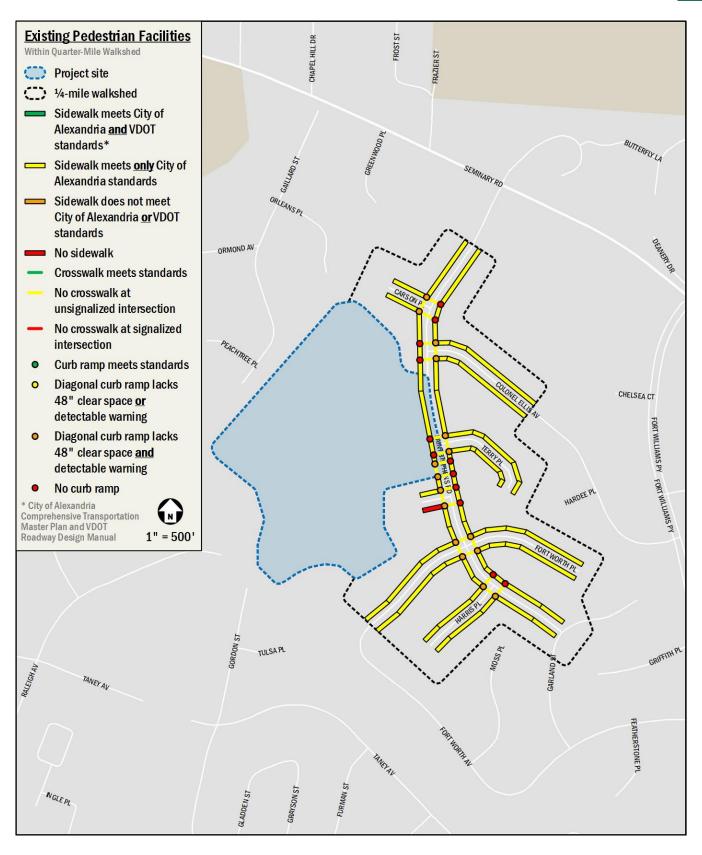


Figure 25: Existing Pedestrian Facilities



# **BICYCLE FACILITIES**

This section presents a review of bicycle facilities near the St. Stephen's and St. Agnes Upper School site. The steps performed in this review include:

- A review of existing bicycle infrastructure near the site
- A review of proposed City projects that would improve bicycle access to and from the site

The following conclusions are reached within this chapter:

- The site has good connectivity to existing on- and off-street bicycle facilities.
- There are currently no Capital Bikeshare stations near the site, but a station has been proposed 0.5 miles from the site.

#### **EXISTING BICYCLE FACILITIES REVIEW**

The site is not directly adjacent to any bicycle facilities, but is located on St. Stephens Road, a neighborhood street with relatively low vehicular traffic and speed. The newly installed bike lanes on Seminary Road are 0.3 miles from the school site, accessible from St. Stephens Road.

The Seminary Road bike lanes connect with designated bike routes on N. Howard Street and Fort Williams Parkway, which then connect with other bicycle facilities such as the Holmes Run and Eisenhower Avenue Trails.

Existing bicycle facilities near the St. Stephen's and St. Agnes Upper School site are shown on Figure 26.

#### **Bicycle Parking**

There are currently eight (8) bicycle parking spaces on the St. Stephen's and St. Agnes Upper School site, located on four (4) exterior bicycle racks near one of the school's entrances.

#### **Bicycle Activity**

No bicycle trips to or from the school site were observed during site observations on Tuesday, December 10 and Thursday, December 12, 2019.

#### **Capital Bikeshare**

The Capital Bikeshare program provides an additional cycling option for staff and visitors. Capital Bikeshare has placed over 500 bikeshare stations across Washington, DC, Arlington County, the City of Alexandria, and Fairfax County in Virginia, and Montgomery County and Prince George's County in Maryland, with 4,300 bicycles provided.

The nearest Capital Bikeshare station to the St. Stephen's and St. Agnes Upper School site is 1.3 miles away at the intersection of Radford Street and Osage Street in Alexandria.

#### PROPOSED BICYCLE FACILITIES

This section reviews proposed infrastructure improvements on or near the St. Stephen's and St. Agnes Upper School site that would improve bicycle access.

#### **Bicycle Parking**

As part of the proposed improvements to the school site, eight (8) additional bicycle parking spaces will be provided on four (4) new bicycle racks at the front of the site. This will bring the total number of on-site bicycle parking spaces to 16.

Comprehensive Transportation Master Plan – Bicycle Element The following bicycle improvement is proposed in the Bicycle Element of the City of Alexandria's Comprehensive Transportation Master Plan:

 A Capital Bikeshare station is proposed near the intersection of Seminary Road and Fort Williams Parkway, about 0.5 miles from the site.



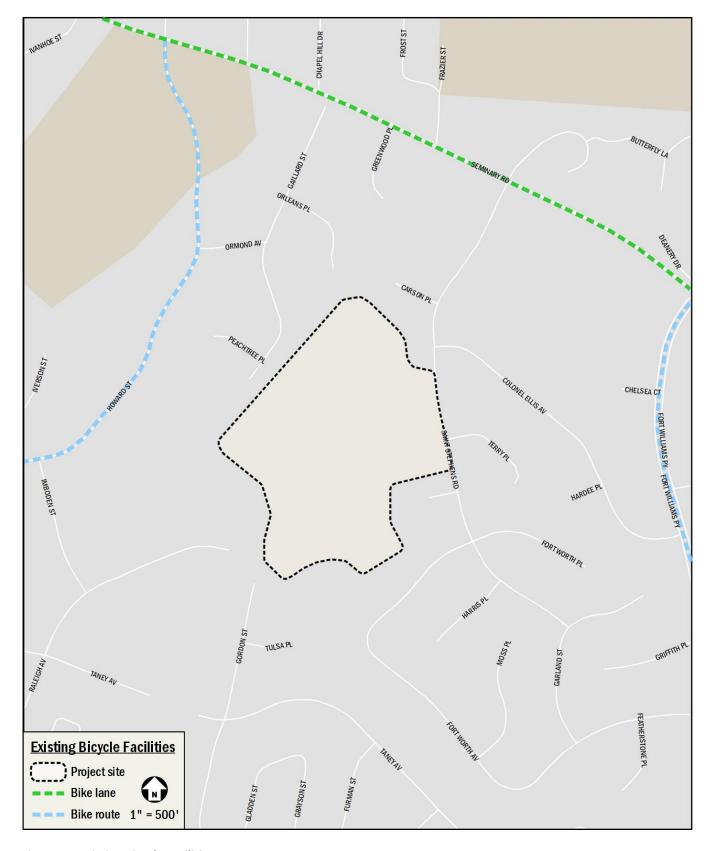


Figure 26: Existing Bicycle Facilities



# TRANSPORTATION SUSTAINABILITY AND QUALITY OF LIFE

This section highlights certain measures the St. Stephen's and St. Agnes Upper School is undertaking to reduce vehicle trips and mitigate the impact of site-generated vehicle trips on the transportation network. These measures include:

- Four (4) carpool-only spaces in the student parking lot;
- Orderly, efficient arrival and dismissal procedures assisted by a traffic control officer;
- A staggered dismissal pattern beginning at 2:45pm and ending at 3:30pm, which on most days allows the dismissal vehicle queue to remain fully within the school driveway; and

 An on-site parking supply that meets typical school day demand, containing most parking impacts within the school site in existing conditions, construction conditions, and post-construction conditions.

Under existing conditions, special events such as major athletic games sometimes create longer queues and increased parking demand that impacts neighborhood streets, particularly in the spring season. However, this is not the case for typical school day activity.

Due to the existing mitigation measures the school has implemented, as well as the planned continuation of those measures both during and after construction, the proposed improvements to the St. Stephen's and St. Agnes Upper School are not expected to have a negative impact on the surrounding transportation network or on neighborhood quality of life.



# SUMMARY AND CONCLUSION

This Transportation Statement reaches the following major findings:

#### **PROJECT SUMMARY**

The project consists of a building renovation and addition, gradually increasing student and staff populations, and increasing the on-site parking supply. Changes to parking and arrival/dismissal operations are as follows:

#### **Parking**

#### Staff Parking

The 96 parking spaces within the existing staff parking areas in front of the school will remain as-is. The existing 23-space staff parking area in the rear of the school will be replaced by a new staff parking area containing 27 spaces. Overall, staff parking supply will increase from 119 to 123 spaces. Both the existing and proposed totals include six (6) ADA spaces.

#### Student Parking

The existing 67-space student parking area will be increased to include an additional 16 tandem spaces, bringing the total student parking supply from 67 to 83 spaces.

#### **Unassigned Parking**

The existing 44-space unassigned parking area will remain as-is.

#### Temporary Parking

During construction, a portion of staff parking containing approximately 23 spaces will be inaccessible. In its place, a temporary 30-space parking area will be added in the existing baseball field area. Once construction of the school addition is complete, the temporary parking area will be decommissioned.

#### **Arrival/Dismissal Operations**

Arrival and dismissal operations will remain as-is.

#### Private Vehicle Student Pick-up/Drop-off

The private vehicle student pick-up/drop-off area is located in the inner lane of the traffic circle in front of the school's main entrance, with vehicles queuing down the school driveway.

During arrival, the queue occasionally spills onto St. Stephens Road. Due to a staggered dismissal process which begins at 2:45pm and ends at 3:30pm, the vehicle queue length stays constant as students exit the school, find their vehicle, and the vehicle exits the queue. On a typical school day, the maximum vehicle queue extends about halfway down the driveway during dismissal.

#### Bus

During arrival, regional buses unload in the outer lane of the traffic circle in front the school's main entrance. Intra-campus shuttles travel south/clockwise through the main parking lot and around the loop behind the school, loading in the small parking lot at the school's northern edge.

During dismissal, all buses turn south through the main parking lot. All buses except the athletic buses load and unload in the parking lot drive aisle at the southeast corner of the school building. Athletic buses unload in the loop driveway at the school's northwestern corner.

#### **Temporary Operations**

While the school addition is under construction, temporary arrival/dismissal operations are proposed. During both arrival and dismissal, private vehicle drop-off operations will remain the same. However, buses will not be able to travel around the loop as the loop's rear half will be closed to traffic.

#### Transportation Sustainability and Quality of Life

This report highlights certain measures St. Stephen's and St. Agnes Upper School is undertaking to reduce vehicle trips and reduce the impact of site-generated vehicle trips on the transportation network.

#### **CONCLUSION**

This report concludes that the St. Stephen's and St. Agnes Upper School site improvements will not have a negative impact on the surrounding transportation and roadway network as long as the school continues the transportation policies it has in place today, including:

- Four (4) carpool-only spaces in the student parking lot;
- Orderly, efficient arrival and dismissal procedures assisted by a traffic control officer;
- A staggered dismissal pattern beginning at 2:45pm and ending at 3:30pm, which on most days allows the dismissal vehicle queue to remain fully within the school driveway; and
- An on-site parking supply that meets typical school day demand, containing most parking impacts within the school site in existing conditions, construction conditions, and post-construction conditions.