

PUBLIC FACILITIES REVIEW COMMITTEE MEETING

DATE: May 1, 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
200 East Market Street
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Staff Members:

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|------------------|----------------------|--------------|--|
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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 School Board has endorsed a concept design, which resolved major issues such as building placement, general parking numbers, and site circulation. The BLPC and PFRC are discussing schematic design of the facility, which will include building and site design, and architecture, and contain engineered drawings. The schematic design will be acted upon by the School Board on May 2, 2013. It is anticipated that an application for use permit will be submitted in July, 2013 for September, 2013 public hearings.

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) 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 36th Street N. The site borders Fairfax County in the northwest.

Zoning: The site is zoned [“S-3A” Special Districts](#). Schools are a permitted use provided a conditional use permit is obtained 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 School Board has approved a concept for the new elementary school at the Williamsburg Middle School campus. Concept 1.5 established the general location of the building on the site, the general orientation, placement and height of the building, general circulation pattern, and layout of athletic fields. 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 36th 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.

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: 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 36th Street N.

The Zoning Ordinance requires that 95 spaces be provided for the new elementary school, and 302 spaces be provided at campus build-out. The recommendation by Toole would require a modification to parking standards by the County Board, subject to [ACZO Section 33.C.4.f](#). The modification would include both reducing the required ratio of parking spaces provided, and locating some spaces counted towards the ratio off site. The following chart shows a comparison of the Toole recommendation with zoning standards:

| Parking | ES Only | Build-out |
|--|----------------|------------------|
| ACZO Sec. 33 standard | 95 | 302 |
| Toole Analysis (demand) | 117 | 318 |
| Toole Analysis (recommendation) | 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 36th 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.

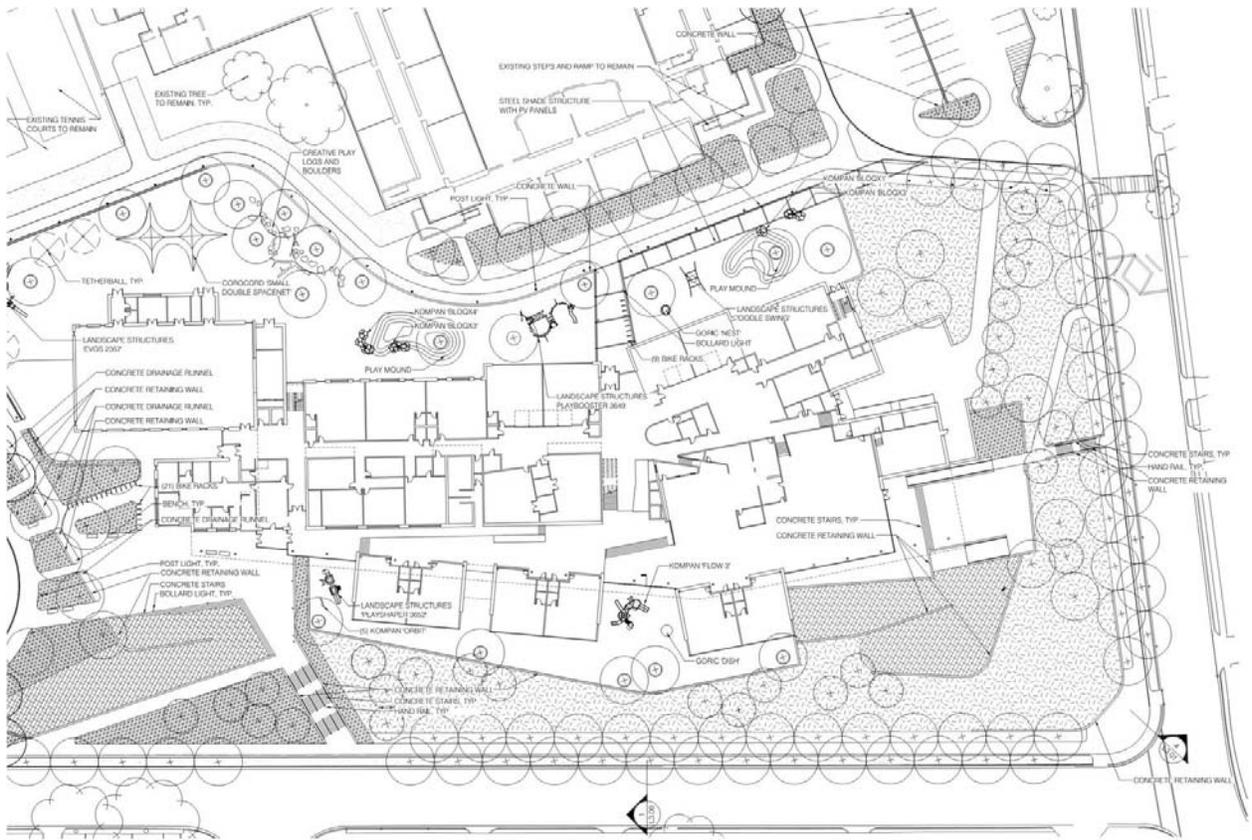
Additionally, staff recommends that APS prepare a detailed multi-modal Transportation Demand Management (TDM) program to address student, parents, staff, and visitor transportation to the campus. A

Facilities and Recreation: Concept 1.5 preserves two (2) irrigated athletic fields, a combination baseball/athletic field, and a small practice athletic field. Tennis and basketball courts are preserved. Coordination of joint County use of facilities will be discussed during the use permit review.

Schematic Design: The BLPC has held four (4) meetings to discuss schematic designs for the new elementary school. It is expected that building and site design will be completed during the schematic design, prior to submission of an application for use permit. The following images depict drawings associated with schematic design:

Landscape Plan:





Renderings:







Building orientation/access: The main entrance to the school is located adjacent to the parent drop-off/parking area to the west of the site. There are walkways to the building that connect the sidewalk along N. 36th Street to the entrance to the building. In addition, there are walkways to the building that connect the cafeteria, located on the east side of the building, to the sidewalk along N. Harrison Street. Attention should be paid to the use of landscaping and architectural techniques to create an inviting, comfortable, and visually identifiable route for pedestrians to enter the facility.

Massing and architecture: The preliminary schematic designs present a two-story building that conforms to the topography of the site by stepping down the hill towards 36th Street. The building will consist of two stories above grade, with pre-K/Kindergarten classrooms cut into the hill. Placement of the pre-K/K classrooms project at slightly different angles from the main building, serving to break up the visual impact of the building from 36th Street. The architects are considering various materials such as brick, fiber cement, aluminium, glass, and stone.

Location/treatment of service access: Service portion of the facility is located on the east elevation, and access is provided through a driveway connected to the bus loop. Attention should be paid to screening the service areas with landscaping material and/or a screening wall.

Landscaping and site design: County standard sidewalks and green strips will be constructed, at a minimum, along the new school frontages along 36th Street N. and N. Harrison Street, which will be planted with street trees at standard spacing. A second row of trees will be planted at the back of sidewalk along 36th Street N., which will soften views of the facility from residential uses to the south. A row of shade trees will be planted running parallel to the eastern edge of the fields along a path running north-south. Attention should be paid to ensure that such trees do not impact the playing fields by providing too much shade during certain hours.

Rain gardens will be provided at the eastern and western ends of the building. Landscaping material has not yet been determined.

As a result of the APS goal to prepare the school for Net Zero energy use, the architects are proposing several schemes for placement of photovoltaic (PV) panels to be placed at the site. Possible locations for PV panels are on the roof of the building, on a shade structure at the playing fields, and on a shade structure in the bio-swale in the new parking lot/parent drop off-queue. Careful attention should be paid to the visual impacts of PV panels at this location, particularly as related to the vista of the fields as viewed from 36th Street.