



Docket Item #9
Development Site Plan #2009-0009
5000 Polk Avenue – James K. Polk Elementary School

Application	General Data	
Project Name: James K. Polk Elementary School	PC Hearing:	October 6, 2009
	If approved, DSP Expiration:	October 6, 2012 (36 months)
	Plan Acreage:	Site: 587,803 SF (13.49 acres)
Location: 5000 Polk Avenue	Zone:	R-12 and R-20
	Proposed Use:	School Gymnasium Addition
	Gross Floor Area:	Existing: 61,474 SF Proposed: 6,875 SF Total: 68,349 SF
Applicant: Alexandria City Public Schools	Small Area Plan:	Seminary Hill
	Historic District:	N/A
	Green Building:	Project will seek LEED Silver Certification but, at a minimum, will attain LEED Certification

Purpose of Application
 Development site plan to replace outdated mechanical and electrical systems with energy efficient systems, construct a gymnasium addition to meet Virginia State education standards and construct a surface parking lot.

Staff Recommendation: APPROVAL WITH CONDITIONS
Staff Reviewers: Patricia Escher, AICP, Patricia.Escher@alexandriava.gov
Jessica Ryan McVary, AICP, Jessica.Ryan@alexandriava.gov

PLANNING COMMISSION ACTION, OCTOBER 6, 2009:

I. SUMMARY

A. Recommendation

Staff recommends approval of a development site plan to allow the construction of a gymnasium addition, a mechanical room addition, a surface parking lot and the replacement of existing mechanical and electrical equipment at the existing James K. Polk Elementary School. The proposed gymnasium addition is necessary to ensure compliance with the Virginia State Education Standards while the replacement of mechanical and electrical systems ensures energy efficiency and consistency with the green building policy of the City and the Alexandria City Public Schools.

Discussion topics include:

- Consistency with approved Capital Improvement Programs;
- Building and site design;
- Green building and sustainable design; and
- Parking

B. Project Description

Alexandria City Public Schools requests approval of a development site plan to construct a 6,240 square-foot gymnasium addition, a 635 square-foot mechanical room addition, a 27-space surface parking lot and upgrade existing mechanical and electrical systems with solar photovoltaic panels and a closed loop geothermal well system.

II. BACKGROUND

A. Site Context

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 61,474 square-foot school, two playgrounds, a recreational field for baseball and soccer, a small wooden stage with amphitheater seating, 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.

Constructed in 1965, the Polk Elementary School was renovated in 1994 to provide a new library, office, computer lab, wired classrooms and a secure building entrance. Despite these renovations, Alexandria City Public Schools (ACPS) anticipated overcrowding at the school only a few years later. To alleviate the expected overcrowding, ACPS requested approval of a special use permit to install a temporary classroom trailer in 1999. City Council approved the request for the temporary classroom trailer, which was designed to accommodate two classrooms and a total of 36 students. The special use permit approval was valid for only one year and in 2000,

ACPS continued to experience overcrowding issues. As a result, ACPS requested approval to extend the special use permit as well as add an additional trailer, designed to accommodate three classrooms. City Council approved the request and the special use permit was valid for 5 years. ACPS planned a classroom addition during this 5-year period to alleviate overcrowding; however the addition was not constructed due to fiscal constraints. As such, in June 2005, ACPS requested approval for the continued use of the temporary trailers until August 2009.

In compliance with the special use permit, the trailers were removed from the site this summer. To accommodate the classrooms which occupied the trailers, ACPS converted two computer labs into classrooms, subdivided other rooms for special programs and relocated administrative staff. In September 2009, the school enrollment was 544 students between kindergarten and fifth grade and the school employed 25 licensed teachers and 4 paraprofessionals.

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 Evolution

The Alexandria City Public Schools (ACPS) approached Planning and Zoning staff in early 2009 to discuss improvements at Polk Elementary School. During initial conversations, ACPS presented a schematic site plan which proposed improvements to site circulation and parking as well as upgrades to mechanical and electrical systems and the construction of a gymnasium.

Due to budget constraints, ACPS narrowed the scope of the proposed project to include the most critical improvements: upgrades to mechanical and electrical systems, the construction of a gymnasium and a new surface parking lot to recover parking eliminated with the proposed addition.

In the conceptual submission, ACPS proposed the gymnasium addition on the eastern side of the school with a surface parking lot located between the addition and North Pickett Street. Upon reviewing the conceptual submission, staff recommended that ACPS explore alternate configurations for the surface parking lot and refine the building design to enhance the relationship between the existing school and the proposed addition.

III. PROJECT DESCRIPTION

Polk Elementary School currently uses an existing multi-purpose room for physical education activities, as well as assemblies, performances and public events. The existing multi-purpose room is approximately 2,900 square feet, 250 square feet less than the minimum gymnasium size recommended by the Virginia State Education Standards. In addition to the constraints imposed by the size of the multi-purpose room, the room is also used as many as 30 times per year for assemblies, performances and public events, such as elections, during which time it cannot be used for physical education.

The 6,240 square-foot gymnasium addition is proposed on the eastern end of the existing school in the location of the existing parking lot, which includes 27 parking spaces. The proposed gymnasium is connected to the existing school through an internal corridor and includes a basketball court, a relocated climbing wall, storage for physical education, two lavatories and an office. The gymnasium also includes a central cloth divider, which allows physical education and other events to occur simultaneously. To recover parking lost to the proposed gymnasium, ACPS proposes to construct a new 27-space surface parking lot on the eastern side of the gymnasium, which is described further in the staff analysis section of the report.

With this application, ACPS proposes to demolish an existing loading dock currently located on the eastern side of the school and construct a new loading dock between the existing school and the proposed gymnasium. The location of the new loading dock provides direct access to the cafeteria for food delivery and trash removal. To screen loading activities from Polk Avenue, the loading dock is inset from the main building façade and a screen wall is proposed between the gymnasium addition and the loading dock. Staff recommends that an ornamental fence be provided to further screen the loading dock and a recycling area from the public right-of-way.

ACPS also proposes to construct a 635 square-foot mechanical room addition. The mechanical room addition is proposed along the southern side of the building and is designed with exterior brick to match the existing school. The room is approximately 12 feet in height and is designed to accommodate a hot water storage tank and other mechanical system upgrades, including pumps for a geothermal energy system.

With the upgrades to the mechanical and electrical systems, ACPS proposes to incorporate sustainable technology, specifically a ground source geothermal energy system and solar photovoltaic panels. The geothermal energy system, which is contingent upon future Capital Improvement Program funding, requires between 40 and 50 wells to be drilled at a depth of 500 feet. ACPS proposes to drill the wells in a recreation field south of the school and connect the system infrastructure, through underground pipes, to the proposed mechanical room.

ACPS also proposes to install south-facing solar photovoltaic panels on the roof of the existing school, between the main school entrance and the proposed gymnasium. As proposed, the photovoltaic panels are attached to the existing roof with galvanized metal supports and are largely screened from Polk Avenue by the existing roof line of the multi-purpose room. The photovoltaic panels are designed to convert solar energy into electricity and contribute to on-site renewable energy credits for the Leadership in Energy and Environmental Design.

IV. ZONING

Table 1: Zoning Table

Property Address:	5000 Polk Avenue	
Total Site Area:	13.49 Acres (587,803 Square Feet)	
Zone:	R-12 and R-20	
Current Use:	Elementary School and Parking Area	
Proposed Use:	Elementary School and Gymnasium Addition	
	Permitted/Required	Proposed
FAR	.30	.1
Setbacks		
Front	35 Feet	125.94 Feet
Side	1:1 or 25 Feet	194.27 Feet
Rear	N/A	N/A
Parking	23 Spaces	38 Spaces
Loading spaces:	0 Spaces	1 Space

V. STAFF ANALYSIS

A. Capital Improvement Program

Recognizing the building improvements needed at James K. Polk Elementary School, the Alexandria City Public Schools requested funds, beginning in the 2003 Capital Improvement Program (CIP) to fund necessary improvements at the school including upgrades to electrical, plumbing and HVAC systems. The 2003 CIP allocated funding, beginning in fiscal year 2005 for these systems. In the 2006 CIP, the School Board and the City Council approved funding, beginning in fiscal year 2008, for the ongoing system improvements as well as the gymnasium addition and the associated surface parking lot.

During the 2009 CIP process, the School Board requested nearly \$92 million for capital improvements for allocation between fiscal years 2009- 2014. The City Council awarded \$65 million of the School's request, but due to fiscal constraints did not fund the additional \$27 million requested. As a result, the scope of proposed improvements at Polk Elementary was modified to complete the most essential improvements; mainly the HVAC system upgrades, the gymnasium addition and the surface parking lot. Although additional improvements are anticipated, such as the ground source geothermal energy system, the installation of an elevator and upgrades to fire alarms, sprinklers and a playground, these improvements were not funded during the FY 2010 CIP and are contingent upon future funding.

Despite the fiscal constraints, the most essential improvements are the purpose of this application and are consistent with the improvements identified and approved in the last several Capital Improvement Programs.

B. Building Design

Designed to complement the existing school, the proposed gymnasium is precast concrete and incorporates a heavy sandblast precast base to relate to the horizontal nature of the existing school as well as create a defined building base. A brick planter, which matches the brick of the existing school, overlaps the rusticated base of the addition to create a defined relationship between the proposed gymnasium and the existing school. Although the proposed gymnasium, which is approximately 28 feet in height, relates in height, mass and scale to the existing school, the lower end of the gymnasium's sloping roof aligns with the top of the existing parapet, to further reduce the height and scale of the gymnasium, as perceived from Polk Avenue.

Consistent with the ACPS policy of "greenovation," a vegetated roof which consists of pre-planted modular trays is proposed on the gymnasium to reduce stormwater runoff. In addition to reducing stormwater runoff, the vegetated roof also serves as a learning experience for students of the school. To facilitate learning, particularly in understanding stormwater runoff, the gutters and downspouts of the vegetated roof are highlighted as a prominent design feature on the front façade of the gymnasium. The design team proposes to omit the front of the gutter to ensure that stormwater is visible as it leaves the roof and enters the brick planter at the base of the gymnasium. ACPS is also proposing tubular skylights on the roof of the gymnasium to ensure sufficient daylight is provided.

C. Geothermal Energy

In an effort to incorporate sustainable design strategies and reduce long-term heating and cooling costs of the Polk Elementary School, ACPS proposes a ground source geothermal energy system – similar to the system recently completed at Minnie Howard School - to replace the existing outdated heating and cooling system. The geothermal energy system, which is contingent upon future Capital Improvement Program funding, requires between 40 and 50 borings to be drilled at a depth of approximately 500 feet to utilize consistent temperatures within the earth for heating and cooling. Upon allocation of funding, ACPS proposes to drill the necessary borings south of the school, in an area occupied by a recreation field. The area in which the borings are proposed is currently 400 feet in length and 100 feet in width; however this area is likely to decrease during final engineering and design.

The recreation field at Polk Elementary School, technically a diamond field, is used by the Department of Recreation, Parks and Cultural Activities (RP&CA) for t-ball, coach pitch baseball and girls softball. The field is also used by ACPS for physical education classes and during the autumn, the outfield is used by the Alexandria Soccer Association as a rectangular soccer field. Due to the frequent use of these fields, the proposed geothermal energy system requires coordination with the Department of RP&CA to relocate each of the programmed

activities to another field, if the geothermal wells are located in the recreation field upon final engineering and design.

While RP&CA agrees to postpone the use of the fields during construction of the geothermal wells, staff requests that if more than 20 percent of the field is impacted by the geothermal wells, that the field be restored and graded to industry standards upon completion of the wells. Staff further requests that the ground wells not preclude the installation of future irrigation, as recommended in the 2006 Athletic Fields Master Plan. Although many improvements are recommended for the Polk Elementary fields in the Master Plan, staff is requesting that ACPS only complete the grading improvements with the completion of the geothermal energy system.

Due to the proximity of the recreation field to adjoining residential properties, ACPS anticipates that the noise generated during construction of the geothermal energy system is likely to affect adjacent neighbors. ACPS agrees to comply with the City Noise Ordinance and plans to actively communicate with the adjacent neighbors during construction through informational fliers and through the creation of a website which will provide up-to-date information on the progress of construction.

D. Green Building and Sustainable Design

Consistent with the City's Green Building Policy and the Alexandria City Public School Policy of "greenovation," the design team plans to seek certification under the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program. While the City's Green Building Policy establishes a standard of LEED Silver Certification for non-residential projects, it recognizes that some projects, such as renovations and additions, require flexibility due to inherent challenges which inhibit the ability to achieve Silver Certification. In this case, ACPS agrees to strive to achieve LEED Silver Certification and is committed to achieving a minimum of LEED Certification.

Since the schematic design phase of the gymnasium, ACPS has incorporated many techniques to ensure optimum energy efficiency, including day lighting, the use of natural ventilation and the installation of photovoltaic panels. For example, the windows proposed on the south elevation of the proposed gymnasium maximize the available light and are operable to enable natural ventilation. To reduce glare and ensure adequate thermal comfort, sun screens are proposed along the south and southwest facing windows. When natural light levels are adequate, light levels in the gymnasium are designed to automatically dim to ensure energy efficiency.

In addition, ACPS proposes many other techniques to ensure energy efficiency, use of recycled building materials and optimum indoor environmental quality including but not limited to:

- Separate areas for recycling containers and outdoor maintenance equipment;
- Low-flow plumbing fixtures;
- Use of building materials with recycled content; and
- Use of low-VOC (Volatile Organic Compound) adhesives, carpets, paints and other building materials.

Despite the sustainable design and building techniques proposed, ACPS is not certain that LEED Silver Certification, as required by the City's Green Building Policy, can be achieved with the proposed project. Based on an initial assessment of anticipated credits, ACPS believes that the project is on the threshold of LEED Silver Certification, and agrees to strive for this level of certification. However, as the anticipated credits margin on the threshold of Silver Certification, ACPS requests flexibility in compliance with the City's Green Building Policy and asks that LEED Certification be accepted in this case.

Due to the limited scope of the proposed improvements – which are additions to an existing building, ACPS is unable to acquire many of the site specific and building system credits – particularly related to water efficiency - necessary to achieve Silver Certification. For this reason, staff supports applying flexibility in this case. Staff continues to encourage ACPS to achieve Silver Certification, but recommends that a minimum of LEED Certification be attained.

E. Parking

Section 8-200(A) of the Zoning Ordinance requires 23 parking spaces to serve the elementary school, 1 parking space for every 25 classroom seats. While there are currently 38 parking spaces on-site, the new gymnasium is proposed in the location of the existing parking lot, which includes 27 parking spaces. The 11 remaining parking spaces are located at the westernmost entrance to the school, just off of Polk Avenue. As the proposed addition serves the existing school population and does not add classroom seats, ACPS is required to provide 23 total parking spaces, but has agreed to replace the parking spaces absorbed by the gymnasium addition.

To recover parking lost to the proposed gymnasium addition and ensure compliance with the Zoning Ordinance, ACPS proposes to construct a new 27-space surface parking lot on the eastern side of the gymnasium. The proposed parking lot is accessible from the eastern vehicular entrance and includes 15 standard parking spaces, 10 compact parking spaces and 2 handicap spaces. The 11 spaces at the western vehicular entrance remain unchanged. The proposed parking lot is designed to serve faculty and staff at the School.

F. Stormwater

The Alexandria City Public Schools originally requested a waiver of stormwater management detention requirements due to the negligible increase in impervious site area. However, due to the concern with stormwater management articulated at a public meeting held on September 16, 2009, ACPS decided to withdraw the waiver request and achieve the stormwater management detention and pollutant removal requirements through a vegetated roof on the gymnasium addition, a structural best management practice and a stormwater detention facility. Through these facilities, ACPS has satisfied all stormwater requirements.

G. Construction Phasing

Alexandria City Public Schools (ACPS) plans to commence construction on the proposed site improvements next spring (2010). Initial work proposed includes mobilization, installation of barriers and other site preparation. ACPS anticipates that full construction activity will commence with the onset of summer recess and expects the proposed surface parking lot and the foundation of the gymnasium to be complete by the end of summer recess. While the anticipated duration of construction is 12 months, some of the proposed site improvements, such as the geothermal energy system, may be completed in future phases due to fiscal constraints.

VI. COMMUNITY

Alexandria City Public Schools held a public meeting on the evening of Wednesday, September 16th to discuss the proposed site improvements with parents, neighbors and interested parties. The Brookville-Seminary Valley Civic Association, the Seminary Hill Association and the Alexandria Parent Teacher Association were invited to attend the meeting. Overall, participants voiced support for the proposed site improvements but a few neighboring residents expressed concern with stormwater runoff from the site and inquired about the noise likely to result from the drilling of the geothermal wells. ACPS has addressed the public concerns about these two issues through the methods noted in the body of the staff report.

VII. CONCLUSION

Staff recommends **approval** of the development special use permit with site plan 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;
 Jessica Ryan McVary, AICP, Urban Planner.

VIII. ATTACHMENTS

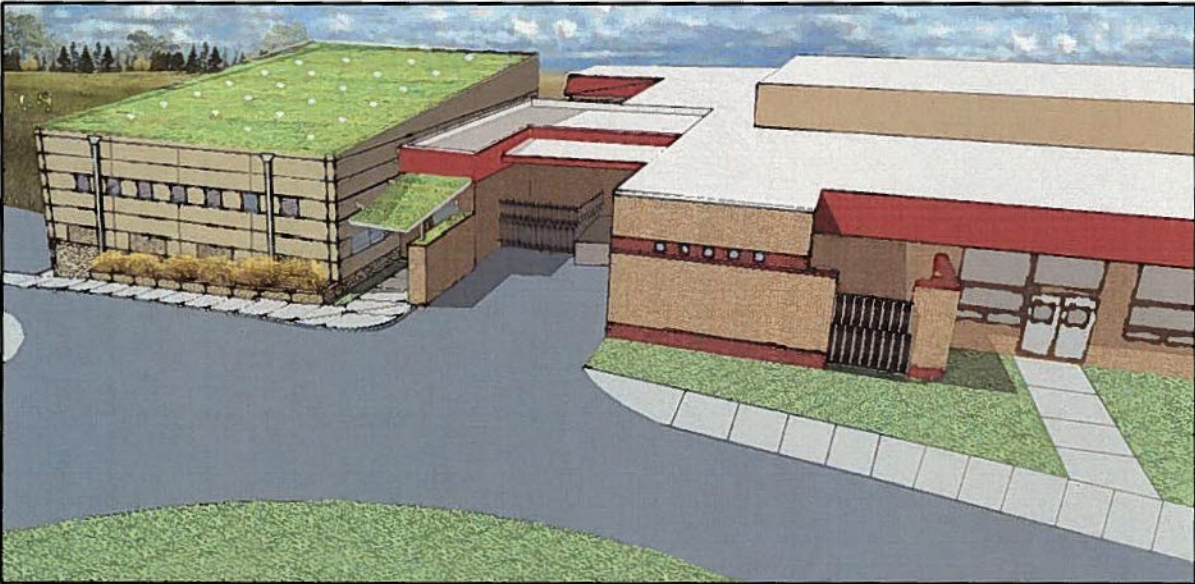


Figure 1: View of Proposed Gymnasium from the North



Figure 2: View of the Proposed Gymnasium and Parking Lot from the Northeast

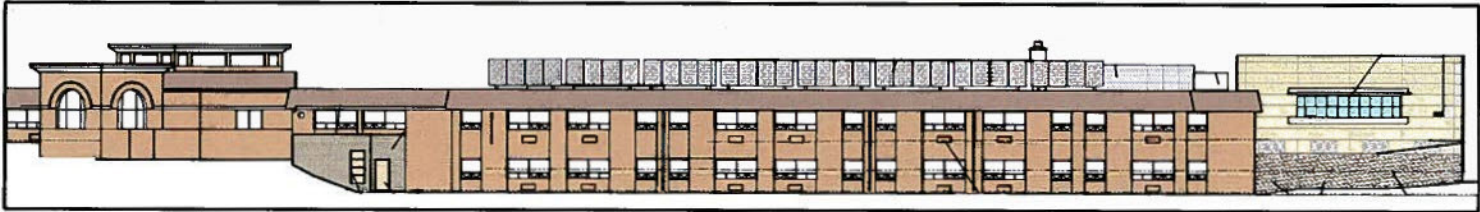


Figure 3: Partial South Elevation - Proposed Gymnasium, Mechanical Room and Solar Panels



Figure 4: Proposed Location of Geothermal Wells

IX. STAFF RECOMMENDATIONS:

1. Provide all improvements depicted on the preliminary plan dated 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)

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. (P&Z)(RP&CA)
4. Provide the following modifications to the landscape plan and supporting drawings:
 - a. Update crown coverage calculation to reflect disturbed areas including the geothermal well field.
 - b. Provide City standard landscape notes.
 - c. Depict the property line on the landscape plan.
 - d. Provide planted parking screen per City of Alexandria Landscape Guidelines.
 - e. Provide tree protection and protection details per City of Alexandria Landscape Guidelines.
 - f. 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)
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 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.
 - b. Hose bibs, ground set water connections and FDCs must be fully accessible and not blocked by plantings, site utilities or other obstructions.
 - c. Locate water sources and hose bibs in coordination with City Staff. (Code Administration) (RP&CA)
7. 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)
8. Provide temporary fencing around geothermal construction area to allow maximum open space and field use during the course of construction. (RP&CA)
9. 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)

10. Pipes and infrastructure related to the geothermal wells shall be buried 24" below grade. (RP&CA)
11. Provide sections illustrating below-grade geothermal infrastructure. (RP&CA)
12. Provide RPCA with an as-built plan of equipment, infrastructure, location and depth of installed geothermal wells. (RP&CA)
13. Soil unearthed during the geothermal boring process shall not be returned as topsoil to the field. (RP&CA)
14. 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)
15. 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)

C. TREE PROTECTION AND PRESERVATION:

16. Work with RPCA staff to develop a tree protection plan. (RP&CA)
17. A fine shall be paid by the applicant in an amount not to exceed \$10,000 for each tree that is destroyed 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)
18. 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)

D. BUILDING:

19. 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)
20. The applicant shall construct an on-site mock-up panel prior to vertical construction and approval of the wall check survey.

- 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)
21. 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 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)
 22. 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)
 23. 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)
 24. 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)

E. SIGNAGE:

25. 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)

F. PARKING:

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

G. SITE PLAN:

27. 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)
28. 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)
29. 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)

H. CONSTRUCTION

30. 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)
31. 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)

32. 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) days, a "stop work order" will be issued, with construction halted until the violation has been corrected. * (P&Z)(T&ES)
33. 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)
34. 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)
35. 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)
36. 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)
37. 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)

38. 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)
39. 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)
40. 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)
41. 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)

I. STORMWATER

42. 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)

J. SOLID WASTE

43. Prior to Final Site Plan release, 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)

K. STREETS / TRAFFIC

44. 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)
45. A pre-construction walk/survey of the site shall occur with City Construction and Inspection (C&I) staff to document existing conditions prior to any land disturbing activities. (T&ES)
46. Submit a Traffic Control Plan as part of the final site plan, for construction detailing proposed 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)
47. 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)
48. All 90 degree parking spaces adjacent to a sidewalk that is less than seven feet must have wheel stops. (T&ES)

L. UTILITIES

49. Locate all private utilities outside of the public right-of-way and public utility easements. (T&ES)
50. Underground utilities serving the new construction to the satisfaction of the Director of T&ES. (T&ES)

M. WATERSHED, WETLANDS, & RPAs

51. 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)
52. 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)

N. BMP FACILITIES

53. 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)
54. 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)
55. 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)
56. The hydrodynamic device shall be added to the City / Alexandria City Public Schools (ACPS) BMP Memorandum of Understanding (MOU) for maintenance by ACPS prior to submission of Final Site Plan #2. (T&ES)
57. 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)
58. Prior to release of the certificate of occupancy, 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)

O. NOISE

59. All exterior loudspeakers shall be prohibited and no amplified sound shall be audible at the property line. (T&ES)

P. AIR POLLUTION

60. Contractors shall not cause or permit vehicles to idle for more than 10 minutes when parked. (T&ES)

CITY DEPARTMENT CODE COMMENTS

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

Planning and Zoning

- F - 1. 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.
- F - 2. 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.
- F - 3. 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.
- F - 4. Dimension the width of the sidewalk located adjacent to the planter on the north side of the proposed gymnasium.
- F - 5. 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
- F - 6. Identify the square footage that will be disturbed with the installation of the geo-thermal wells.
- F - 7. 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.

F - 8. Depict travel directions in the proposed parking lot on all applicable sheets.

F - 9. 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.

F - 10. Correct all match line detail references on sheet A201.

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. (T&ES)
- F - 2. Worksheet B is calculated incorrectly. Correct as necessary. (T&ES)
- F - 3. City Standard Notes (Project Description Block, etc.) shall be included. (T&ES)
- F - 4. Sheet C-1 states that Erosion and Sediment Control is not required. Remove this statement, as Erosion and Sediment control is required. (T&ES)
- 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. (T&ES)
- 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. (T&ES)

- F - 7. Include all symbols, abbreviations, and line types in the legend. (T&ES)
- F - 8. 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 and ASTM 1785-76 Schedule 40 pipes will be acceptable. The acceptable minimum and maximum velocities will be 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). (T&ES) [Include this condition on all plans.]
- F - 9. 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, 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. (T&ES) [Include this condition on all plans.]
- F - 10. 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.
- F - 11. Maintenance of Vertical Separation for Crossing Water Main Over and Under a Sewer: When a water main over crosses or under crosses a sewer then the vertical separation

between the bottom of one (i.e., sewer or water main) to the top of the other (water main or sewer) shall be at least 18"; however, if this cannot be achieved then both the water main and the 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 - 12. No pipe shall pass through or come in contact with any part of 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.
- F - 13. 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.
- F - 14. Show the drainage divide areas on the grading plan or on a sheet showing reasonable information on topography along with the structures where each sub-area drains.
- F - 15. Provide proposed elevations (contours and spot shots) in sufficient details on grading plan to clearly show the drainage patterns. (T&ES)
- F - 16. All the existing and proposed public and private utilities and easements shall be shown on the plan and a descriptive narration of various utilities shall be provided. (T&ES)
- F - 17. 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)
- 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 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 - 4 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 - 5 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 or contact the City's Solid Waste Division at 703-519-3486 ext.132. (T&ES)
- C - 6 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. (T&ES)
- C - 7 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 - 8 The sewer tap fee must be paid prior to release of the site plan.*

- C - 9 All easements and/or dedications must be recorded prior to release of the site plan.*
- C - 10 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 - 11 Provide a phased erosion and sediment control plan consistent with grading and construction plan.
- C - 12 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 - 13 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 - 14 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 - 15 All driveway entrances, curbing, etc. in the public ROW or abutting public ROW shall meet City design standards. (T&ES)
- C - 16 All sanitary laterals and/or sewers not shown in the easements shall be owned and maintained privately. (T&ES)
- C - 17 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 - 18 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. (T&ES)
- C - 19 The applicant must comply with the City of Alexandria, Erosion and Sediment Control Code, Section 5, Chapter 4. (T&ES)
- C - 20 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.* (T&ES)

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.
- C - 1 Applicant must provide fire lane signage along the existing access drive aisle for emergency vehicles.
 - 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 - 2 The developer shall provide a building code analysis with the following building code data on the plan: a) use group; b) number of stories; c) type of construction; d) floor area per floor; e) fire protection plan. Code requirement met, provided on sheet A-001
- C - 3 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.
- C - 4 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.
- C - 5 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.

- C - 6 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.
- C - 7 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.
- C - 8 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.
- C - 9 A fire prevention code permit is required for the proposed operation. Noted by applicant.
- C - 10 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.
- C - 11 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.
- C - 12 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.
- C - 13 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.
- C - 14 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.

- C - 15 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.
- C - 16 A demolition permit is required for the proposed project (USBC 108.1). Noted by applicant.
- C - 17 Roof drainage systems must be installed so as neither to impact upon, nor cause erosion/damage to adjacent property. Noted by applicant.
- C - 18 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.
- C - 19 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.

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.

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



APPLICATION

DEVELOPMENT SITE PLAN

DSP # 2009-0009

Project Name: POLK ELEMENTARY

PROPERTY LOCATION: 5000 POLK AVE.

TAX MAP REFERENCE: 039.01-01 ZONE: R-12 / R-20

APPLICANT

Name: Alexandria City Public Schools - David Conrath
Address: 2000 N. Beauregard St. Alexandria VA

PROPERTY OWNER

Name: Alexandria City Public Schools - David Conrath
Address: 2000 N. Beauregard St. Alexandria VA

PROPOSED USE: School Addition

[] **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.

Christina Protopappas

Print Name of Applicant or Agent

9813 Godwin Drive

Mailing/Street Address

Manassas VA 20110

City and State

Zip Code

[Signature]

Signature

703-548-2188

Telephone #

703-683-5781

Fax #

Cprotopappas@bousmancg.com

Email address

9-3-09

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: _____

ALL APPLICANTS MUST COMPLETE THIS FORM.

The applicant is: (check one)

the Owner Contract Purchaser Lessee or Other: Agent 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.

City of Alexandria

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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