

**Docket Items #6 A-C**  
**ACPS Modular Classroom Addition(s)**  
**Charles Barrett - Development Site Plan #2010-0005**  
**Patrick Henry – Development Site Plan #2010-0010**  
**James K. Polk – Development Site Plan #2010-0009**

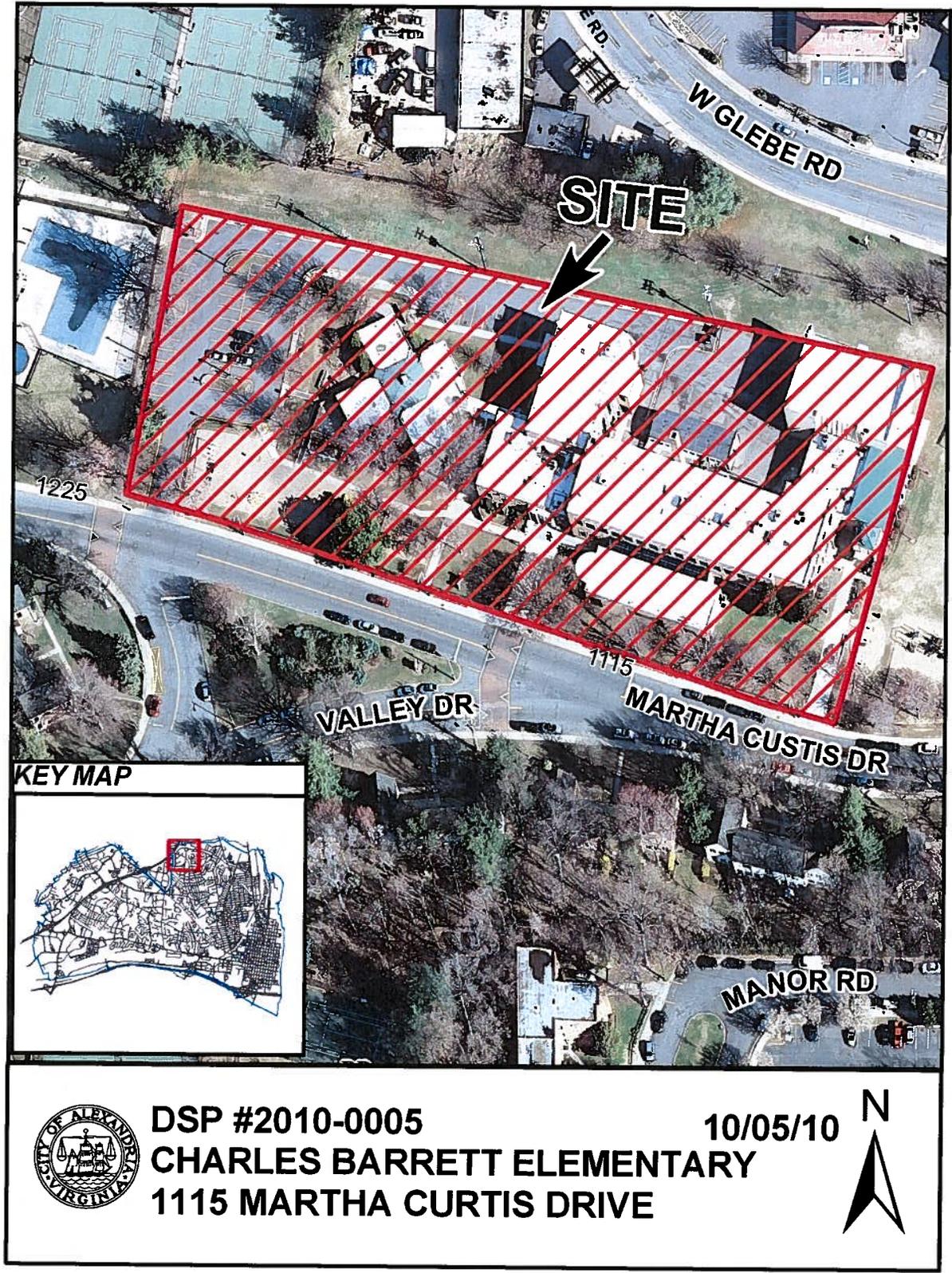
Application	General Data	
<p><b>Charles Barrett Elementary:</b>  <b>DSP#2010-0005</b>            1115 Martha Custis Drive            Zone: RB / POS            Site: 215,252 sf (4.9 ac)</p> <p><b>Patrick Henry Elementary:</b>  <b>DSP#2010-0010</b>            4643 Taney Avenue            Zone: R-12            Site: 652,703 sf (14.9 ac)</p> <p><b>James K. Polk Elementary:</b>  <b>DSP#2010-0009</b>            5000 Polk Avenue            Zone: R-12 / R-20            Site: 587,803 sf (13.5 ac)</p>	PC Hearing:	October 5, 2010
	If approved, DSP Expiration:	October 5, 2013 (36 months)
	Existing / Proposed Use:	Elementary School
	Gross Floor Areas:	<p><b>Charles Barrett:</b>            Existing: 75,294 sf            Proposed: 14,274 sf            Total: 89,568 sf</p> <p><b>Patrick Henry:</b>            Existing: 74,898 sf            Proposed: 13,681 sf            Total: 88,579 sf</p> <p><b>James Polk:</b>            Existing: 52,862 sf            Proposed: 11,768 sf            Total: 64,630 sf</p>
	Small Area Plans:	CB: North Ridge / Rosemont PH & JP: Seminary Hill
Applicant: Alexandria City Public Schools (ACPS) represented by Dave Conrath	Green Building:	Polk will strive for LEED Silver, but will meet LEED Certification at minimum. The other two schools will work to achieve 50 LEED points for the proposed additions.
Historic Districts:	N/A	

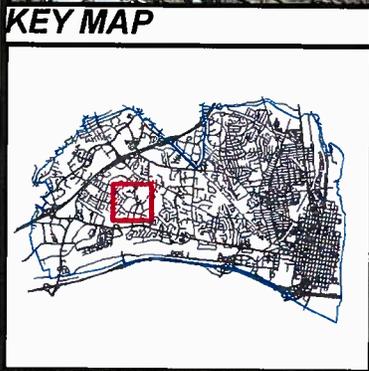
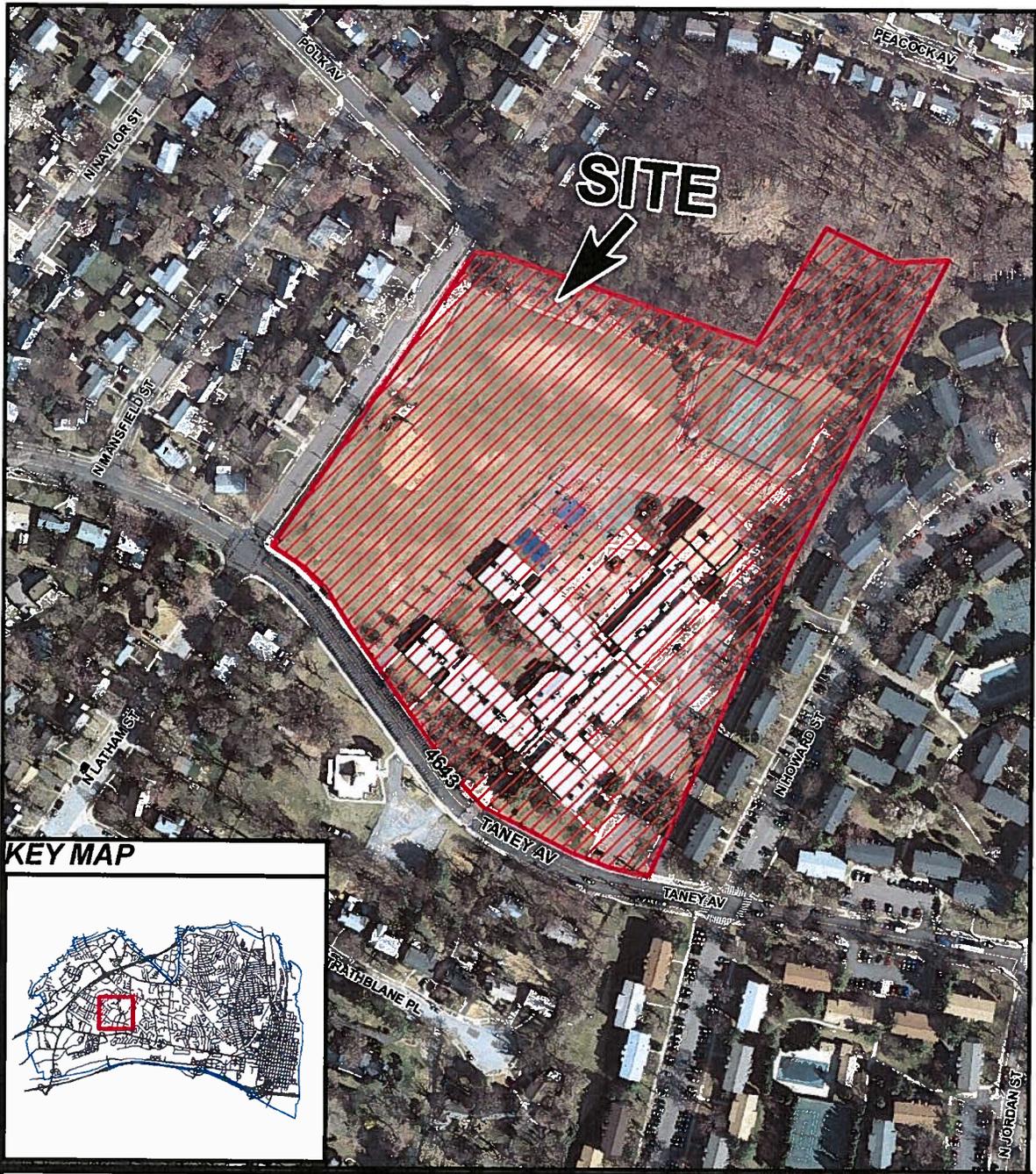
Purpose of Applications
<ul style="list-style-type: none"> <li>• Development site plan approvals for three elementary schools to construct 1 - 2 modular classroom additions at each school;</li> <li>• In addition to the proposed additions, Charles Barrett Elementary is requesting a minor expansion of the existing cafeteria and a modification to the side setback;</li> </ul>

- James Polk Elementary is proposing to expand the existing parking lot; and
- The applicant has requested a waiver of the screening required for the rooftop mechanical equipment for all three schools.

**Staff Recommendation: APPROVAL WITH CONDITIONS**

**Staff Reviewers: Kristen Mitten, [Kristen.Mitten@alexandriava.gov](mailto:Kristen.Mitten@alexandriava.gov)  
Patricia Escher, AICP, [Patricia.Escher@alexandriava.gov](mailto:Patricia.Escher@alexandriava.gov)**

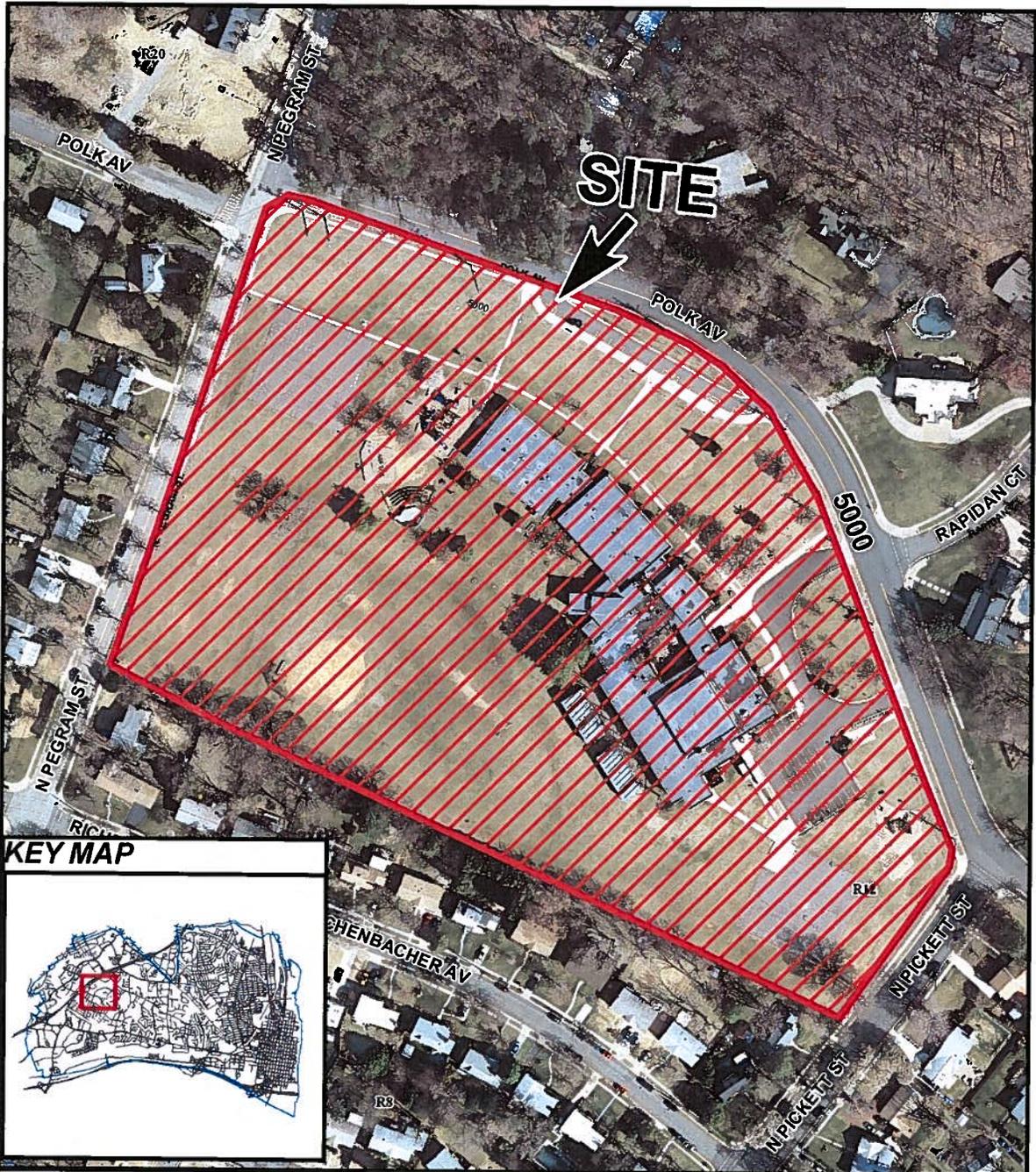




**DSP #2010-0010  
PATRICK HENRY ELEMENTARY  
4643 TANEY AVENUE**

**10/05/10**





DSP #2010-0009  
JAMES K. POLK ELEMENTARY  
5000 POLK AVENUE

10/05/10



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## **I. SUMMARY**

### ***A. Recommendation***

Staff recommends approval of the three individual development site plans for Charles Barrett, Patrick Henry and James Polk Elementary schools to allow the construction of the proposed modular classroom additions, the expansion of the Charles Barrett cafeteria, and the James Polk parking lot improvement. The proposed classroom additions constitute a plan to accommodate up to 675 new students and 27 new teachers which are necessary to provide both a permanent solution and flexibility towards meeting the school capacity needs of the City. Additionally, staff supports the proposed modification of the side yard setback at Charles Barrett and has added conditions to address the screening of the mechanical rooftop equipment, as discussed in more detail in the staff analysis section.

Discussion topics include:

- Building Design;
- Green Building and Sustainable Design;
- Parking; and
- Construction Phasing.

### ***B. Project Descriptions***

Alexandria City Public Schools (ACPS) is requesting approval of three separate development site plans, which, considering the similar development nature of the proposals, have been combined into a single staff report. However, Planning Commission will need to make three separate motions, one for each site plan.

The following applications represent the maximum build-out of the modular additions proposed by the applicant in anticipation of meeting increasing school capacity needs for the next school year, as well as providing flexibility to further expand the schools if enrollment rates continue to rise. Since these buildings are modular in nature, all or portions of these building can be installed and occupied, as necessary, to accommodate demand for additional classrooms. In an effort to provide flexibility, staff has analyzed and the Planning Commission is being asked to approve several different options for each location.

#### **1. Charles Barrett:**

- Modular Classroom Addition #1: single-story, 1,216 sf, 1 classroom
- Modular Classroom Addition #2: two-story, 12,710 sf, 8 classrooms
- Maximum Occupancy: 225 new students and 9 new teachers
- Cafeteria Addition: single-story, 348 sf
- Request for a modification to the Side Setback - 12 feet, instead of 32 feet
- Request to waive required screening for rooftop mechanical equipment.

#### **2. Patrick Henry:**

- Option 1 (as depicted on site plan):
  - Modular Classroom Addition #1: single-story, 8,096 sf, 6 classrooms
  - Modular Classroom Addition #2: single-story, 5,585 sf, 4 classrooms

- Option #2 (as depicted in *Attachment #1*):
  - Modular Classroom Addition: single-story, 11,186 sf, 10 classrooms
- Maximum Occupancy: 250 new students and 10 new teachers
- Request to waive required screening for rooftop mechanical equipment.

3. **James Polk:**

- Modular Addition #1: two-story, 11,768 sf, 8 classrooms & new stage for gym
- Maximum Occupancy: 200 new students and 8 new teachers
- Expanded 36-space surface parking lot
- Request to waive required screening for rooftop mechanical equipment.

## **II. Charles Barrett Elementary**

### ***A. Site Context – Charles Barrett***

Located in the northern portion of the City, the Charles Barrett Elementary School is positioned on a 4.8 acre campus which is occupied by the 75,294 square-foot school / recreational center, and a 39-space surface parking lot. Access to the property is from Martha Custis Drive and the school is bordered by multi-family condos to the west, townhouses to the south and east, and commercial uses to the north (including a Pizza Hut, a 7- Eleven convenience store, and a small shopping center (with a Chinese carry-out, pizza restaurant, insurance office and hair salon).

### ***B. Project History – Charles Barrett***

Charles Barrett received a special use permit in 1998 for a temporary classroom trailer. This special use permit was renewed two times in the following years to permit the temporary classroom trailer to remain until August 31, 2011, until funding could be acquired for a more permanent solution. The temporary trailer was approved to be located to the rear of the building on an asphalted former play lot in the same location as the 2-story modular classroom addition proposed with this application.

### ***C. Project Description – Charles Barrett***

#### ***2-Story Modular Classroom Addition:***

A 12,710 square-foot two-story addition is proposed on the northern side of the existing school in the location of a former asphalt play area. The proposed classroom addition is connected to the school through an internal corridor and includes four (4) kindergarten/pre-k classrooms, four (4) primary classrooms and two restrooms. The Zoning Ordinance requires a minimum side yard setback ratio of 1:1 or 25 feet, whichever is greater. The proposed height of this addition closest to the property line is 32 feet, which is also, therefore, the required side setback for this addition. The applicant seeks a modification to reduce the side yard setback for this addition to 12 feet, which is consistent with the setbacks previously granted for the existing school.

*Single-Story Modular Classroom Addition:*

A 1,216 square-foot single-story addition is proposed on the north side of the existing school in a grassy area in between the school and a surface parking lot serving the school. The proposed classroom addition is connected to an existing school corridor and includes one (1) kindergarten/pre-k classroom.

*Cafeteria Addition:*

A 348 square-foot single-story addition is proposed on the east side of the existing cafeteria in the location of an existing concrete walkway. This addition expands the cafeteria to accommodate additional lunch tables.

**Figure 1: Charles Barrett Model (cafeteria addition not visible)**



**D. Zoning – Charles Barrett**

**Table 1: Charles Barrett Zoning Table**

Property Address:	1115 Martha Custis Drive	
Zone:	RB/POS (additions located entirely in RB Zone)	
Total Site Area:	4.942 acres (215,252 square feet)	
Site Area w/in RB Zone:	3.42 acres (149,400 square feet)	
Existing School:	62,537 net square feet	
Proposed Addition(s):	14,022 net square feet	
Current / Proposed Use:	Elementary School	
<b>RB Zone Requirements</b>	<b>Permitted/Required</b>	<b>Proposed</b>
FAR	0.75 - permitted in RB Zone only	0.512
Setbacks		
Front	20 feet	28 feet
Side	32 feet (greater of 1:1 or 25 feet)	12 feet*
Rear	N/A	N/A
Parking	23 spaces	39 spaces
Loading spaces:	0 Spaces	1 Space

\* Modification requested.

### **III. Patrick Henry Elementary**

#### ***A. Site Context – Patrick Henry***

Located in the western portion of the City, Patrick Henry Elementary School is positioned on a 14.9 acre campus which is occupied by the 74,898 square-foot school / recreational center. The campus is located in an area of the City primarily characterized by single-family and multi-family residential homes and is bordered by Taney Avenue to the south, North Latham Street to the west, single-family homes to the north and Foxchase multi-family homes to the east.

#### ***B. Project History – Patrick Henry***

In 2000, Patrick Henry received a special use permit for a temporary classroom trailer containing two (2) classrooms. The SUP for the trailer was approved for five years and in 2005 the school remodeled the interior of the school to subdivide existing full size classrooms into resource rooms for reading, special education and ELL classes. As the student population continues to increase, additional homerooms are needed for the grade levels.

#### ***C. Project Description – Patrick Henry***

As this proposal was going through the process, the applicant realized that an alternative to the proposed Patrick Henry site plan, herein referred to as Option#2 and depicted in *Attachment#1*, would provide the necessary ten classrooms in a single modular building addition without the need to relocate the playground and basketball court. This preferred Option#2 addition will be located in the same area as the originally proposed 6-classroom addition, bracketed between two wings of the school, will be approximately 2,500 sf smaller than the cumulative size of the two additions proposed in Option#1, and will have fewer impacts to the site. Options are outlined below:

##### **OPTION#1**

###### ***Single-Story Modular Classroom Addition #1:***

An 8,096 square-foot single-story addition is proposed on the northwest side of the existing school in a courtyard bracketed by two wings of the school. The addition would connect to the existing school through two new corridors and includes six (6) primary classrooms.

###### ***Single-Story Modular Classroom Addition #2:***

A 5,585 square-foot single-story addition is proposed on the north side of the existing school in the location of an existing playground and basketball court. The addition would connect to the existing school through a new corridor and includes two (2) kindergarten/pre-k classrooms, two (2) primary classrooms and a new resource room. If this addition is to be built, ACPS will work with staff to determine a suitable location and design for the replacement play area that is to be displaced by this addition.

**Figure #2 – Patrick Henry Proposed Option #1 Addition(s)**

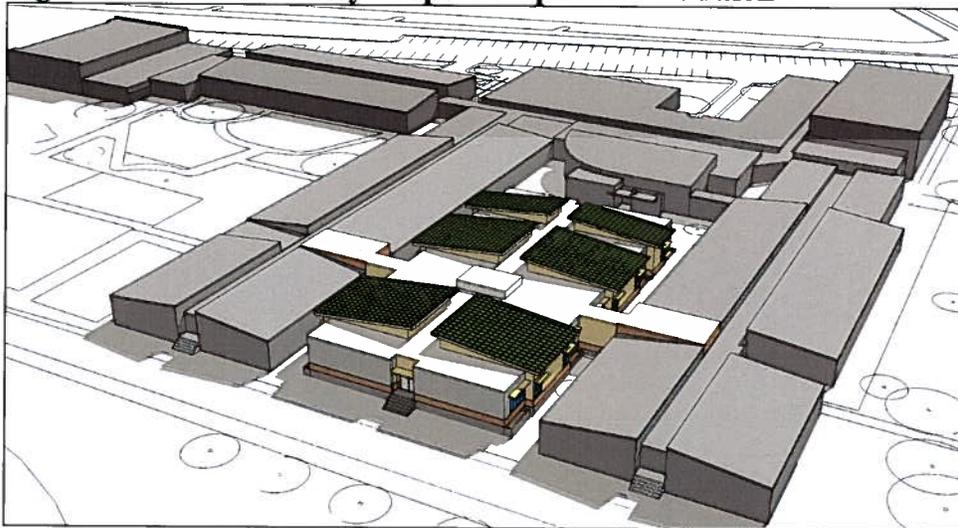


**OPTION#2**

*Single-Story Modular Classroom Addition:*

Option#2 is the applicant’s preferred option to meet the needs of the anticipated Fall 2011 enrollment with the least amount of impact to the existing playground areas. If Option#2 is selected, only one 11,186 square-foot single-story addition would be proposed on the northwest side of the existing school in a courtyard bracketed by two wings of the school. This addition would connect to the existing school through two new corridors, as depicted in *Attachment #1*, and would include 10 primary classrooms.

**Figure #3 – Patrick Henry Proposed Option #2 Addition**



***D. Zoning – Patrick Henry***

**Table 2: Patrick Henry Zoning Table**

Property Address:	4643 Taney Avenue
Zone:	R-12
Total Site Area:	14.9 acres (652,703 square feet)
Current / Proposed Use:	Elementary School

	<b>Permitted/Required</b>	<b>Proposed</b>
FAR	0.30	0.130 to 0.134
Setbacks		
Front	35 feet	46+ feet
Side	25' (greater of 1:1 or 25')	100+ feet
Rear	N/A	N/A
Parking	19 Spaces	94 Spaces
Loading spaces:	0 Spaces	1 Space

#### **IV. James K. Polk Elementary**

##### ***A. Site Context – James Polk***

Located in the northwest portion of the City, the James K. Polk Elementary School is positioned on a 13.49 acre campus which is occupied by the 68,439 square-foot school/gymnasium, a 27-space surface parking lot and a paved area used for recreational activities in addition to overflow parking. The campus is located in an area of the City primarily characterized by single-family residential homes and is bordered by Polk Avenue to the north, North Pickett Street to the east, North Pegram Street to the west and single-family homes to the south. The school campus is characterized by fairly steep topography, which decreases approximately 45 vertical feet from the northeastern to the southwestern property lines. However, the site also contains relatively flat areas, which are used for both recreation and parking.

##### ***B. Project History – James Polk***

To alleviate overcrowding, ACPS received a special use permit in 1999 for a temporary classroom trailer, designed to accommodate two classrooms and a total of 36 students for one year. In 2000, ACPS continued to experience overcrowding issues and subsequently received another special use permit for two temporary trailers, designed to accommodate three classrooms for five years. ACPS planned a classroom addition during this 5-year period to alleviate overcrowding; however due to fiscal constraints, the addition was not constructed and in June 2005, ACPS requested approval for the continued use of the temporary trailers until August 2009. To comply with the special use permit expiration, the trailers were removed from the site. To accommodate the classrooms previously provided by the trailers, ACPS converted two computer labs into classrooms, subdivided other rooms for special programs and relocated administrative staff.

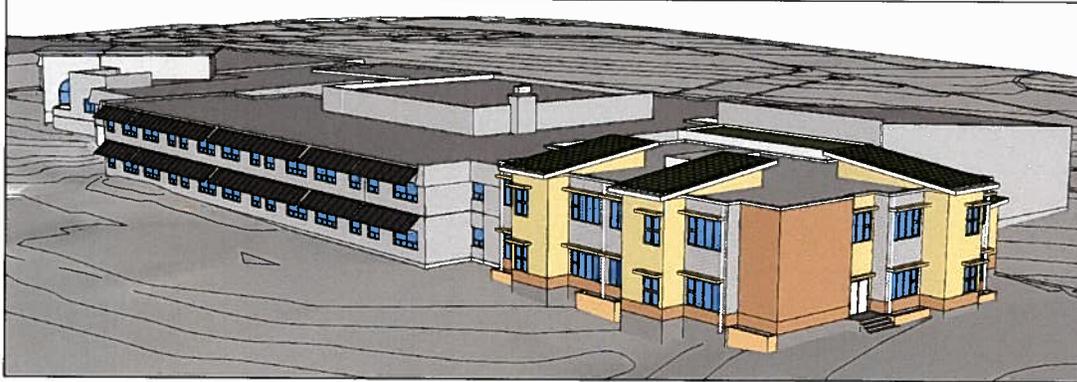
##### ***C. Project Descriptions – James Polk***

###### ***2-Story Modular Addition:***

A 11,768 square-foot two-story addition is proposed on the southeast side of the existing school, on a grassy area next to the existing parking lot, in between the new 6,240 square foot gymnasium addition (DSP#2009-0009) and single-family homes. The proposed modular addition will connect to the school by adding on to the end of an existing corridor and through a new vestibule connecting to the gymnasium. The addition includes eight (8)

primary classrooms, two new restrooms and a new stage platform that will connect to the existing gymnasium.

**Figure #4 – James Polk Proposed Addition**



***D. Zoning – James Polk***

**Table 3: James Polk Zoning Table**

Property Address:	5000 Polk Avenue	
Zone:	R-12 and R-20 (addition located entirely in R-12 Zone)	
Total Site Area:	13.49 acres (587,803 square feet)	
Site Area w/in R-12 Zone:	9.04 acres (394,030 square feet)	
Current / Proposed Use:	Elementary School	
<b>R-12 Zone Requirements</b>	<b>Permitted/Required</b>	<b>Proposed</b>
FAR	0.30	0.137
Setbacks		
Front	35 feet	125+ feet
Side	28.56' (greater of 1:1 or 25')	190+ feet
Rear	N/A	N/A
Parking	32 Spaces	47 Spaces
Loading spaces:	0 Spaces	1 Space

**V. STAFF ANALYSIS**

***A. Building Design***

The modular nature of the proposed building additions provides ACPS with the maximum flexibility to respond to the changing demands in enrollment relatively quickly. The additions will be constructed of steel and concrete off-site in “modular pieces” and three to four of these “modular pieces” can be easily assembled on-site to create a single classroom. The small size of each module allows these pieces to provide flexibility should changes in layout be desired. Classrooms can be subdivided to accommodate offices and/or special use classes. Additionally, as enrollment demand changes throughout the City, these building modules can, if necessary, be disassembled and transferred to expand capacity at another school site.

The interior and exterior finishes are high-quality materials, and are anticipated to meet or exceed the quality of the existing classrooms at these schools. The exterior will be a combination of three materials: 8"x8" terra cotta tile, prefinished metal rainscreen panels, and phenolic resin rainscreen panels. The color scheme of brick red, sand and muted gray-blue shown in the submission was selected to blend well with the subject schools, but the applicant will investigate fine-tuning the color scheme in the final site plan review process. There is interest, however, in keeping a simple/adaptable color palette, since there is the potential of relocating these modules in the future to other schools. An additional benefit of the modular construction system is that both the metal and phenolic rainscreen panels, which constitute the bulk of the façade, can (if desired) be easily swapped out, so there is always the ability to replace damaged pieces, or even to change one section of wall, for example to a desired accent color. The exterior design also features a simple composition of horizontal and vertical elements, to create a small, approachable scale for these additions. Where appropriate, there are also exterior horizontal canopies that act as sun shading devices for the windows, and add an important level of detail and articulation to the modular buildings.

With this proposal, the applicant is requesting a waiver for the required screening for rooftop mechanical equipment. Due to the building heights and proximity to public streets, staff is unsure whether screening will be necessary at this point. To avoid requiring potentially unnecessary improvements, staff has recommended a condition that the mechanical equipment be screened if, after construction, staff determines the rooftop equipment is visible or presents objectionable views.

### ***B. Green Building and Sustainable Design***

In April of 2008, the City adopted a Green Building Policy whereby the City set a standard for non-residential public buildings to attain a LEED Silver Certification with the recommendation that the private sector follow suit. The policy also acknowledged that while the Silver Certification should be attained in most instances, flexibility could be allowed to accommodate the individual circumstances of each proposal. The policy states: "*The types and scale of developments within each category vary greatly, however, and certain building types (for example, medical, hotel, industry, affordable housing, historic buildings, churches, redevelopment of small retail or restaurant establishments, and renovations or small additions to existing buildings) may require a more flexible approach.*"

Acknowledging both the small scale of these additions and USGBC's requirement that an entire structure achieve LEED Certification in order for an addition(s) to achieve LEED Certification; staff recommends flexibility in the application of the City's Green Building Policy. The applicant has stated that the proposed additions are to be built to LEED Silver standards, however, given the age of the existing schools, the school sites cannot achieve LEED Certification without substantial additional improvements to the existing school buildings and/or sites.

Recently; however, with the approval of a new gym addition at James Polk Elementary, ACPS allocated additional funds to incorporate additional green features for the rest of the school and committed to strive for a LEED Silver Certification for the entire school with the

commitment to achieve a minimum of LEED Certification. Since James Polk Elementary is currently being brought up to LEED standards and the proposed classroom addition is to be built to LEED Silver standards, staff is continuing to encourage ACPS to achieve Silver Certification for James Polk Elementary, but recommends that a minimum of LEED Certification be attained, as previously required with the approved site plan for the gym addition.

Consistent with the ACPS policy of “greenovation”, the applicant is proposing to use for these additions recycled/recyclable materials, low-VOC paints, finishes and adhesives, high efficiency operable windows, spray foam insulation, high efficiency Mitsubishi VRV (variable refrigerant volume) air-conditioning units, green roofs (where possible), sand filters for stormwater, energy efficient lighting, SIPS roof panels, and water efficient fixtures.

### ***C. Parking***

Section 8-200(A) of the Zoning Ordinance requires 1 parking space for every 25 classroom seats.

Even without the provision of additional parking, both Charles Barrett and Patrick Henry well exceed the new parking requirements generated by the proposed classroom additions by 16 spaces and 65 spaces respectively. No additional parking is proposed at these schools and staff does not believe that additional spaces are necessary.

With the proposed classroom addition, James Polk Elementary is required to have a total of 32 parking spaces. While the existing parking count of 38 spaces on-site is sufficient to meet the Zoning Ordinance requirements, ACPS is proposing to expand the existing parking lot to maintain the existing number of spaces and to provide the nine (9) additional spaces required under the ordinance solely for the new classrooms. James Polk is proposing 47 on-site parking spaces with this application, which exceeds the requirement by 15 spaces. The expansion and redesign of the parking lot also accommodates a new access point onto North Pickett Street, which will help reduce the interaction between cars and buses and improve the overall vehicular circulation.

### ***D. Construction Phasing***

ACPS has indicated that each school will not initially need to be fully built-out to the size, scale and scope proposed herein for each school. However, staff advised ACPS to propose the maximum anticipated scope for the additions so that potential additions/enlargements, that may be necessary in the short term, can be fully analyzed now without the need to return to Planning Commission later. This would efficiently permit schools to respond more quickly to fluctuations in enrollment without having to go through a subsequent public review process.

#### ***Anticipated Phasing:***

##### **Phase I:**

Winter 2010 – Begin site / utility work

Spring 2011 – Pour foundations;

Summer 2011 – Install Phase I Additions;  
Fall 2011 - Additions ready for occupancy in time for first day of school

**Phase II:**

Remaining structures constructed (if needed) to meet enrollment demands at later date.

**Table 4: Anticipated Phasing Table**

<b><u>CHARLES BARRETT</u></b>		
<b>Proposed</b>	<b>Phase I</b>	<b>Phase II</b>
Addition#1: 1-story (1 classroom)	Addition#1: 1-story (1 classroom)	
Addition#2: 2-story (8 classrooms)	Addition#2: 1st level (4 classrooms)	Addition#2: 2nd level (4 classrooms)
Cafeteria Addition: 348 sf	Cafeteria Addition: 348 sf	
<b><u>PATRICK HENRY</u></b>		
<b>Proposed</b>	<b>Phase I</b>	<b>Phase II</b>
<b>OPTION #1</b>		
Addition#1: 1-story (6 classrooms)	Addition#1: 1-story (6 classrooms)	
Addition#2: 1-story (4 classrooms)		Addition#2: 1-story (4 classrooms)
or		
<b>OPTION #2: 1-story (10 classrooms)</b>	<b>OPTION #2: 1-story (10 classrooms)</b>	
<b><u>JAMES POLK</u></b>		
<b>Proposed</b>	<b>Phase I</b>	<b>Phase II</b>
Addition#1: 2-story (8 classrooms)	Addition#1: 1st level (4 classrooms)	Addition#1: 2nd level (4 classrooms)

**VI. COMMUNITY**

Alexandria City Public Schools held three public meetings in September to discuss the proposed modular additions for each individual school with parents, neighbors and interested parties.

The North Ridge Civic Association, Arlandria Civic Association, Parc East Condo Association, Park Fairfax Condo Association and the Charles Barrett PTA were invited to attend the Charles Barrett Community Meeting on Wednesday, September 15<sup>th</sup>.

Charles Barrett participants generally voiced enthusiastic support for the proposed addition but expressed concerns regarding the safety of the existing crosswalk and traffic patterns in front of the school (see *Attachment #2*). The City was recently awarded a Safe Routes to School grant to study and improve the traffic patterns/safety in and around Charles Barrett Elementary, and the process is currently underway with the transportation consultant. Following public outreach on design concepts, expected improvements are anticipated to be in place within a year. Thirteen members of the Charles Barrett community attended.

The Brookville-Seminary Valley Civic Association, Seminary Hill Association, Strawberry Hill Civic Association, Seminary Ridge Civic Association, Plaza Condo Association, Parkside at Alexandria Condo Association, Alexandria Overlook Condo Association and the Patrick Henry and James Polk PTA's were invited to attend the individual community

meetings for Patrick Henry on Thursday, September 16<sup>th</sup> and for James Polk on Thursday, September 23<sup>rd</sup>.

Patrick Henry participants voiced support for the proposed addition options and one person raised a concern regarding the traffic speed in front of the school. Over 15 members of the Patrick Henry community attended.

James Polk participants voiced support for the expansion of the school, as overcrowding currently exists. Concerns were raised regarding the lack of crosswalks across Polk Avenue and the need for a sidewalk along Polk Avenue, opposite the school, where many student drop-offs occur. With the City's Safe Routes to School grant, improvements will also be provided on the nearby streets around Polk Elementary. Six members of the James Polk community attended.

## **VII. CONCLUSION**

Staff recommends **approval** of the three development site plans subject to compliance with all applicable codes and the following staff recommendations.

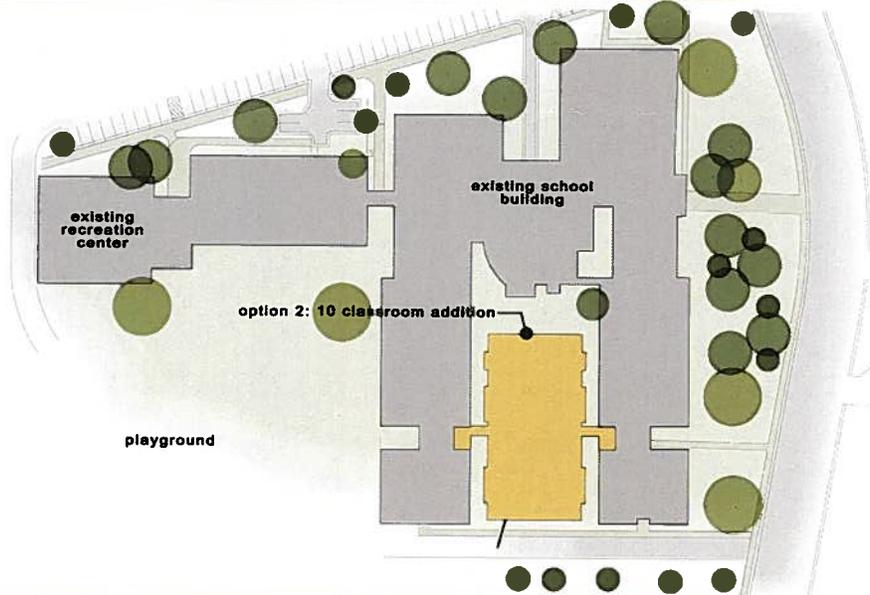
Staff:           Faroll Hamer, Director, Planning and Zoning;  
                    Gwen Wright, Chief, Development;  
                    Patricia Escher, AICP, Principal Planner;  
                    Kristen Mitten, Urban Planner.

# VIII. ATTACHMENTS

## Attachment #1 - Patrick Henry Option #2

ACPS MODULAR CLASSROOM ADDITIONS

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DEL NINNO  
ARCHITECTS

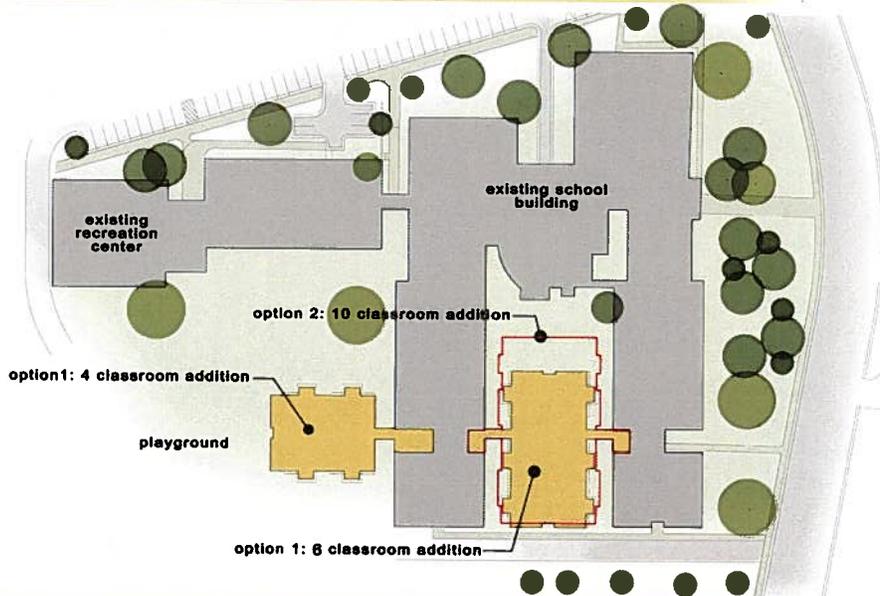


PATRICK HENRY ELEMENTARY SCHOOL

PROPOSED SITE PLAN

ACPS MODULAR CLASSROOM ADDITIONS

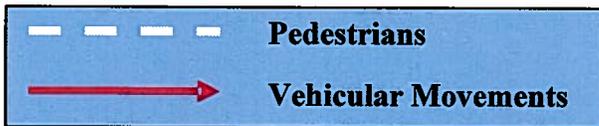
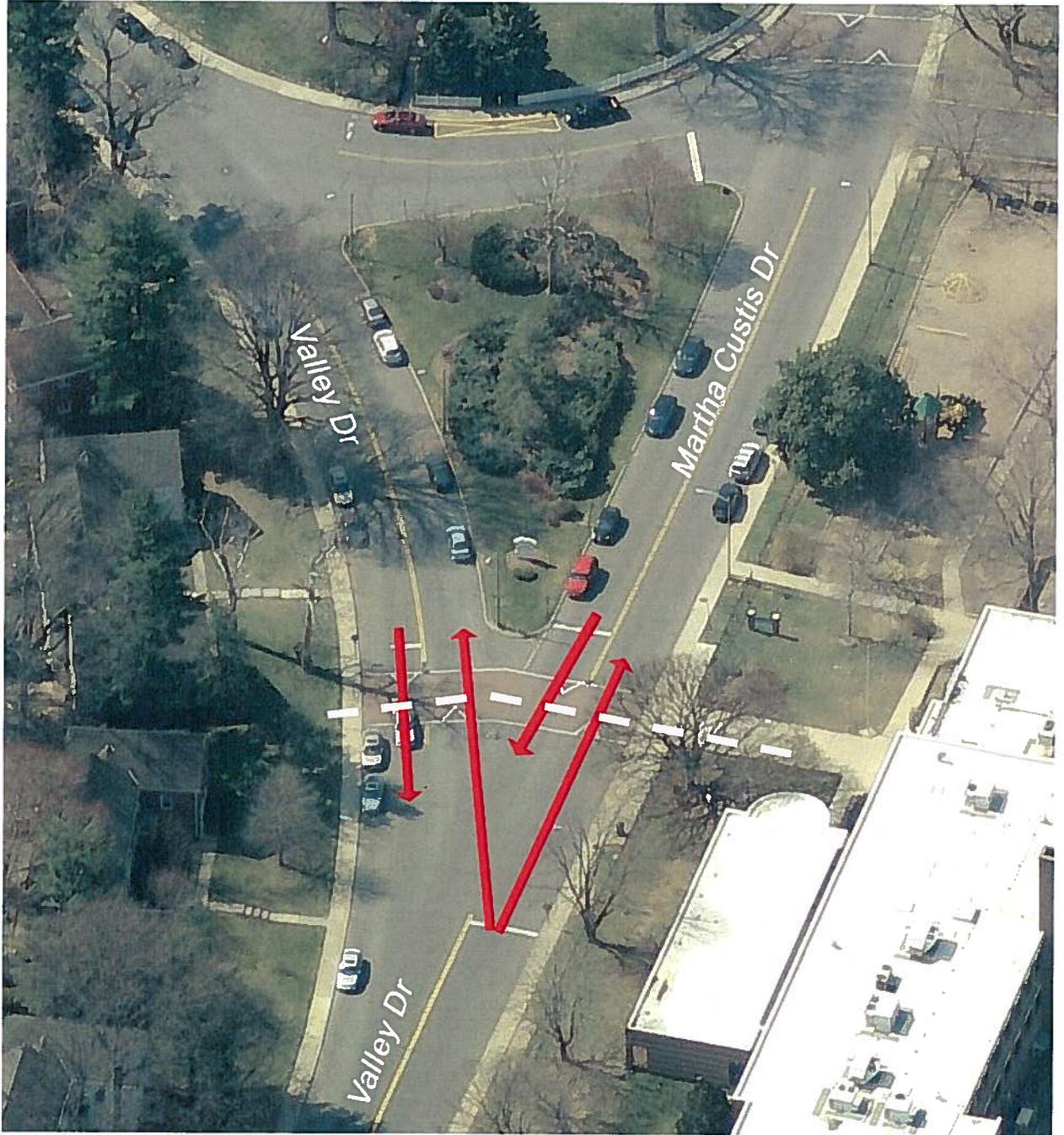
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PATRICK HENRY ELEMENTARY SCHOOL

PROPOSED SITE PLAN

### Attachment #2 – Charles Barrett Traffic & Crosswalk



**IX. STAFF RECOMMENDATIONS for DSP#2010-0005 (Charles Barrett):**

1. Provide all improvements depicted on the preliminary plan dated June 18, 2010 and comply with the following conditions of approval:

***A. PEDESTRIAN/STREETSCAPE:***

2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
  - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
  - b. Install and maintain ADA accessible pedestrian crossings in the proposed project area. Additionally, provide an ADA accessible route on the final site plan.
  - c. Construct all concrete sidewalks to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 5 feet.
  - d. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to VDOT standards as outlined in a City Memo to Industry (3/07) available on-line: <http://alexandriava.gov/tes/info/default.aspx?id=3522>
  - e. Provide thermoplastic pedestrian crosswalks at all crossings at the proposed development, which must be designed to the satisfaction of the Director of T&ES.
  - f. All crosswalks shall be standard, 6" wide, white thermoplastic parallel lines with reflective material, with 10' 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. \*\*\* (P&Z)(RP&CA)(T&ES)

***B. OPEN SPACE/LANDSCAPING:***

3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the Landscape Plan shall:
  - a. Provide plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
  - b. Ensure positive drainage in all planted areas.
  - c. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers. (P&Z)(RP&CA)

4. Provide the following modifications to the landscape plan and supporting drawings:
  - a. Landscape plan requirements apply to limits of disturbed area. (RP&CA)
  - b. Provide required project notes in compliance with City of Alexandria Landscape Guidelines-Section I. (RP&CA)
5. Provide a site irrigation/water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA and Code Administration.
  - a. Provide an exhibit that demonstrates that all parts of the site associated with the additions can be accessed by a combination of building mounted hose bibs and ground set hose connections.
  - b. Provide external water hose bibs continuous at perimeter of building. Provide at least one accessible external water hose bib on all building sides at a maximum spacing of 90 feet apart.
  - c. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
  - d. Install all lines beneath paved surfaces as sleeved connections.
  - e. Locate water sources and hose bibs in coordination with City Staff. (Code Administration) (RP&CA)
6. Provide a palette of site furnishings in consultation with staff.
  - a. Provide location and specification for site furnishings that depicts the scale, massing and character of site furnishings to the satisfaction of the Directors of RP&CA, P&Z and T&ES. (RP&CA)(P&Z)(T&ES)
7. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls. 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 RP&CA, P&Z, and T&ES. (RP&CA)(P&Z)(T&ES)
8. The site is in a residential zone with Open Space percentage requirements. Demonstrate that Floor Area Ratios are in compliance with requirements for adequate Open Space. (RP&CA)

***C. TREE PROTECTION AND PRESERVATION:***

9. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, RP&CA and the City Arborist. (P&Z)(RP&CA)
10. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated February, 2010 and reduced if possible to retain existing trees and grades.

- b. Reduce the limits of disturbance to provide maximum separation tree on the west side of westernmost infill addition and construction activities. (P&Z)(RP&CA)

**D. BUILDING:**

11. The applicant is requesting a waiver from screening the rooftop mechanical equipment. It does not appear that the rooftop mechanical equipment will be visible from the public right-of-way or nearby properties; however, if staff determines once the building is constructed that the visibility of the mechanical units needs to be screened, the applicant shall do so prior to the release of the final certificate of occupancy. If a screen is necessary, the screening material shall match a predominate façade material of the proposed addition, to the satisfaction of the Director of P&Z. (P&Z)
12. The applicant shall provide a materials board prior to approval of the final site plan which includes all of the proposed building materials and identifies the finish and color proposed for review and approval by the Department of Planning and Zoning. (P&Z)
13. The applicant shall construct one on-site mock-up panel, at the first of the three schools participating in the modular building program (Charles Barrett, Patrick Henry or James Polk) prior to any vertical construction and approval of the wall check surveys.
  - a. The mock-up panel shall include each of the proposed building materials for review and approval by the Department of Planning and Zoning. (P&Z)
14. The applicant shall hire a LEED accredited professional as a member of the design and construction team. The proposed school additions shall achieve the points necessary under the U.S. Green Building Council's system for LEED Silver certification. The applicant shall achieve at least 50 LEED points (version 3.0) and all applicable LEED prerequisites. The following shall be submitted and are subject to the satisfaction of the Directors of P&Z and T&ES:
  - a. Include in the final site plan, a Green Building plan with a LEED Scorecard and narrative detailing how each prerequisite and point is proposed to be achieved.
  - b. Prior to the issuance of the final certificate of occupancy for each phase of the addition(s), submit verification that the elements to earn the above specified numbers of LEED points have been achieved.
  - c. Failure to achieve the above LEED points for the project will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve these certification levels, then any City-wide Green Building policies existing at the time of staff's determination will apply. (P&Z)(RP&CA)(T&ES)

15. The applicant shall work with the City for reuse of the existing building materials as part of the demolition process, including leftover, unused, and/or discarded building materials.(T&ES)
16. The applicant shall use EPA-labeled WaterSense fixtures to minimize the generation of municipal wastewater from the site and explore the possibilities of adopting water reduction strategies (i.e., use of gray water system on-site) and other measures that could possibly reduce the wastewater generation from this site. A list of applicable mechanisms can be found at <Http://www.epa.gov/WaterSense/pp/index.htm>. (T&ES)

**E. SIGNAGE:**

17. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.\* (P&Z)(T&ES)

**F. SITE PLAN:**

18. Per Section 11-418 of the Zoning Ordinance, the development site plan shall expire and become null and void, unless substantial construction of the project is commenced within 36 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. (P&Z)
19. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and RP&CA 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 any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
  - 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. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
  - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
  - h. The lighting for the areas not covered by the City of Alexandria' 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. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)
20. Clearly identify proposed site areas that will be vegetated and/or paved. (RP&CA)
21. Prior to First Final Site Plan submission provide a landscape maintenance plan and cost analysis that incorporates level(s) of anticipated manicure, interval/scheduling of work and all changes to the existing site. Maintenance Plan and cost analysis shall be approved by the Director of RPCA. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

**G. CONSTRUCTION:**

22. 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. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. \* (T&ES)
23. Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:
- a. Include a plan for temporary pedestrian and vehicular circulation;
  - b. Include the overall schedule for construction and the hauling route;
  - c. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
  - d. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. \* (P&Z)(T&ES)(Code)
24. Provide off-street parking for all construction workers without charge to the construction workers. 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 plan is found to be violated during the course of 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)
25. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
26. No major construction staging shall be allowed within the public right-of-way on West Glebe Road and Martha Custis Dr. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. \*\* (T&ES)
27. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Construction & Inspection 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)
28. 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 of the date of the meeting before the permit is issued. (P&Z)(T&ES)
29. 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, RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
30. 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. (T&ES)

31. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
32. Temporary construction 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 certificate of occupancy permit. \*\*\* (P&Z)
33. Submit a wall check prior to the commencement of framing for the building(s). The wall check shall include the building footprint, as depicted in the approved 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 shall be approved by the P&Z prior to commencement of framing. (P&Z)
34. Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. \*\*\* (P&Z)

**Site Access & Construction:**

35. Site development staging and access shall not impact ongoing programs at the recreation center. Prior to First Final Site Plan submission meet with RPCA-Recreation to develop and provide a remediation plan that addresses replacement of facilities for uses affected during construction and after completion of work. Remediation plans shall be approved by the Director of RPCA. Coordinate this meeting via RPCA-Park Planning. (RP&CA)
36. Provide clear and unobstructed access to all site areas anticipated to receive regular maintenance. For example, it appears that some areas of the site are precluded from maintenance access.
  - a. Prior to First Final Site Plan submission meet with RPCA-Park Operations to review and develop an operations/maintenance impact analysis for each site. For example, it appears that some areas of the site are precluded from maintenance access. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

**H. SOLID WASTE:**

37. In order for the City to provide solid waste service, the development must meet all the minimum street standards. The trash truck must be able to pick up solid waste from school roads without backing up. The containers must be placed inside the units or within an enclosure that completely screens them from view. The applicant must

purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)

38. Provide and install one (1) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right-of-way to serve open space and park sites. Receptacles shall be generally located along the property frontage at school entrances and at strategic locations in the vicinity of the site as approved by the Director of T&ES. (T&ES)

***I. STREETS / TRAFFIC:***

39. 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)
40. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
41. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan, shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. (T&ES)
42. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)

***J. UTILITIES:***

43. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)

***K. WATERSHED, WETLANDS, & RPAs:***

44. The Charles Barrett project site lies within Four Mile Run Watershed thus stormwater quantity controls shall be designed to demonstrate that post development stormwater runoff does not exceed the existing runoff quantities for the 2-year, 10-year, and 100-year storm events. (T&ES)

45. The storm water collection system is located within the Four Mile Run watershed. All on-site storm water 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)

**L. BMP FACILITIES:**

46. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
47. 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 Worksheet A or B and Worksheet C, as applicable. (T&ES)
48. The storm water 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 approved 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)
49. The BMPs and Stormwater Detention Facilities shall be added to the list of BMPs that ACPS maintains.\* (T&ES)
50. The Applicant shall submit two originals of a storm water quality BMP Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. It must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan. (T&ES)
51. Prior to issuance of the final occupancy permit, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water 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)

***M. NOISE:***

52. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. (T&ES)
53. Supply deliveries, loading and unloading activities shall not occur between the hours of 11:00 pm and 7:00 am. (T&ES)

***N. ARCHAEOLOGY:***

54. The applicant/developer shall call Alexandria Archaeology immediately (703-838-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of 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. (Arch)
55. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. (Arch)

**Charles Barrett - CITY DEPARTMENT CODE COMMENTS**

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

**Planning and Zoning**

- F - 1. The scale listed on the floor plan and elevation sheets for all three sites do not appear to correspond with the dimensions provided. Please coordinate the scale and dimensions on the architectural sheets.
- F - 2. Update General Note #11 to include both the required setbacks and the provided setbacks.
- F - 3. Revise the following on sheet CB C-1:
- a. The required rear yard setback in the RB zone is based on a ratio or 1:1 or a minimum of 25 feet. As the height of the building next to the property line is 32.88', your required rear setback for this project is 32.88 feet. The open stairs depicted 6 feet from the property line are a permitted encroachment, therefore the setback request should be revised to reflect the distance to the modular building, or 12 feet, which represents a 20'+ relief. Revise the Project Description, the Requested Modifications, and General Note #11 accordingly.
  - b. The height listed in General Note #12 and shown on the elevations for the 2-story infill building is 37 feet, however the Project Description calls out a height of 27 feet for the 2-story modular building. Revise the Project Description accordingly.
  - c. For General Note #9, verify the calculation of the total required parking. It appears that the total number of seats should sum to 556, instead of 523, which would increase the parking requirement to 23 spaces.
- F - 4. Per the development site plan checklist, provide a list of all existing approvals which apply to the site, including special use permit SUP#2005-00030.
- F - 5. Obtain property owner permission for any off-site work as depicted with limits of disturbance.
- F - 6. Label zone districts on-site and on adjacent properties.
- F - 7. Change the zoning line to a different line type so that it does not look the same as a property line.
- F - 8. Remove the BRL line in the POS as it is not applicable in this zone.
- F - 9. Remove the BRL line from project site. The City uses the term setback instead of BRL on site plans.
- F - 10. Respond to all technical corrections provided with Completeness letter.

**Transportation and Environmental Services**

- 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 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 - 3. The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F - 4. Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F - 5. 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 AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. 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 - 6. All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" 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" 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 - 7. Lateral Separation of Sewers and Water Mains: A horizontal separation of 10’ (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” 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 - 8. 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” for sanitary sewer and 12” 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” clearance shall be encased in concrete. (T&ES)
- F - 9. 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 - 10. Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12” 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 - 11. The rip rap shall be designed as per the requirements of Virginia Erosion and Sediment Control Handbook, Latest Edition. (T&ES)
- F - 12. 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 - 13. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F - 14. 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 - 15. The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- F - 16. As per previous comment: The storm water master plan on sheet C-7 does not break the site area into sub-drainage areas meaning all impervious surfaces throughout the site will require water quality treatment. The flow through planter boxes specified would only provide treatment for the proposed modular buildings leaving the remaining impervious areas untreated. Future submittals shall address this inconsistency. (OEQ)
- F - 17. The numbers in Worksheet A do not match those provided within the Stormwater Management Narrative.
- F - 18. The numbers in the Stormwater Management narrative do not match those in the Impervious Area Calculations.
- F - 19. One of the modular classrooms is covering grass area and the larger classroom addition is over previous impervious area. How is it that the grass area does not change from pre to post? It is unclear what area is being seeded and fertilized on sheet C-4.
- F - 20. The numbers provided for On-Site treated in the Project Description block do not match any other representation of treated area.
- F - 21. Sheet C-4: Plan notes a prop addition where a concrete walk exists. What is this addition and how is it accounted for in the calculations?
- F - 22. No E&SC shown on the plan – notes only is insufficient.

- F - 23. The applicant shall comply with all provisions of the Environmental Management Ordinance (Chesapeake Bay Preservation Act) in accordance with Article XIII of the City of Alexandria Zoning Ordinance for storm water quality control including both the requirement of pollutant load reduction as well as treatment of the Water Quality Volume Default (WQV).
- 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 storm water 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, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. 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 then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C - 3 Per the requirements of Article 13-113 (d) 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 storm water 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 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 - 5 (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 - 6 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 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 - 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. (T&ES)
- C - 8 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 - 9 Americans with Disability Act (ADA) ramps shall comply with the current requirements of Accessible Curb Ramps by the Code of Virginia(T&ES)
- C - 10 The applicant shall provide storage space for solid waste and recyclable 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 a trash truck and the trash truck shall not back up to collect trash. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: [www.alexandriava.gov](http://www.alexandriava.gov) or contact the City's Solid Waste Division at 703-519-3486 ext.132. (T&ES)
- C - 11 The applicants will be required to submit a Recycling Implementation Plan form to the Solid Waste Division, as outlined in Article H to Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle.

- C - 12 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C - 13 All easements and/or dedications must be recorded prior to release of the site plan.\*
- C - 14 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.\*
- C - 15 Provide a phased erosion and sediment control plan consistent with grading and construction plan.
- C - 16 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 insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary.
- C - 17 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 - 18 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 - 19 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C - 20 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 - 21 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 water quality volume default and stormwater quantity management. (T&ES)
- C - 22 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C - 23 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, 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 VSMP permit for land disturbing activities greater than 2500 SF. \* (T&ES)

**Code Administration:**

- F-1 The following comments are for preliminary review only.
- C - 1 The proposed construction shall conform to the requirements of the Virginia Uniform Statewide Building Code.
- C - 2 Handicapped accessibility shall be provided to the structure(s).
- C - 3 A NFPA72 fire alarm will be required for the proposed structure(s).
- C - 4 The structure(s) shall bear a seal showing compliance with the Virginia Industrialized Building Safety Regulations Code.
- C - 5 Foundation information must be provided at the time of the building permit submission.

**Archaeology**

- F-1 Historical maps indicate that the mill race for Roache's Mill ran through the eastern edge of this property, the Loudoun & Hampshire Railroad ran along the northern edge, and the 2<sup>nd</sup> New Jersey camped just to the east during the Civil War. However, given the proposed location of the modular classrooms adjacent to the current buildings, it is likely that previous grading and construction would have caused disturbance to any intact resources.

***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. STAFF RECOMMENDATIONS for DSP#2010-0010 (Patrick Henry)**

1. Provide all improvements depicted on the preliminary plan dated June 18, 2010 and comply with the following conditions of approval:

### **A. *PEDESTRIAN/STREETSCAPE:***

2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
  - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
  - b. Install and maintain ADA accessible pedestrian crossings in the proposed project area. Additionally, provide an ADA accessible route on the final site plan.
  - c. Construct all concrete sidewalks to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 5 feet.
  - d. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to VDOT standards as outlined in a City Memo to Industry (3/07) available on-line: <http://alexandriava.gov/tes/info/default.aspx?id=3522>
  - e. Provide thermoplastic pedestrian crosswalks at all crossings at the proposed development, which must be designed to the satisfaction of the Director of T&ES.
  - f. All crosswalks shall be standard, 6" wide, white thermoplastic parallel lines with reflective material, with 10' 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. \*\*\* (P&Z)(RP&CA)(T&ES)

### **B. *OPEN SPACE/LANDSCAPING:***

3. Develop, provide, install and maintain an integrated Landscape Plan with the final site plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the Landscape Plan shall:
  - a. Provide plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
  - b. Ensure positive drainage in all planted areas.
  - c. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers. (P&Z) (RP&CA)

4. Provide the following modifications to the landscape plan and supporting drawings:
  - a. Landscape plan requirements apply to limits of disturbed area.
  - b. Landscape plan shall provide crown coverage remediation for large trees to be lost due to construction of Infill Unit Number One.
  - c. There shall be no net loss of crown coverage for site areas within limits of disturbance.
  - d. Provide required project notes in compliance with City of Alexandria Landscape Guidelines-Section I. (RP&CA)
  
5. Provide a site irrigation/water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA and Code Administration.
  - a. Provide an exhibit that demonstrates that all parts of the site associated with the addition(s) can be accessed by a combination of building mounted hose bibs and ground set hose connections.
  - b. Provide external water hose bibs continuous at perimeter of building. Provide at least one accessible external water hose bib on all building sides at a maximum spacing of 90 feet apart.
  - c. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
  - d. Install all lines beneath paved surfaces as sleeved connections.
  - e. Locate water sources and hose bibs in coordination with City Staff. (Code Administration) (RP&CA)
  
6. Provide a palette of site furnishings in consultation with staff.
  - a. Provide location and specification for site furnishings that depicts the scale, massing and character of site furnishings to the satisfaction of the Directors of RP&CA, P&Z and T&ES. (RP&CA)(P&Z)(T&ES)
  
7. Replace all play areas and structures compromised or damaged by proposed work.
  - a. Provide a coordinated design palette of play area related site structures/equipment. Locate and depict the scale, massing and character of play equipment, perimeter fencing, grade conditions, surfacing and associated site furnishings.
  - b. Play area and site equipment must comply with the most recent guidelines, specifications and recommendations of the Consumer Product Safety Commission (CPSC) Handbook for Public Playground Safety, ASTM Specification for Playground Equipment for Public Use (ASTM F1487) and ASTM Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment (ASTM F1292).
  - c. Applicant shall provide certification that the play areas have been designed, reviewed and approved by a certified playground safety inspector (CPSI professional) with current certification. Play area and equipment shall comply with Americans with Disabilities Act Accessibility Guidelines (ADAAG) for Buildings and Facilities; Play Areas 36DFR Park 1191; Final Rule. (RP&CA)

8. Replace all athletic fields and open space compromised or damaged by proposed work.
  - a. Replacement fields shall provide dimensions, grading and runouts consistent with National Federation of State High School Athletic Associations standards for soccer and lacrosse.
  - b. Play surfaces shall have immediate positive drainage. No surface drains, surface utilities or other impediments shall be placed in the play or runout areas.
  - c. Field play surfaces shall be Patriot Bermuda sod over-seeded with seasonal Rye, with an engineered field subgrade and underdrain system approved by the City (RP&CA).
9. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls. 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 RP&CA, P&Z, and T&ES. (RP&CA)(P&Z)(T&ES)
10. The site is in a residential zone with Open Space percentage requirements. Demonstrate that Floor Area Ratios are in compliance with requirements for adequate Open Space. (RP&CA)

***C. TREE PROTECTION AND PRESERVATION:***

11. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, RP&CA and the City Arborist. (P&Z)(RP&CA)
12. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated February, 2010 and reduced if possible to retain existing trees and grades.
  - a. Provide tree protection in compliance with City of Alexandria Landscape Guidelines.
  - b. Reduce limits of disturbance to eliminate impact on large trees west of the bus/emergency access lane adjacent to Infill Unit Number One.
  - c. Provide tree protection for large tree east of bus/emergency access lane.
  - d. Relocate construction staging area to ensure that limits of disturbance do not impact existing diamond and rectangular field(s).
  - e. Relocate construction staging areas to ensure that limits of disturbance do not impact existing City programmed children's camps, day care and after school programs.(P&Z) (RP&CA)
13. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed and/or the City may request that replacement trees of similar caliper and species be provided for damaged trees if the approved tree protection methods

have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the issuance of the last certificate of occupancy permit.  
(P&Z)(RP&CA)

**D. BUILDING:**

14. The applicant is requesting a waiver from screening the rooftop mechanical equipment. It does not appear that the rooftop mechanical equipment will be visible from the public right-of-way or nearby properties; however, if staff determines once the building is constructed that the visibility of the mechanical units needs to be screened, the applicant shall do so prior to the release of the final certificate of occupancy. If a screen is necessary, the screening material shall match a predominate façade material of the proposed addition, to the satisfaction of the Director of P&Z.  
(P&Z)
15. The applicant shall provide a materials board prior to approval of the final site plan which includes all of the proposed building materials and identifies the finish and color proposed for review and approval by the Department of Planning and Zoning.  
(P&Z)
16. The applicant shall construct one on-site mock-up panel, at the first of the three schools participating in the modular building program (Charles Barrett, Patrick Henry or James Polk) prior to any vertical construction and approval of the wall check surveys.
  - a. The mock-up panel shall include each of the proposed building materials for review and approval by the Department of Planning and Zoning. (P&Z)
17. The applicant shall hire a LEED accredited professional as a member of the design and construction team. The proposed school additions shall achieve the points necessary under the U.S. Green Building Council's system for LEED Silver certification. The applicant shall achieve at least 50 LEED points (version 3.0) and all applicable LEED prerequisites. The following shall be submitted and are subject to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
  - a. Include in the final site plan, a Green Building plan with a LEED Scorecard and narrative detailing how each prerequisite and point is proposed to be achieved.
  - b. Prior to the issuance of the final certificate of occupancy for each phase the addition(s), submit verification that the elements to earn the above specified numbers of LEED points have been achieved
  - c. Failure to achieve LEED points for the project will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve these certification levels, then any City-wide Green Building policies existing at the time of staff's determination will apply.  
(P&Z)(RP&CA)(T&ES)

18. The applicant shall work with the City for reuse of the existing building materials as part of the demolition process, including leftover, unused, and/or discarded building materials.(T&ES)
19. The applicant shall use EPA-labeled WaterSense fixtures to minimize the generation of municipal wastewater from the site and explore the possibilities of adopting water reduction strategies (i.e., use of gray water system on-site) and other measures that could possibly reduce the wastewater generation from this site. A list of applicable mechanisms can be found at <Http://www.epa.gov/WaterSense/pp/index.htm>. (T&ES)

***E. SIGNAGE:***

20. Install a temporary informational sign on the site prior to the approval of the final site plan for the project. The sign shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.\* (P&Z)(T&ES)

***F. SITE PLAN:***

21. Per Section 11-418 of the Zoning Ordinance, the development site plan shall expire and become null and void, unless substantial construction of the project is commenced within 36 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. (P&Z)
22. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and RP&CA 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 any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
  - 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. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
  - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
  - h. The lighting for the areas not covered by the City of Alexandria' 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. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)
23. Clearly identify proposed site areas that will be vegetated and/or paved. (RP&CA)
24. Prior to First Final Site Plan submission provide a landscape maintenance plan and cost analysis that incorporates level(s) of anticipated manicure, interval/scheduling of work and all changes to the existing site. Maintenance Plan and cost analysis shall be approved by the Director of RPCA. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

**G. CONSTRUCTION:**

25. 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. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. \* (T&ES)
26. Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:
- a. Include a plan for temporary pedestrian and vehicular circulation;
  - b. Include the overall schedule for construction and the hauling route;
  - c. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
  - d. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. \* (P&Z)(T&ES)(Code)
27. Provide off-street parking for all construction workers without charge to the construction workers. 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 plan is found to be violated during the course of 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)
28. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES)
29. No major construction staging shall be allowed within the public right-of-way on North Latham Street and Taney Avenue. The applicant shall meet with T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. \*\* (T&ES)
30. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Construction & Inspection 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)
31. 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 of the date of the meeting before the permit is issued. (P&Z)(T&ES)
32. 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, RP&CA and T&ES. (P&Z)(RP&CA)(T&ES)
33. 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. (T&ES)

34. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)
35. Temporary construction 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 certificate of occupancy permit. \*\*\* (P&Z)
36. Submit a wall check prior to the commencement of framing for the building(s). The wall check shall include the building footprint, as depicted in the approved 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 shall be approved by the P&Z prior to commencement of framing. (P&Z)
37. Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. \*\*\* (P&Z)

**Site Access & Construction:**

38. Site development staging and shall not impact ongoing programs at the recreation center. (RP&CA)
39. The project proposal has significant impacts on existing City after school, camps and day care programs. Prior to First Final Site Plan submission meet with RPCA-Recreation to develop and provide a remediation plan that addresses replacement of facilities for uses affected during construction and after completion of work. Remediation plans shall be approved by the Director of RPCA. Coordinate this meeting via RPCA-Park Planning. (RP&CA)
40. Provide clear and unobstructed access to all site areas anticipated to receive regular maintenance. For example, it appears that some areas of the site are precluded from maintenance access.
  - a. Prior to First Final Site Plan submission meet with RPCA-Park Operations to review and develop an operations/maintenance impact analysis for each site. For example, it appears that some areas of the site are precluded from maintenance access. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

**H. SOLID WASTE:**

41. In order for the City to provide solid waste service, the development must meet all the minimum street standards. The trash truck must be able to pick up solid waste from school roads without backing up. The containers must be placed inside the units or within an enclosure that completely screens them from view. The applicant must purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)
42. Provide and install one (1) Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans with domed lid by Victor Stanley. The receptacle(s) shall be placed in the public right-of-way to serve open space and park sites. Receptacles shall be generally located along the property frontage at school entrances and at strategic locations in the vicinity of the site as approved by the Director of T&ES. (T&ES)

**I. STREETS / TRAFFIC:**

43. 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)
44. A pre-construction walk/survey of the site shall occur with Transportation and Environmental Services Construction and Inspection staff to document existing conditions prior to any land disturbing activities. (T&ES)
45. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan, shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. (T&ES)
46. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)

**J. UTILITIES:**

47. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)

**K. WATERSHED, WETLANDS, & RPAs:**

48. The storm water collection system is located within the Holmes Run watershed. All on-site storm water 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)

**L. BMP FACILITIES:**

49. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES)
50. 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 Worksheet A or B and Worksheet C, as applicable. (T&ES)
51. The storm water 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 approved 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)
52. The BMPs and Stormwater Detention Facilities shall be added to the list of BMPs that ACPS maintains.\* (T&ES)
53. The Applicant shall submit two originals of a storm water quality BMP Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. It must be executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan. (T&ES)
54. Prior to issuance of the final occupancy permit, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water 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)

***M. NOISE:***

55. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. (T&ES)
56. Supply deliveries, loading and unloading activities shall not occur between the hours of 11:00 pm and 7:00 am. (T&ES)

**Patrick Henry - CITY DEPARTMENT CODE COMMENTS**

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

**Planning and Zoning**

- F - 1 The scale listed on the floor plan and elevation sheets for all three sites do not appear to correspond with the dimensions provided. Please coordinate the scale and dimensions on the architectural sheets.
- F - 2 Update General Note #11 to include both the required setbacks and the provided setbacks.
- F - 3 Respond to all technical corrections provided with Completeness letter.

**Transportation and Environmental Services**

- 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 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 - 3 The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F - 4 Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F - 5 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 AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. 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 - 6 All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. Minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6" for all commercial and institutional developments; however, a 4" 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" 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 - 7 Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (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" 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 - 8 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" for sanitary sewer and 12" 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" clearance shall be encased in concrete. (T&ES)
- F - 9 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 - 10 Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12" 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 - 11 The rip rap shall be designed as per the requirements of Virginia Erosion and Sediment Control Handbook, Latest Edition. (T&ES)
- F - 12 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 - 13 Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F - 14 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 - 15 The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (T&ES)
- F - 16 Clarify the relationship between the limits of disturbance, drainage divides and where water quality improvements are proposed. (OEQ)
- F - 17 Water quality calculations are typically completed for each sub drainage area being disturbed. In this case, drainage areas being disturbed for each modular classroom can be combined when completing water quality calculations but should not be combined in total. For example, sub drainage areas 3E and 3F can be combined but should not include any other divide area. The water quality calculation and worksheet on sheet C-7 shall be revised on the final plan to reflect this. Again any drainage area that is disturbed is included in its totality in the parcel size calculations. Stormwater Master Plan shall be revised to reflect drainage area changes. (OEQ)

- F - 18 Several symbols and lines are shown for LOD. Provide a single line type for clarity.
- F - 19 BMP calculations are incorrect. Revise as appropriate.
- F - 20 The applicant shall comply with all provisions of the Environmental Management Ordinance (Chesapeake Bay Preservation Act) in accordance with Article XIII of the City of Alexandria Zoning Ordinance for storm water quality control including both the requirement of pollutant load reduction as well as treatment of the Water Quality Volume Default (WQV), RPA and wetlands issues.
- 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 storm water 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, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. 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 then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (T&ES)
- C - 3 Per the requirements of Article 13-113 (d) 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 storm water 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 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 - 5 (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 - 6 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 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 - 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. (T&ES)
- C - 8 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 - 9 Americans with Disability Act (ADA) ramps shall comply with the current requirements of Accessible Curb Ramps by the Code of Virginia(T&ES)
- C - 10 The applicant shall provide storage space for solid waste and recyclable 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 a trash truck and the trash truck shall not back up to collect trash. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: [www.alexandriava.gov](http://www.alexandriava.gov) or contact the City's Solid Waste Division at 703-519-3486 ext.132. (T&ES)

- C - 11 The applicants will be required to submit a Recycling Implementation Plan form to the Solid Waste Division, as outlined in Article H to Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle.
- C - 12 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C - 13 All easements and/or dedications must be recorded prior to release of the site plan.\*
- C - 14 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.\*
- C - 15 Provide a phased erosion and sediment control plan consistent with grading and construction plan.
- C - 16 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 insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary.
- C - 17 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 - 18 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 - 19 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C - 20 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 - 21 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 water quality volume default and stormwater quantity management. (T&ES)
- C - 22 The applicant shall comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C - 23 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, 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 VSMP permit for land disturbing activities greater than 2500 SF. \* (T&ES)

**Code Administration:**

- F-1 The following comments are for preliminary review only.
- C - 1 The proposed construction shall conform to the requirements of the Virginia Uniform Statewide Building Code.
- C - 2 Handicapped accessibility shall be provided to the structure(s).
- C - 3 A NFPA72 fire alarm will be required for the proposed structure(s).
- C - 4 The structure(s) shall bear a seal showing compliance with the Virginia Industrialized Building Safety Regulations Code.
- C - 5 Foundation information must be provided at the time of the building permit submission.

**Archaeology**

- F-1 There is low potential for significant archaeological resources to be disturbed by this project. No archaeological action is required.

***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

## **XI. STAFF RECOMMENDATIONS for DSP#2010-0009 (James K. Polk)**

The following conditions include those brought forward from DSP#2009-0009 (gym addition) that were amended as necessary by Staff, depicted by strikeouts and underlines, to apply to the proposed modular classroom addition:

1. Provide all improvements depicted on the preliminary plan dated June 18, 2010 ~~August 28, 2009~~ and comply with the following conditions of approval:

### ***A. PEDESTRIAN/STREETSCAPE:***

2. Provide the following pedestrian improvements to the satisfaction of the Directors of P&Z, RP&CA and T&ES:
  - a. Complete all pedestrian improvements prior to the issuance of a certificate of occupancy permit.
  - b. Install and maintain ADA accessible pedestrian crossings in the proposed project area. Additionally, provide an ADA accessible route on the final site plan.
  - c. Construct all concrete sidewalks to City standards. The minimum unobstructed width of newly constructed sidewalks shall be 5 feet.
  - d. All newly constructed curb ramps in Alexandria shall be concrete with detectable warning and shall conform to VDOT standards as outlined in a City Memo to Industry (3/07) available on-line: <http://alexandriava.gov/tes/info/default.aspx?id=3522>
  - e. Provide thermoplastic pedestrian crosswalks at all crossings at the proposed development, which must be designed to the satisfaction of the Director of T&ES.
  - f. All crosswalks shall be standard, 6" wide, white thermoplastic parallel lines with reflective material, with 10' 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.
  - g. ~~Extend the five-foot sidewalk located between the gymnasium and the surface parking lot to connect to the sidewalk located south of the gymnasium. Continue the sidewalk to the existing asphalt play area. \*\*\*~~  
(P&Z)(RP&CA)(T&ES) (DSP#2009-0009)

### ***B. OPEN SPACE/LANDSCAPING:***

3. Develop, provide, install and maintain an integrated Landscape Plan that is coordinated with other associated site conditions to the satisfaction of the Directors of P&Z and RP&CA. At a minimum the Landscape Plan shall:
  - a. Provide an enhanced level of detail plantings throughout the site (in addition to street trees). Plantings shall include a simple mixture of seasonally

- variable, evergreen and deciduous shrubs, ornamental and shade trees, groundcovers and perennials that are horticulturally acclimatized to the Mid-Atlantic and Washington, DC National Capital Region.
- b. Ensure positive drainage in all planted areas.
  - c. Provide planting details for all proposed conditions including street trees, multi-trunk trees, shrubs, perennials, and groundcovers.
  - d. Provide a materials palette for site surface and restraint system beneath modular buildings. Example: Provide detail and depth of crushed stone or rock indicating means of separation from adjacent planted areas.(P&Z)  
(RP&CA)
4. Provide the following modifications to the landscape plan and supporting drawings:
- a. Landscape plan requirements apply to limits of disturbed area.
  - b. Update crown coverage calculation to reflect disturbed areas including the geothermal well field.
  - c. Provide required City standard landscape project notes in compliance with City of Alexandria Landscape Guidelines – Section I.
  - d. Depict the property line on the landscape plan.
  - e. Provide planted parking screen at perimeter of proposed parking areas in compliance with per City of Alexandria Landscape Guidelines.
  - f. ~~Provide tree protection and protection details per City of Alexandria Landscape Guidelines.~~
  - g. Show tree protection on demolition plan, sediment and erosion control plan and landscape plan. (RP&CA)
5. ~~Provide \$250 per tree required to achieve the minimum crown coverage to the Department of RP&CA in lieu of providing trees on site. Revise the landscape plans accordingly to eliminate the proposed trees. (RP&CA) [condition removed by staff]~~
6. Provide a site irrigation/water management plan developed installed and maintained to the satisfaction of the Directors of RP&CA and Code Administration.
- a. Provide an exhibit that demonstrates that all parts of the site associated with the addition can be accessed by a combination of building mounted hose bibs and ground set hose connections.
  - b. Provide external water hose bibs continuous at perimeter of building addition. Provide at least one accessible external water hose bib on all building addition sides at a maximum spacing of 90 feet apart.
  - c. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
  - d. Install all lines beneath paved surfaces as sleeved connections.
  - e. Locate water sources and hose bibs in coordination with City Staff. (Code Administration) (RP&CA)
7. Provide a palette of site furnishings in consultation with staff.

- a. Provide location and specification for site furnishings that depicts the scale, massing and character of site furnishings to the satisfaction of the Directors of RP&CA, P&Z and T&ES. (RP&CA)(P&Z)(T&ES)
8. Provide material, finishes, and architectural details for all retaining walls, seat walls, decorative walls, and screen walls. 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 RP&CA, P&Z, and T&ES. (RP&CA)(P&Z)(T&ES)
9. The exact location and size of the geothermal well field shall be finalized and approved by the Departments of P&Z, RP&CA and T&ES prior to commencement of ground disturbance for the geothermal wells. (P&Z)(RP&CA)(T&ES) (DSP#2009-0009)
10. Provide temporary fencing around geothermal construction area to allow maximum open space and field use during the course of construction. (RP&CA) (DSP#2009-0009)
11. If more than 20 percent of the diamond field is impacted by the geothermal wells, the applicant shall restore and regrade the diamond outfield to industry standards as recommended in the Alexandria Fields Master Plan. The diamond field is defined as the area within a 270 foot radius of home plate.
  - a. Consult with a certified sports field manager and employ laser grading to provide industry standard drainage.
  - b. Amend outfield with topsoil.
  - c. Reseed with 80% bluegrass and 20% rye grass mix.
  - d. Provide temporary above grade irrigation for four weeks after seeding. (RP&CA) (DSP#2009-0009)
12. Pipes and infrastructure related to the geothermal wells shall be buried 24" below grade. (RP&CA) (DSP#2009-0009)
13. Provide sections illustrating below-grade geothermal infrastructure. (RP&CA) (DSP#2009-0009)
14. Provide RPCA with an as-built plan of equipment, infrastructure, location and depth of installed geothermal wells. (RP&CA) (DSP#2009-0009)
15. Soil unearthed during the geothermal boring process shall not be returned as topsoil to the field. (RP&CA) (DSP#2009-0009)
16. Above-grade infrastructure related to geothermal wells shall not be located within the outfield of the baseball diamond. Locate any above-grade infrastructure in coordination with RPCA staff. (RP&CA) (DSP#2009-0009)

17. Coordinate construction activities with RP&CA staff.
  - a. Provide a construction schedule to RP&CA's Deputy Director of Park Operations 30 days prior to commencement of work.
  - b. Provide construction updates and revised schedules to RP&CA monthly during construction.
  - c. Provide notice to RP&CA's Deputy Director of Park Operations 90 days prior to commencement of construction of geothermal wells. (RP&CA) (DSP#2009-0009)

**C. *TREE PROTECTION AND PRESERVATION:***

18. Provide, implement and follow a tree conservation and protection program that is developed per the City of Alexandria Landscape Guidelines and to the satisfaction of the Directors of P&Z, RP&CA and the City Arborist. (P&Z)(RP&CA) ~~Work with RPCA staff to develop a tree protection plan. (RP&CA)~~
19. The area of the limits of disturbance and clearing for the site shall be limited to the areas as generally depicted on the preliminary site plan dated June 18, 2010 and reduced if possible to retain existing trees and grades.
  - a. Provide tree protection in compliance with City of Alexandria Landscape Guidelines.
  - b. Reduce/relocate limits of disturbance to eliminate impact on large tree at southeast corner of the site along North Pickett Street.
  - c. Ensure that construction staging areas to ensure that limits of disturbance do not impact existing City programmed children's camps, day care and after school programs.
20. There shall be no net loss of crown coverage for site areas within limits of disturbance. (P&Z)(RP&CA)
21. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed and/or the City may request that replacement trees of similar caliper and species be provided for damage trees if the approved tree protection methods have not been followed. The replacement trees shall be installed and if applicable the fine shall be paid prior to the issuance of the last certificate of occupancy permit. \*\*\* (P&Z)(RP&CA)
22. The area of the limits of disturbance and clearing for the site shall be revised to include the geothermal wells on all applicable sheets and otherwise be limited to the areas as generally depicted on the preliminary site plan dated August 28, 2009 and reduced if possible to retain existing trees and grades. (P&Z)(RP&CA) (DSP#2009-0009)

**D. BUILDING:**

23. The applicant is requesting a waiver from screening the rooftop mechanical equipment. It does not appear that the rooftop mechanical equipment will be visible from the public right-of-way or nearby properties; however, if staff determines once the building is constructed that the visibility of the mechanical units needs to be screened, the applicant shall do so prior to the release of the final certificate of occupancy. If a screen is necessary, the screening material shall match a predominate façade material of the proposed addition, to the satisfaction of the Director of P&Z. (P&Z)
24. The applicant shall provide a materials board prior to approval of the final site plan which includes all of the proposed building materials and identifies the finish and color proposed for review and approval by the Department of Planning and Zoning. (P&Z) (DSP#2009-0009)
25. The applicant shall construct one on-site mock-up panel, at the first of the three schools participating in the modular building program (Charles Barrett, Patrick Henry or James Polk) prior to any vertical construction and approval of the wall check surveys.
  - a. The mock-up panel shall include each of the proposed building materials for review and approval by the Department of Planning and Zoning. (P&Z) (DSP#2009-0009)
26. Per the City's Green Building Policy adopted April 18, 2009, the applicant shall work to achieve a green building certification level of LEED Silver and at a minimum shall achieve LEED Certification to the satisfaction of the Directors of P&Z, RP&CA and T&ES. Diligent pursuance and achievement of this certification shall be monitored through the following:
  - a. Provide evidence of the project's registration with LEED with the submission of the first final site plan.\*
  - b. Provide evidence of submission of materials for Design Phase credits to the U.S. Green Building Council (USGBC) prior to issuance of a certificate of occupancy. \*\*\*
  - c. Provide evidence of submission of materials for Construction Phase credits to USGBC within six months of obtaining a final certificate of occupancy.
  - d. Provide documentation of LEED Silver or LEED Certification from USGBC within two years of obtaining a final certificate of occupancy.
  - e. Failure to achieve LEED Certification for the project(s) will be evaluated by City staff, and if staff determines that a good faith, reasonable, and documented effort was not made to achieve these certification levels, then any City-wide Green Building policies existing at the time of staff's determination will apply. (P&Z)(RP&CA)(T&ES)
27. The applicant shall use EPA-labeled WaterSense fixtures to minimize the generation of municipal wastewater from the site and explore the possibilities of adopting water

reduction strategies (i.e., use of gray water system on site) and other measures that could possibly reduce the wastewater generation from this site. A list of applicable mechanisms can be found at: <http://www.epa.gov/WaterSense/pp/index.htm>. (T&ES) (DSP#2009-0009)

28. The applicant shall work with the City for reuse of the existing building materials as part of the demolition process, leftover, unused, and/or discarded building materials.(T&ES) (DSP#2009-0009)
29. Provide an ornamental gate/fence/rolling door to screen the length of the loading dock and recycling area. The gate shall be set back from the northern façade of the gymnasium. A detail of the gate shall be included in the final site plan. The final gate, including the material and finish, shall be subject to the approval of the Director of P&Z. (P&Z) (DSP#2009-0009)

**E. SIGNAGE:**

30. Install a temporary informational sign on the site prior to the approval of the final site plan for the project and shall be displayed until construction is complete or replaced with a contractor or real estate sign incorporating the required information; the sign shall notify the public of the nature of the upcoming project and shall provide a phone number for public questions regarding the project.\* (P&Z)(T&ES) (DSP#2009-0009)

**F. PARKING:**

31. Locate a minimum of ~~27~~ 36 parking spaces in the surface parking lot. (P&Z)(T&ES)

**G. SITE PLAN:**

32. Per Section 11-418 of the Zoning Ordinance, the development site plan shall expire and become null and void, unless substantial construction of the project is commenced within 36 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. (P&Z) (DSP#2009-0009)
33. Provide a lighting plan with the final site plan to verify that lighting meets City standards. The plan shall be to the satisfaction of the Directors of T&ES, P&Z, and RP&CA 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 any existing street lights located on the opposite side(s) of all adjacent streets. Photometric calculations must extend from proposed building face(s) to property line and from property line to the opposite side(s) of all adjacent streets and/or 20 feet beyond the property line on all adjacent properties and rights-of-way. Show existing and proposed street lights and site lights.
  - 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. Provide location of conduit routing between site lighting fixtures so as to avoid conflicts with street trees.
  - g. Detail information indicating proposed light pole and footing in relationship to adjacent grade or pavement. All light pole foundations shall be concealed from view.
  - h. The lighting for the areas not covered by the City of Alexandria' 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. Full cut-off lighting shall be used at the development site to prevent light spill onto adjacent properties. (P&Z)(T&ES)(RP&CA)(Police)
34. Coordinate location of site utilities with other site conditions to the satisfaction of the Directors of RP&CA, 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. (RP&CA)(P&Z)(T&ES) (DSP#2009-0009)
35. The surface parking lot shall provide one-way circulation. Provide all necessary signage and pavement markings to ensure one-way circulation. (P&Z)(T&ES) (DSP#2009-0009)
36. Clearly identify proposed site areas that will be vegetated and/or paved. (RP&CA)
37. Prior to First Final Site Plan submission provide a landscape maintenance plan and cost analysis that incorporates level(s) of anticipated manicure, interval/scheduling of work and all changes to the existing site. Maintenance Plan and cost analysis shall be approved by the Director of RPCA. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

## **H. CONSTRUCTION**

38. 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. In addition, building and construction permits required for site preconstruction shall be permitted prior to release of the final site plan to the satisfaction of the Director of T&ES. \* (T&ES) (DSP#2009-0009)
39. Prior to the final occupancy permit for the last construction phase, fully remove contractor's staging and storage area and the 20' wide gravel construction drive and replace with landscaping. \*\*\*\* (P&Z)
40. Submit a construction management plan for review and approval by the Directors of P&Z, T&ES and Code Administration prior to final site plan release. The plan shall:
  - a. Include a plan for temporary pedestrian and vehicular circulation;
  - b. Include the overall schedule for construction and the hauling route;
  - c. Copies of the plan shall be posted in the construction trailer and given to each subcontractor before they commence work;
  - d. If the plan is found to be violated during the course of construction, citations will be issued for each infraction and a correction notice will be forwarded to the applicant. If the violation is not corrected within five (5) calendar days, a "stop work order" will be issued, with construction halted until the violation has been corrected. \* (P&Z)(T&ES)(Code) (DSP#2009-0009)
41. Provide off-street parking for all construction workers without charge. 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 plan is found to be violated during the course of construction, a correction notice will be issued to the developer. If the violation is not corrected within ~~ten (10)~~ five (5) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. \* (P&Z)(T&ES)
42. The sidewalks shall remain open during construction or pedestrian access shall be maintained to the satisfaction of the Director of T&ES throughout the construction of the project. (T&ES) (DSP#2009-0009)

43. No major construction staging shall be allowed within the right-of-way along Polk Avenue, North Pickett Street or North Pegram Street or on the westernmost recreational fields. The applicant shall meet with RP&CA and T&ES to discuss construction staging activities prior to release of any permits for ground disturbing activities. \*\* (RP&CA)(T&ES) (DSP#2009-0009)
44. A "Certified Land Disturber" (CLD) shall be named in a letter to the Division Chief of Construction & Inspection 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) (DSP#2009-0009)
45. 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 of the date of the meeting before the permit is issued. (P&Z)(T&ES) (DSP#2009-0009)
46. 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, RP&CA and T&ES. (P&Z)(RP&CA)(T&ES) (DSP#2009-0009)
47. 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. (T&ES) (DSP#2009-0009)
48. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES) (DSP#2009-0009)
49. Temporary construction 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 certificate of occupancy permit. \*\*\* (P&Z) (DSP#2009-0009)
50. Submit a wall check prior to the commencement of framing for the building(s). The wall check shall include the building footprint, as depicted in the approved 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 shall be approved by the P&Z prior to commencement of framing. (P&Z) (DSP#2009-0009)

51. Submit a height certification and a location survey for all site improvements to the Department of P&Z as part of the request for a certificate of occupancy permit. The height certification and the location survey shall be prepared and sealed by a registered architect, engineer, or surveyor. The height certification shall state that the height was calculated based on all applicable provisions of the Zoning Ordinance. \*\*\* (P&Z) (DSP#2009-0009)

**Site Access & Construction:**

52. Provide clear and unobstructed access to all site areas anticipated to receive regular maintenance. For example, it appears that some areas of the site such as the proposed interior courtyard are precluded from maintenance access. (RP&CA)
  - a. Prior to First Final Site Plan submission meet with RPCA-Park Operations to review and develop an operations/maintenance impact analysis for each site. Coordinate this meeting via RPCA-Park Planning. (RP&CA)

***I. STORMWATER***

53. All stormwater designs that require analysis of pressure hydraulic systems, including but not limited to the design of flow control structures and storm water 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) (DSP#2009-0009)

***J. SOLID WASTE***

54. In order for the City to provide solid waste service, the development must meet all the minimum street standards. The trash truck must be able to pick up solid waste from school roads without backing up. The containers must be placed inside the units or within an enclosure that completely screens them from view. The applicant must purchase the standard containers from the City or provide containers that are compatible with City collection system and approved by the Director of T&ES. (T&ES)
55. Prior to Final Site Plan release for the gymnasium addition, provide \$1,150 per receptacle to the Director of T&ES for purchase and installation of two (2) receptacles, Iron Site Bethesda Series, Model SD-42 decorative black metal trash cans by Victor Stanley. The receptacle(s) shall be placed in the public right of way. Receptacles shall be generally located along the property frontage and at strategic locations in the vicinity of the site as approved by the Director of T&ES. (T&ES) (DSP#2009-0009)

**K. STREETS / TRAFFIC**

56. 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) (DSP#2009-0009)
57. A pre-construction walk/survey of the site shall occur with City Transportation and Environmental Services Construction and Inspection (C&I) staff to document existing conditions prior to any land disturbing activities. (T&ES)
58. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed controls to traffic movement, lane closures, construction entrances, haul routes, and storage and staging shall be provided for informational purposes. In addition, the Traffic Control Plan shall be amended as necessary and submitted to the Director of T&ES along with the Building and other Permit Applications as required. The Final Site Plan shall include a statement "FOR INFORMATION ONLY" on the Traffic Control Plan Sheets. (T&ES)
59. All Traffic Control Device design plans, Work Zone Traffic Control plans, and Traffic Studies shall be signed and sealed by a professional engineer, registered in the Commonwealth of Virginia. (T&ES)
60. Show turning movements of standard vehicles in the parking lot. Turning movements shall meet AASHTO vehicular guidelines and shall be to the satisfaction of the Director of T&ES. (T&ES) (DSP#2009-0009)
61. Modify the driveway entrance on N. Pickett Street to allow one-way entry only:
  - a. The driveway entrance shall be reduced to 18 feet in width.
  - b. Appropriate "Do Not Enter" signage shall be posted to prohibit vehicles from exiting onto N. Pickett Street.
  - c. The proposed parking area drive aisle shall remain 22 feet in width. (T&ES)
62. All 90-degree parking spaces adjacent to a sidewalk that is less than seven feet must have wheel stops. (T&ES) (DSP#2009-0009)

**L. UTILITIES**

63. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES) (DSP#2009-0009)
64. Underground utilities serving the new construction to the satisfaction of the Director of T&ES. (T&ES) (DSP#2009-0009)

**M. WATERSHED, WETLANDS, & RPAs**

65. The storm water collection system is located within the Holmes Run watershed. All on-site storm water 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) (DSP#2009-0009)
66. Project lies entirely within an area described on historical maps as containing marine clays. Construction methodology and erosion and sediment control measures must account for the presence of marine clay or highly erodible soils. (T&ES) (DSP#2009-0009)

**N. BMP FACILITIES**

67. The City of Alexandria's storm water management regulations regarding water quality are two-fold: first, phosphorus removal requirement and second, water quality volume default. Compliance with the phosphorus requirement does not relieve the applicant from the water quality default requirement. The water quality volume determined by the site's proposed impervious area shall be treated in a Best Management Practice (BMP) facility. (T&ES) (DSP#2009-0009)
68. 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 Worksheet A or B and Worksheet C, as applicable. (T&ES) (DSP#2009-0009)
69. The storm water 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 approved 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) (DSP#2009-0009)
70. The hydrodynamic device BMPs and Stormwater Detention Facilities shall be added to the City / Alexandria City Public Schools (ACPS) BMP Memorandum of Understanding (MOU) for maintenance by ACPS and to the list of BMPs that ACPS maintains prior to submission of Final Site Plan #2. \* (T&ES)
71. The Applicant shall submit two originals of a storm water quality BMP Maintenance Agreement with the City to be reviewed as part of the Final #2 Plan. It must be

executed and recorded with the Land Records Division of Alexandria Circuit Court prior to approval of the final site plan. (T&ES)

72. Prior to release of the certificate of occupancy, the Applicant shall provide the City with a copy of the 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.\*\*\*(T&ES) (DSP#2009-0009)
73. Prior to issuance ~~release~~ of the ~~certificate of final~~ occupancy permit, the Applicant is required to submit a certification by a qualified professional to the satisfaction of the Director of T&ES that any existing storm water management facilities adjacent to the project and associated conveyance systems were not adversely affected by construction operations and that they are functioning as designed and are unaffected by construction activities. 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) (DSP#2009-0009)

***O. NOISE***

74. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. (T&ES) (DSP#2009-0009)
75. Supply deliveries, loading and unloading activities shall not occur between the hours of 11:00 pm and 7:00 am. (T&ES)

***P. ARCHAEOLOGY:***

76. The applicant/developer shall call Alexandria Archaeology immediately (703-838-4399) if any buried structural remains (wall foundations, wells, privies, cisterns, etc.) or concentrations of 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. (Archaeology)
77. The applicant/developer shall not allow any metal detection or artifact collection to be conducted on the property, unless authorized by Alexandria Archaeology. (Archaeology)

**James Polk - CITY DEPARTMENT CODE COMMENTS**

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

**Planning and Zoning**

- F - 1. The scale listed on the floor plan and elevation sheets for all three sites do not appear to correspond with the dimensions provided. Please coordinate the scale and dimensions on the architectural sheets.
- F - 2. Update General Note #11 to include both the required setbacks and the provided setbacks.
- F - 3. Remove the contractor's staging/storage area from the site plan, sheet C-4.
- F - 4. Extend the five-foot sidewalk to connect to the southern egress door of the modular addition.
- ~~F - 5. Revise the following zoning tabulations on the cover sheet (sheet C1.00):~~
- ~~a. The proposed height, according to the architectural elevations on sheet A201, is 28' - 4". Revise the proposed height in the zoning tabulations accordingly.~~
  - ~~b. The front yard setback identified on the dimension plan (sheet C5.10) is 125.94 feet. Revise the front yard setback in the zoning tabulations accordingly.~~
  - ~~c. The side yard setback identified on the dimension plan (sheet C5.10) is 194.27 feet. Revise the side yard setback in the zoning tabulations accordingly.~~
  - ~~d. Based on the site area, the FAR allowed is 176,340 square feet. Revise the FAR allowed in the zoning tabulations accordingly.~~
  - ~~e. Revise the FAR proposed to be based on net square footage.~~
  - ~~f. The existing and proposed gross and net square footage shown on the cover sheet (sheet C1.00) are inconsistent with the square footages shown in the building area tabulations on sheet A001. Revise the tabulations accordingly on all applicable sheets.~~
  - ~~g. Include the required and proposed frontage in the zoning tabulations. (DSP#2009-0009) [Finding Deleted by Staff]~~
- ~~F - 6. Per the Preliminary Development Site Plan Checklist, revise the following:~~
- ~~a. Include a City approval signature block on sheet A201.~~
  - ~~b. Provide a signature and registration number of the architect preparing the plans on all architectural sheets.~~
  - ~~c. Indicate the height of the existing building on all applicable sheets.~~
  - ~~d. Depict the R-8 zoning district boundary located along the southern property line on all applicable sheets.~~
  - ~~e. Ensure that all utility information is complete, including the relocated gas and telephone lines. (DSP#2009-0009) [Finding Deleted by Staff]~~

- F - 7. ~~Identify the finished floor and the height of the proposed gymnasium addition and the mechanical room addition on the site plan and the dimension plan. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 8. ~~Dimension the width of the sidewalk located adjacent to the planter on the north side of the proposed gymnasium. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 9. ~~Label the numbers enclosed in circles on sheets C5.00, C6.00, C8.00 C11.00 and C11.20 or include this symbol in the legend provided on sheet C2.00. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 10. ~~Identify the square footage that will be disturbed with the installation of the geothermal wells. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 11. ~~Revise the dimension plan, sheet C5.10 to:~~
  - ~~a. Label the width of the drive aisles in the surface parking lot.~~
  - ~~b. Verify that the length of the loading space is 40 feet.~~
  - ~~c. Depict and label the front yard setback from the proposed gymnasium to North Pickett.~~
  - ~~d. Provide additional building dimensions for the proposed gymnasium.~~
  - ~~e. Remove the Limits of Disturbance information from the dimension plan. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 12. ~~Depict travel directions in the proposed parking lot on all applicable sheets. (DSP#2009-0009)~~
- F - 13. ~~Revise sheet A001 to:~~
  - ~~a. Clarify the existing and proposed square footage on the lower level. The location of the mechanical room addition is unclear.~~
  - ~~b. Number the LD / ESL classroom and the classroom located left of the multi-purpose room.~~
  - ~~c. Correct all overlapping text.~~
  - ~~d. Revise the building code analysis and building gross area tabulations to ensure consistency throughout the plan set. Square footage should be consistent with the square footage information provided to staff on September 4, 2009. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 14. ~~Correct all match line detail references on sheet A201. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 15. Respond to all technical corrections provided with Completeness letter.

### Recreation Parks & Cultural Activities

- F-1 Required crown coverage for site will need to be accommodated on-site.

**Transportation and Environmental Services**

- F - 1. ~~As per Article XIII, Section 13-109(E)(1), a Stormwater Master Plan shall be submitted and approved prior to Final 1. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 2. ~~Worksheet B is calculated incorrectly. Correct as necessary. (DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 3. City Standard Notes (Project Description Block, etc.) shall be included.(DSP#2009-0009)
- F - 4. ~~Sheet C-1 states that Erosion and Sediment Control is not required. Remove this statement, as Erosion and Sediment control is required.(DSP#2009-0009) [Finding Deleted by Staff]~~
- F - 5. 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. (DSP#2009-0009)
- F - 6. 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. (DSP#2009-0009)
- F - 7. The Plan shall include a dimension plan with all proposed features fully dimensioned and the property line clearly shown. (T&ES)
- F - 8. Include all symbols, abbreviations, and line types in the legend. (DSP#2009-0009)
- F - 9. All storm sewers shall be constructed to the City of Alexandria standards and specifications. The minimum diameter for storm sewers shall be 18-inches in the public Right of Way (ROW) and the minimum size storm sewer catch basin lead shall be 15". The acceptable pipe material will be Ductile Iron Pipe (DIP) AWWA C-151 (ANSI A21.51) Class 52 or Reinforced Concrete Pipe (RCP) ASTM C-76 Class IV. For roof drainage system, Polyvinyl Chloride (PVC) ASTM 3034-77 ~~SDR 35~~SDR 26

and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 2.0 fps ~~2.5 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).

- F - 10. All sanitary sewers shall be constructed to the City of Alexandria standards and specifications. The minimum diameter of sanitary sewers shall be 10" in the public Right of Way and sanitary lateral 6". The acceptable pipe materials will be Polyvinyl Chloride (PVC) ASTM 3034-77 ~~SDR 35~~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" or larger diameters); however, RCP C-76 Class III pipe may be acceptable on private properties. The acceptable minimum and maximum velocities will be 2.5 fps and 10 fps, respectively. Lateral 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.
- F - 11. Lateral Separation of Sewers and Water Mains: A horizontal separation of 10' (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" 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. (DSP#2009-0009)
- F - 12. ~~Maintenance of Vertical Separation for~~ Crossing Water Main Over and Under a Sanitary or Storm Sewer: When a water main over crosses or under crosses a sanitary or storm sewer then the vertical separation between the bottom of one (i.e., sanitary or storm sewer or water main) to the top of the other (water main or sanitary / storm sewer) shall be at least 18" for sanitary sewer and 12" 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" clearance shall be encased in concrete.
- F - 13. 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. (DSP#2009-0009)

- F - 14. Crossing Existing or Proposed Utilities: Underground telephone, cable T.V., gas, and electrical duct banks shall be crossed maintaining a minimum of 12" 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 and pressure tested in place without leakage prior to installation. 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. (DSP#2009-0009)
- F - 15. The rip rap shall be designed as per the requirements of Virginia Erosion and Sediment Control Handbook, Latest Edition. (T&ES)
- F - 16. 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. (DSP#2009-0009)
- F - 17. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (DSP#2009-0009)
- F - 18. 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. (DSP#2009-0009)
- F - 19. The Traffic Control Plan shall replicate the existing vehicular and pedestrian routes as nearly as practical and the pedestrian pathway shall not be severed or moved for non-construction activities such as parking for vehicles or the storage of materials or equipment. Proposed traffic control plans shall provide continual, safe and accessible pedestrian pathways for the duration of the project. (DSP#2009-0009)
- F - 20. The plan shall demonstrate how the water quality requirements are being satisfied for each drainage divide where disturbance occurs. The plan is unclear as to which area will be disturbed but applicant should know that if there is disturbance within a drainage area the entire drainage area shall be included in the site area calculation. The entire area will require meeting water quality standards. Individual worksheets and project description blocks that demonstrate compliance shall be provided on the final plan. The worksheet and project description on sheet C-8 block shall be revised to satisfy water quality requirements via the master plan approach. (OEQ)
- F - 21. Stormwater Master Plan shall be revised to reflect correct drainage divides. There are multiple drainage divides with the same designation, eg. two DA T2 , two DA 5's, two DA 4's. (OEQ)

- F - 22. The designer should simplify the number of drainage divides on the master plan. For example, all drainage divides being treated by the proposed aqua swirl should be considered one divide. (OEQ)
- F - 23. The green roof for the modular building is acknowledged. Note that green roofs are considered pervious but no treatment credit is given.
- F - 24. BMP calculations are incorrect. Revise as appropriate.
- F - 25. Several symbols and lines are shown for LOD. Provide a single line type for clarity.
- F - 26. Provide Stormdrain marker detail.
- F - 27. The applicant shall comply with all provisions of the Environmental Management Ordinance (Chesapeake Bay Preservation Act) in accordance with Article XIII of the City of Alexandria Zoning Ordinance for storm water quality control including both the requirement of pollutant load reduction as well as treatment of the Water Quality Volume Default (WQV), RPA and wetlands issues.
- 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 storm water 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. (DSP#2009-0009)
- C - 2 Per the requirements of the City of Alexandria Zoning Ordinance (AZO) Article XIII, the applicant shall comply with the peak flow requirements and prepare a Stormwater Management Plan so that from the site, the post-development peak runoff rate from a two-year storm and a ten-year storm, considered individually, shall not exceed their respective predevelopment rates. 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 then the applicant shall provide an additional 10% storage of the pre-development flows in this watershed to meet detention requirements. (DSP#2009-0009)
- C - 3 Per the requirements of Article 13-113 (d) 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 storm water 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 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 - 5 (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 - 6 Flow from downspouts, foundation drains, and sump pumps shall be discharged to the storm sewer per the requirements of Memorandum to the industry on Downspouts, Foundation Drains, and Sump Pumps, Dated June 18, 2004 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). (DSP#2009-0009)
- C - 7 In compliance with the City of Alexandria Zoning Ordinance Article XI, the applicant shall complete a sanitary sewer adequate outfall analysis as per the requirements of Memorandum to Industry No. 02-07 New Sanitary Sewer Connection and Adequate Outfall Analysis dated June 1, 2007. (DSP#2009-0009)
- C - 8 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 - 9 Americans with Disability Act (ADA) ramps shall comply with the current requirements of Accessible Curb Ramps by the Code of Virginia(T&ES)

- C - 10 The applicant shall provide storage space for solid waste and recyclable 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 a trash truck and the trash truck shall not back up to collect trash. The City's storage space guidelines and required Recycling Implementation Plan forms are available at: [www.alexandriava.gov](http://www.alexandriava.gov) or contact the City's Solid Waste Division at 703-519-3486 ext.132. (DSP#2009-0009)
- C - 11 The applicant shall be responsible to deliver the 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. (DSP#2009-0009)
- C - 12 The applicants will be required to submit a Recycling Implementation Plan form to the Solid Waste Division, as outlined in Article H to Title 5 (Ordinance Number 4438), which requires all commercial properties to recycle. (DSP#2009-0009)
- C - 13 ~~The sewer tap fee must be paid prior to release of the site plan.\* (DSP#2009-0009)~~  
**[Code Requirement Deleted by Staff - Not applicable to public schools]**
- C - 14 All private streets and alleys shall comply with the City's Minimum Standards for Private Streets and Alleys. (T&ES)
- C - 15 All easements and/or dedications must be recorded prior to release of the site plan.\* (DSP#2009-0009)
- C - 16 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.\* (DSP#2009-0009)
- C - 17 Provide a phased erosion and sediment control plan consistent with grading and construction plan. (DSP#2009-0009)
- C - 18 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 insure that this requirement is achieved, the applicant is requested to prepare plans in this format including initial site survey work if necessary. (DSP#2009-0009)

- C - 19 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. (DSP#2009-0009)
- C - 20 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. (DSP#2009-0009)
- C - 21 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (DSP#2009-0009)
- C - 22 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (DSP#2009-0009)
- 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. (DSP#2009-0009)
- C - 24 The applicant must comply with the Article XIII of the City of Alexandria Zoning Ordinance, which includes requirements for storm water pollutant load reduction, treatment of the water quality volume default, and storm water quantity management. (DSP#2009-0009)
- C - 25 The applicant must comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (DSP#2009-0009)
- C - 26 All required permits from Virginia Department of Environmental Quality, Environmental Protection Agency, Army Corps of Engineers, Virginia Marine Resources must 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 VSMP permit for land disturbing activities greater than 2500 SF.\* (DSP#2009-0009)

**Code Administration:**

- F - 1. The following comments are for preliminary review only. Once the applicant has filed for a building permit, code requirements will be based upon the building permit plans. If there are any questions, the applicant may contact James Hunt at 703-746-4197 or james.hunt@alexandriava.gov. (DSP#2009-0009)

- C - 1 The proposed construction shall conform to the requirements of the Virginia Uniform Statewide Building Code.
- C - 2 Handicapped accessibility shall be provided to the proposed addition(s).
- C - 3 A NFPA72 fire alarm will be required for the proposed addition(s).
- C - 4 The addition(s) shall bear a seal showing compliance with the Virginia Industrialized Building Safety Regulations Code.
- C - 5 Foundation information must be provided at the time of the building permit submission.
- C - 6 ~~Applicant must provide fire lane signage along the existing access drive aisle for emergency vehicles. (DSP#2009-0009)~~
  - a. ~~Emergency vehicle easement signs shall be metal construction, 12 inches wide and 18 inches in height. Provide red letters on reflective white background with a 3/8 inch red trim strip around the entire outer edge of the sign. The lettering shall say "NO PARKING," "EMERGENCY VEHICLE EASEMENT," "EM. VEH. EAS," and "City of Alex.," and be placed as shown in Figure A107.1, A107.2 and A107.3. Lettering size shall be as follows: "NO PARKING" 2 inches, "EMERGENCY VEHICLE EASEMENT" 2 1/2 inches. EM. VEH. EAS. 1 inch, CITY OF ALEX. 1/2 inch. Directional Arrows 1 inch by 6 inches solid shaft with solid head 1 1/2 inches wide and 2 inches deep (See Figures A107.1, A107.2, A107.3 for examples). Signs shall be mounted with the bottom of the sign 7 feet above the roadway, and shall be properly attached to a signpost or other approved structure such as designated by the Director of Code Enforcement. Posts for signs, when required, shall be metal and securely mounted. Signs shall be parallel to the direction of vehicle travel and posted so the directional arrows clearly show the boundaries and limits of the Emergency Vehicle Easement. In areas where emergency vehicle easements involve two-way traffic, double mounted signs shall be provided. The maximum distance between signs shall be 100 feet. Other special signs or modifications to emergency vehicle easement signs shall be approved by the Director of Code Enforcement.~~
- C - 7 ~~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) floor area per floor; e) fire protection plan. Code requirement met, provided on sheet A-001. (DSP#2009-0009)~~
- C - 8 ~~The developer shall provide a separate Fire Service Plan which illustrates: a) emergency ingress/egress routes to the site; b) two fire department connections (FDC) to the building, one on each side/end of the building; c) fire hydrants located between forty (40) and one hundred (100) feet of each FDC; d) on-site fire hydrants spaced~~

~~with a maximum distance of three hundred (300) feet between hydrants and the most remote point of vehicular access on site; e) emergency vehicle easements (EVE) around the building with a width of eighteen (18) feet (one way) and twenty-two (22) feet for two-way traffic; f) all Fire Service Plan elements are subject to the approval of the Director of Code Administration. Although several aspects of the plan are not required, the applicant shall include a Fire Service plan which illustrates the EVE's, fire hydrants, and any FDC's that are on the site, both existing and proposed. (DSP#2009-0009)~~

- ~~C - 9 The final site plans shall show placement of fire easement signs. See attached guidelines for sign details and placement requirements. The applicant has indicated that fire lane signage is not required. However, the fire lane and signage is required but the existing access locations are acceptable for access by Fire Department Personnel. (DSP#2009-0009)~~
- ~~C - 10 The applicant of any building or structure constructed in excess of 10,000 square feet; or any building or structure which constructs an addition in excess of 10,000 square feet shall contact the City of Alexandria Radio Communications Manager prior to submission of final site plan. The proposed project shall be reviewed for compliance with radio requirements of the City of Alexandria to the satisfaction of the City of Alexandria Radio Communications Manager prior to site plan approval. Such buildings and structures shall meet the following conditions:~~
- ~~a. The building or structure shall be designed to support a frequency range between 806 to 824 MHz and 850 to 869 MHz.~~
  - ~~b. The building or structure design shall support minimal signal transmission strength of -95 dBm within 90 percent of each floor area.~~
  - ~~c. The building or structure design shall support a minimal signal reception strength of -95 dBm received from the radio system when transmitted from within 90 percent of each floor area.~~
  - ~~d. The building or structure shall be tested annually for compliance with City radio communication requirements to the satisfaction of the Radio Communications Manager. A report shall be filed annually with the Radio Communications Manager which reports the test findings.~~
  - ~~e. If the building or structure fails to meet the above criteria, the applicant shall install to the satisfaction of the Radio Communications Manager such acceptable amplification systems incorporated into the building design which can aid in meeting the above requirements. Examples of such equipment are either a radiating cable system or an FCC approved type bi-directional amplifier. Final testing and acceptance of amplification systems shall be reviewed and approved by the Radio Communications Manager. It has been determined that since the building is actually over 10,000 square feet combined, the applicant must make sure that the building does comply with this requirement. (DSP#2009-0009)~~

- C - 11 ~~A soils report must be submitted with the building permit application. The applicant indicates that the soils report will be submitted with the building permit application. (DSP#2009-0009)~~
- C - 12 ~~Prior to submission of the Final Site Plan #3, the developer shall provide three wet stamped copies of the fire flow analysis performed by a certified licensed fire protection engineer to assure adequate water supply for the structure being considered. The three copies shall be submitted to the Site Plan Coordinator of Code Administration, 301 King Street, Suite 4200, Alexandria, VA 22314. Code requirement deleted; building is not sprinklered. (DSP#2009-0009)~~
- C - 13 ~~A Certificate of occupancy shall be obtained prior to any occupancy of the building or portion thereof, in accordance with USBC 116.1. Noted by applicant. (DSP#2009-0009)~~
- C - 14 ~~A fire prevention code permit is required for the proposed operation. Noted by applicant. (DSP#2009-0009)~~
- C - 15 ~~Additions and Alterations to the existing structure must comply with the 2006 edition of the Uniform Statewide Building Code (USBC). Noted by applicant. The additions and alterations will comply with the 2006 USBC per applicant. (DSP#2009-0009)~~
- C - 16 ~~Additions and alterations to the existing structure and/or installation and/or altering of equipment therein requires a building permit (USBC 108.1). Five sets of plans, bearing the signature and seal of a design professional registered in the Commonwealth of Virginia, must accompany the written application (USBC 109.1). Noted by applicant. (DSP#2009-0009)~~
- C - 17 ~~The drawings do not show steps or stairs. Stairs must comply with USBC. Stairways of 3 or more risers require handrails. The applicant indicates all proposed stairs will comply with the USBC. (DSP#2009-0009)~~
- C - 18 ~~Required exits, parking, and accessibility within the building for persons with disabilities must comply with USBC Chapter 11. Handicapped accessible bathrooms shall also be provided. Noted by applicant. (DSP#2009-0009)~~
- C - 19 ~~Toilet Facilities for Persons with Disabilities: Larger, detailed, dimensioned drawings are required to clarify space layout and mounting heights of affected accessories. Information on door hardware for the toilet stall is required (USBC 1109.2.2). Noted by applicant. Enlarged toilet plans will be submitted with the building permit. (DSP#2009-0009)~~
- C - 20 ~~Prior to the issuance of a demolition permit or land disturbance permit, a rodent abatement plan shall be submitted to Code Enforcement 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. Noted by applicant. (DSP#2009-0009)~~

- C - 21 ~~A demolition permit is required for the proposed project (USBC 108.1). Noted by applicant. (DSP#2009-0009)~~
- C - 22 ~~Roof drainage systems must be installed so as neither to impact upon, nor cause erosion/damage to adjacent property. Noted by applicant. (DSP#2009-0009)~~
- C - 23 ~~Roof drainage must not run toward adjacent property. If the footprint area of the addition: (1) exceeds the footprint area of the existing structure, or (2) the roof drainage of the existing structure is hard piped, or (3) the roof drainage from the addition will cause erosion or damage to an adjacent property, then run-off water must be hard piped (schedule 40 PVC pipe;  $> 3''$  in diameter) to the storm, sewer, inlet box, building sub drain, street flume or curb. The applicant has indicated that the proposed additions will not run towards adjacent properties and roof drains are picked up and routed to the public storm drainage system serving the site per sheet C5.00 and applicant. (DSP#2009-0009)~~
- C - 24 ~~Construction permits are required for this project. Plans shall accompany the permit application that fully details the construction as well as layouts and schematics of the mechanical, electrical, and plumbing systems. Noted by applicant. (DSP#2009-0009)~~

### Police

#### Landscape Recommendations

- R - 1. The proposed shrubbery should have a natural growth height of no more than 2 ½ to 3 feet with a maximum height of 36 inches when it matures and should not hinder the unobstructed view of patrolling law enforcement vehicles. (DSP#2009-0009)

### Archaeology

- F - 1. ~~There is low potential for significant archaeological resources to be disturbed by this project. No archaeological action is required. (DSP#2009-0009)~~ Additional research produced historical maps that indicate a house was present on or near this property during the Civil War. Later 19<sup>th</sup>-century maps show the structure occupied by Mrs. Territt in 1878 and Geo. White in 1894. However, given the proposed location of the modular classrooms adjacent to the current buildings, it is likely that previous grading and construction would have caused disturbance to any intact resources.

### *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

LOT 2010-0000 Charles Barrett 1115 Martha Costis Dr.  
DSP 2010-0009 James Polk 500 Polk Ave  
DSP 2010-0010 Patrick Henry 4643 Taney Ave



APPLICATION

DEVELOPMENT SITE PLAN

DSP # 2010-0003 Project Name: ACPS MODULAR BUILDING PROGRAM

PROPERTY LOCATION: CHARLES BARRETT, JAMES POLK & PATRICK HENRY  
2000 N. Beauvegard St

TAX MAP REFERENCE: 006.01-03-LOT 1 - RB & POS - CB ZONE: CDD#4

APPLICANT  
039.01-01-LOT 1 - R20/R12 - JP  
039.03-05-LOT 14 - R12 - PH

Name: ACPS - DAVE CONRATH

Address: 4701 SEMINARY RD ALEX. VA. 22304

PROPERTY OWNER

Name: CITY OF ALEXANDRIA

Address: \_\_\_\_\_

PROPOSED USE: EX. ELEMENTARY SCHOOLS - MODULAR BUILDING  
INFILLS

**THE UNDERSIGNED** hereby applies for Development Site Plan approval in accordance with the provisions of Section 11-400 of the Zoning Ordinance of the City of Alexandria, Virginia.

**THE UNDERSIGNED**, having obtained permission from the property owner, hereby grants permission to the City of Alexandria to post placard notice on the property for which this application is requested, pursuant to Article XI, Section 11-301 (B) of the 1992 Zoning Ordinance of the City of Alexandria, Virginia.

**THE UNDERSIGNED** also attests that all of the information herein provided and specifically including all surveys, drawings, etc., required of the applicant are true, correct and accurate to the best of his/her knowledge and belief.

ROBERT C. MERENESS

Print Name of Applicant or Agent  
CADCON CONSULTING INC

Mailing/Street Address  
10706 VANDOR LANE

City and State  
MANASSAS, VA. 20109

[Signature]  
Signature

703-392-5141 x117 703 392-0507  
Telephone # Fax #

robertmereness@cadconconsulting.com  
Email address

6/18/10  
Date

**DO NOT WRITE IN THIS SPACE - OFFICE USE ONLY**

Application Received: \_\_\_\_\_ Received Plans for Completeness: \_\_\_\_\_  
Fee Paid and Date: \_\_\_\_\_ Received Plans for Preliminary: \_\_\_\_\_

ACTION - PLANNING COMMISSION: \_\_\_\_\_

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7/1/10

LOT 2010-0003  
DSP 2010-0009  
DSP 2010-0010

Development Site Plan (DSP) # 2010-0023

**ALL APPLICANTS MUST COMPLETE THIS FORM.**

**The applicant is: (check one)**

the Owner     Contract Purchaser     Lessee or     Other: \_\_\_\_\_ of the subject property.

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 ten percent.

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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.

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/ 2012