

**PUBLIC FACILITIES REVIEW COMMITTEE MEETING**

**DATE:** January 23, 2013  
**TIME:** 7:00 p.m. Meeting  
**PLACE:** Williamsburg Middle School Library  
3600 N. Harrison Street

**STAFF COORDINATOR:** Freida Wray, 703-228-3541

**Site Location:** New Elementary  
School #1 (Williamsburg Campus)  
3600 N. Harrison Street  
(RPC# 02-005-001)

**Information:**

**Applicant:**  
John Chadwick  
Arlington Public Schools  
2770 S. Taylor Street  
Arlington, Virginia 22206

**Architect:**  
Wyck Knox  
VMDO Architects  
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Charlottesville, Virginia 22902

**Staff Members:**

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**SUMMARY:** Arlington Public Schools (APS) is proceeding through the Building Level Planning Committee (BLPC) and the Public Facilities Review Committee (PFRC) processes for a new elementary school on the Williamsburg Middle School campus. The BLPC has voted to endorse a concept design, which resolved major issues such as building placement, general parking numbers, and site circulation.

**BACKGROUND:** The 2013-22 Capital Improvements Program (CIP) was approved by the County Board in July, 2012. The CIP included funding for 1,875 new elementary school students as a result of increasing enrollment within the school system. The plan includes funding for construction of additions at three (3) existing elementary schools, and the construction of two (2) entirely new elementary schools on APS property. The APS’ “Multi-Site Study” was completed in Spring 2012 and identified the locations and priorities for the construction projects. The two (2) projects chosen for the FY2013 prioritization included an addition to Ashlawn Elementary School for approximately 300 students, and a new elementary school at the Williamsburg Middle School campus to hold approximately 600 students.

At a joint work session with the School Board held on July 24, 2012, the County Board endorsed a planning process for the two school projects that incorporates the APS process (BLPC) and the County’s process for public facilities (PFRC), and requires them to work in tandem in designing the schools. The process would include three (3) phases: a conceptual phase, a schematic phase, and a final phase during which use permits for the projects would be requested and reviewed by the County Board.

The BLPC consists of schools staff, teachers, parents and PTA members, representation from community groups, and County staff. The PFRC consists of representatives of several commissions, including the Planning Commission, and the schools, as well as at-large members. It also includes project-specific members representing the Rock Spring, Yorktown, Williamsburg, and Franklin Area (Fairfax County) Civic Associations. APS has chosen VMDO Architects, a firm from Charlottesville, Virginia specializing in school design, to design the new school at Williamsburg and run the BLPC process. In addition, APS has contracted with Toole Design Group (“Toole”), a national planning and design firm with expertise in the “Safe Routes to School” movement, to provide transportation planning and engineering services for the project. Toole was recommended by Department of Environmental Services, Transportation Planning staff due to their expertise with multi-modal transportation options for schools.

**The following provides additional information about the site and surroundings:**

Site: The site is bound on the north and east by N. Harrison Street and on the south by 36<sup>th</sup> Street N. The site borders Fairfax County in the northwest.

Zoning: The site is zoned “S-3A” Special Districts. Schools are a permitted use by provision of a use permit subject to ACZO Section 36.

Land Use: The site is identified on the General Land Use Plan (GLUP) as “Public”

Neighborhood: The site is located within the Rock Spring Civic Association. Representatives from the civic association are involved in the BLPC and PFRC processes. In addition, representatives from the Yorktown and Williamsburg civic associations are represented on the BLPC and PFRC. A representative from the Franklin Area Citizens Association in Fairfax County is represented in the PFRC.



**DISCUSSION:** The BLPC has held seven (9) meetings in which conceptual site vignettes were presented and discussed. Vignettes depicted concepts for building placement and circulation and have been refined based on BLPC and PFRC discussion, and will be further discussed at the upcoming PFRC meeting. To date there have been four (5) meetings of the PFRC. Several issues have been identified, including traffic, circulation, parking, visual impacts from new facilities, provision of adequate open space and recreation facilities, and creation of community facilities at the school campus. Summaries of the meetings are located on the PFRC website.

The approximately 1.1 million square foot site is configured with the existing one-story middle school at the northeast corner of the site with ballfields to the west and an open, grassy area to the south at the corner of N. Harrison Street and 36<sup>th</sup> Street North. There is a steep grade change from the subject intersection to the school. The new elementary school will be designed for a capacity of 600 students and approximately 90,000 square feet total, including a 3,500 square foot cafeteria, a 5,100 square foot gymnasium, and a 2,800 square foot media center.

Arlington Public Schools is also considering adding to and expanding the existing Williamsburg Middle School by 300 students of design capacity, bringing the total campus student population at full build-out to 1,900 students. While the addition/expansion of the middle school is not part of the current CIP, it is anticipated that it will be considered for the next CIP. As a result, planning processes for the new elementary school are taking into account a future expansion of the middle school and its impacts on traffic, circulation, and site design.

Principles of Civic Design: The PFRC developed a document in December 2008 entitled *Principles of Civic Design in Arlington* which provides guidelines on building siting, form, and

design. The following are a list of principles, taken directly from the document, which may be applicable to the conceptual phase of the planning process:

### **Civic Values**

- Respect neighborhood context and important historic structures.
- Take advantage of prominent sites and major civic programs to create bold architecture.
- Emphasize leadership in energy conservation and environmental sustainability through architectural design, materials, and construction methods.
- Utilize universal design to ensure open and welcoming accessibility for all citizens.
- Explore adaptive reuse of significant existing structures and building elements and consider possible future reuse of new buildings.
- Optimize open space for public relaxation and recreation, and minimize building footprint and areas used for parking, on-site roads, and service drives.
- Support joint development and use of school and county facilities when in the best interest of both entities.

### **Siting and Orientation**

- Orient the primary building entrance to the appropriate adjacent street or public space so movement and entrance to buildings are natural and intuitive.
- Emphasize pedestrians, bicycles, and mass transit over automobiles in building placement, entry, and architecture.
- Ensure building and site are functionally and spatially coherent, facilitating the flow of people to, from, and within the site.
- Create “positive” outdoor spaces with a pedestrian emphasis.

Building Height and Placement: The Zoning Ordinance Section 1 defines building height in all zoning districts, with the exception of “R” districts, as being measured from average site elevation. Average site elevation pertains to the average of a series of spot elevation measurements taken at intervals along the periphery of the site. In the “S-3A” district, in which the Williamsburg campus is located, building height is a maximum of 45 feet. The average site elevation of the Williamsburg campus is 322.5 feet.

Setback standards for buildings in the “S-3A” district are as generally defined in the Zoning Ordinance Section 32, Bulk, Coverage, and Placement Requirements. The standards require that all buildings within the district be sited no closer to the road centerline than half of the height of the building. In this case, given the “S-3A” district height limit is 45 feet, required minimum setbacks are 22.5 feet from the road centerline. These requirements are not flexible and cannot be modified by the County Board through the Use Permit process.

Parking: During the review of the two projects it was identified that the current zoning standards for parking may present unique challenges for site design and result in excessive parking. The County Manager directed staff to study the current parking standards in the context of current

County goals, policy, and practices, and recommend changes to the Zoning Ordinance if warranted. Staff is proposing an amendment to the Zoning Ordinance to update parking standards for elementary and middle schools which will more closely align standards with current daily demand for parking at school facilities, incorporate transportation demand management strategies, and permit flexibility for the County Board to modify standards to allow creative parking solutions on a site by site basis. The Request to Advertise (RTA) will be heard by the County Board on January 26, 2013, with expected action by the Planning Commission and the County Board in February 23, 2013. The following presents a summary of staff recommendations with respect to parking regulations for elementary and middle schools (note: these standards/regulations are subject to change prior to County Board adoption):

- Employee parking: one space/7.5 students of design capacity
- Visitor parking: one space/40 students of design capacity
- Flexibility: All new school projects are required to prepare and submit a Transportation Management Plan (TMP) with their Use Permit submission. The County Board may approve modifications to the above standards to reduce the required ratios or locate required spaces off site should the County Board find that certain factors such as preservation of recreation facilities and minimization of impervious surfaces are met.

Toole Design Group, as part of their overall transportation study, developed recommendations for parking specific to the Williamsburg campus. The study examined parking demand for school employees by examining current student:staff ratios at Williamsburg Middle School, as well as comparable elementary schools (Jamestown, Nottingham, Tuckahoe, and Ashlawn). Toole then projected the number of spaces needed to accommodate staff for the new elementary school and the expansion of the middle school using the current ratios described above. The study also examined visitor parking demand using data collected from two observations of visitor parking. Toole then increased the number of peak visitors by a margin of 50% to accommodate for a “rainy day” scenario where more visitors may drive than usual. Total parking demand at the campus at full build-out was estimated to be 318 parking spaces.

Toole then worked on a range of scenarios for campus parking, involving locating some spaces off site, and reducing demand through Transportation Demand Management (TDM). The recommended number for total campus parking for Williamsburg is 274 parking spaces. This includes an accounting for current mode split (92% vehicle arrival at Williamsburg Middle School and comparable elementary schools), and a further reduction in demand by 10% assuming TDM measures are implemented. Finally, the recommendation would provide for 57 of the total spaces to be located on street along the campus’ frontage on N. Harrison Street and 36<sup>th</sup> Street N.

The recommendation by Toole would require a modification to parking standards by the County Board should the staff recommended zoning ordinance amendment be adopted. The modification would include both reducing the required ratio of parking spaces provided, and locating some spaces off site. The following chart shows a comparison of the Toole recommendation with the proposed new zoning standards:

<b>Parking</b>	<b>ES Only</b>	<b>Build-out</b>
<b>Current standard</b>	258	686
<b>Proposed standard</b>	95	302
<b>Toole Analysis (demand)</b>	117	318
<b>Toole Analysis (recommendation)</b>	103	274

Transportation: Staff has identified a number of goals with respect to circulation and transportation that should be discussed during the public process for incorporation into the building and site design:

- Emphasis on multi-modal transportation opportunities
- Incorporate building access and circulation into building siting
- Minimize parking/drop-off adjacent to street and sidewalk areas
- Coordinate opening/closing times to manage traffic
- Examine existing/proposed transportation impacts to surrounding communities and incorporate into design
- Implement County standard for sidewalks, streetscape, and driveways

Toole Design Group Transportation Study: On November 28, 2012 Toole Design Group presented the final draft of the Williamsburg Campus School Transportation Plan. The Plan includes an analysis of current conditions at the middle school, as well as an analysis of the transportation impacts associated with the addition of a 600 student elementary school and a 300 student addition/expansion of the middle school. The study takes into account staggered bell times for the elementary and middle schools and the parent drop-off located at the southwestern portion of the site. Toole studied three separate time periods: elementary school arrival, middle school arrival, and middle school dismissal. The study provides recommendations for infrastructure improvements, transportation demand management strategies, parking, and site circulation. A copy of the full Plan is available on the BLPC web site.

The Transportation study made the following key findings:

- Peak traffic impacts only occur during a 15-20 minute period during the arrival and departure times for each school, not during the entire hour studied.
- The arrival period associated with the expanded WMS has the most impact on the adjacent roadway network compared to the other periods studied. This period was then used to analyze possible improvements to the transportation network.
- The existing transportation system can generally support the expansion of the middle school and in turn support the lighter load caused by the smaller elementary school on the campus.
- Striping and signal improvements are recommended at intersection of Williamsburg Blvd. and N. Harrison Street.
- A left-turn restriction from northbound Harrison Street to westbound 36<sup>th</sup> Street is recommended during the morning arrival period for the schools.

- Pedestrian improvements are recommended at Williamsburg Blvd. and N. Kensington St. with the addition of a HAWK style pedestrian signal or possible full intersection signalization.

Additionally, staff recommends that APS prepare a detailed multi-modal Transportation Demand Management (TDM) program to address student, parents, staff, and visitor transportation to the campus.

Facilities and Recreation: Staff has identified a number of goals for the site with respect to the existing play fields that are important in considering placement of a new school building at the Williamsburg campus. There are three soccer fields at the western portion of the site that serve the existing middle school, two of which are irrigated. There is also a baseball field at the far northwestern corner of the site. In addition, there is a heavily used “practice field” located at the southeastern portion of the site overlooking the hill running down to 36<sup>th</sup> Street. The following are County goals with respect to the preservation of recreation fields at the Williamsburg campus:

- Preserve at least two soccer fields and one combination soccer/baseball field
- Two fields should consist of irrigated Bermuda Grass; examine the possibility of using synthetic turf
- Rectangular fields should be placed side-by-side so as to prevent constructing additional fencing

Building Placement Vignettes: Over the past several months, many possible locations for a new elementary school building on the site have been discussed at BLPC and PFRC. The architects began the discussions with the working groups by dividing the site into quadrants (northwest, southwest, and southeast) and analyzing the impacts of a building in each quadrant. Concepts were then refined to represent three general locations for the proposed elementary school building: Concept 1, located the building at the southeast corner of the site and utilized the hill; Concept 2, located the building partially parallel to the western portion of the existing middle school building; and Concept 4, located the building at the northwest quadrant of the site where the existing baseball field is located. Refinements to these three general concepts have been presented as variations (example: 1.1, 1.2, 1.3 ...) as a result of discussions with the BLPC and PFRC.

At its December 19, 2012 meeting, the PFRC voted to eliminate Concept 4 from consideration. The PFRC also requested that the architects develop a concept that combines elements from Concepts 1 and 2. On January 9, 2013 the BLPC was presented with the following concept:

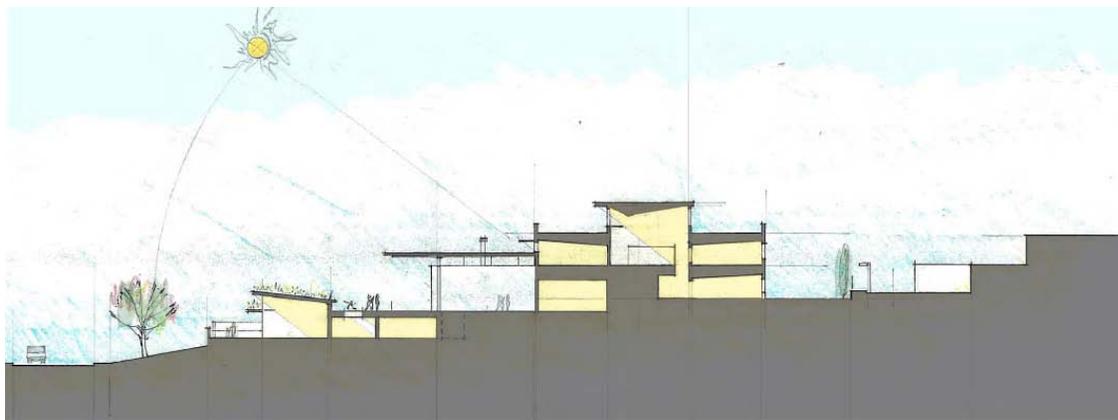


The plan, termed Concept 1.5, was intended to capture PFRC and BLPC input and represent a combination of past Concepts 1 and 2. At their January 17, 2013 meeting, the BLPC voted to recommend acceptance of Concept 1.5 to the School Board (10 votes in favor, 2 abstentions). In general, Concept 1.5 illustrates locating the building on the southeastern quadrant of the site, with the building utilizing the hill to maximize building height. The concept also provides for the general circulation pattern of a shared middle and elementary school bus drop off on the eastern portion of the site, and parent drop off for the elementary school at the southwestern portion of the site.



### Opportunities and Desirables:

- Building is placed on the most under-programmed portion of site, thus maximizing the preservation of existing recreation fields to the greatest extent possible
- Building is placed in the most prominent location for facilitating non-motorized forms of transportation to the site
- Provides opportunities for a spatially compact building by utilizing the site's topography
- Preserves residential scale by providing setbacks from 36<sup>th</sup> Street N., preserving an undeveloped feature at the corner of N. Harrison Street and 36<sup>th</sup> Street N., and tapering building heights to one story across from residences along 36<sup>th</sup> Street N.
- Circulation pattern serves to spread traffic
- Impervious surfaces are reduced through sharing of bus drop off between schools



Outstanding Issues:

- Building orientation/access
- Massing
- Building footprint
- Location/treatment of service access
- Configuration of play space/separation between buildings
- Landscaping treatment
- Transportation Demand Management program
- Drop-off procedures
- County use of facilities
- Utility undergrounding
- Stormwater management