

ENVIRONMENT AND ENERGY CONSERVATION COMMISSION

c/o Department of Environmental Services

2100 Clarendon Blvd., Suite 705

Arlington, VA 22201

October 24, 2016

The Honorable Libby Garvey, Chair
Arlington County Board
2100 Clarendon Blvd., Suite 300
Arlington, VA 22201
Subject: Stratford School Addition

Dear Chair Garvey:

The Environment and Energy Conservation Commission (E2C2) appreciated the opportunity to provide representation on the Public Facilities Review Committee (PFRC) for the Stratford Middle School project over the past 18 months. In September 2016, we were provided a copy of the Environmental Assessment, and APS and its consultants presented on the project at our monthly meeting.

Based on the May 2016 Board hearing on the project, we understand that the majority of the Board supports the addition of the driveway providing vehicular access between Vacation Lane and Old Dominion/Route 29. Although we expressed our views at the Board hearing, we want to reiterate our opposition to the driveway because of its detrimental environmental impacts and lack of demonstrable benefits. It increases the school's impervious footprint and storm water runoff, increases tree loss and land disturbance, exposes students exercising in the adjacent sports field to vehicle idling emissions, reduces possible expansion of a rooftop solar PV system due to the need to mitigate storm water impacts with a green roof, and may encourage parent drop-off/pick-off over other commuting modes. The driveway directly contradicts many of the Principles of Civic Design adopted by the PFRC, particularly those related to the environment and transportation. During the May 2016 Board hearing, a consultant hired by a pro-driveway neighborhood group (Coalition for a Safe Stratford) to conduct an "independent" analysis claimed transportation and air quality benefits from the driveway. County or APS staff never independently verified the private consultant's results, and yet his data were relied upon by Board members, who, in some cases, touted potential environmental benefits of the driveway. Meanwhile, at the same hearing, County staff explained the driveway's various adverse environmental impacts, and the APS transportation consultant stated that the no-driveway option was as safe for pedestrians as the driveway option. The Board's support of the driveway despite the questionable benefits raises questions about the county advisory process. We recognize that the Board must weigh various perspectives and trade-offs, but the Board hearing demonstrated that county-wide goals may not be achievable when they are in opposition to well-organized local neighborhood interests.

Our opposition to the driveway aside, we have several additional comments on the Stratford School project based on our review of the EA, the September 2016 APS presentation, and participation in the PFRC.

- **Trees:** We are disappointed with the significant tree loss from the project, but we do appreciate APS' efforts to ensure that all tree replacement can be accomplished within the school boundaries. However, we noticed that there are an absence of trees along the driveway. While we recognize the need to preserve the historic viewshed of the building, we would like further consideration of planting trees along the driveway and/or north side of the playing field that would be in keeping with the school design and historic preservation considerations. The addition of trees will provide shade for

pedestrians, remove air pollutants, reduce the heat island effect, and reduce noise levels. Also, given the reduced spacing of the trees (as authorized by the county urban forester) and steep slope on the southern portion of the site, we recommend seeking a longer tree replacement guarantee period (beyond the standard one-year guarantee) in the contract so that newly planted trees can be replaced if they do not survive planting/transplanting.

- **Renewable Energy:** Throughout the project planning process, we have been disappointed with the lack of renewable energy options other than the demonstration of a solar photovoltaic system, which provides limited electricity for educational purposes only rather than aggressively pursuing renewable energy goals outlined in the Community Energy Plan. The increased impervious surfacing due to the new driveway means that the roof would need to be a green roof in order to naturally treat the storm water rather than maximizing roof space for photovoltaic panels, should future funding be made available.
- **Building Energy Efficiency:** We support the installation of the most energy efficient technologies in the addition, including energy-efficient LED lighting, lighting controls, daylighting features, and high efficiency HVAC equipment. In support of tightening the building envelope, we recommend that thermal breaks are properly implemented and thermal bridges are minimized with respect to the building façade, parapet connection, and windows. We agree with the usage of low-e glazing and would like to ensure that the low-e rating applies to the entire assembly rather than just the center of glass. To the extent that leftover or additional funds are available, we recommend allocating them for energy efficient LED renovations with integrated controls in the existing classrooms as the most cost-effective method to improve energy efficiency of the building.
- **Electric Vehicle Charging Stations:** While we support the implementation of EV charging stations and expansion of EV charging infrastructure as a means to reduce greenhouse gas emissions, we recommend that EV charging stations be incorporated intelligently into a site transportation plan in such a way that stations are utilized and encourage participation, and not included simply to obtain a LEED point. Similar to providing for handicap spaces, consideration should be given to the location of EV charging stations in the early stages of design. Four spaces could be provided with two charging stations that have the ability to charge two adjacent spots simultaneously.
- **Impervious Cover:** We support the net decrease of the impervious cover in the Resource Protection Area (RPA) and the incorporation of green pavers in the project design. Because pervious pavers may not function as designed when they are not maintained, we would like to see sufficient resources committed to evaluating their performance and conducting necessary maintenance.
- **Invasive Plants:** To avoid the introduction of invasive species to the site, we recommend adding specifications and/or contractual terms to minimize procurement of top soil that contains invasive plant seeds.
- **Long-Term Planning for Storm Water Management:** It is not clear that APS has an overall compliance strategy for its Municipal Separate Storm Sewer System (MS4) Storm Water Permit. The APS was issued a General Permit under the Small MS4 program on April 18, 2014. Under that permit, APS is required to submit a plan by January 1, 2018 to demonstrate how it will reduce pollutant loading due to storm water by 40% in two permit cycles. The requirement is for a cumulative reduction across all APS properties (whether involved in construction or not) relative to baseline. Each school project (including this one) appears to approach storm water management design in a vacuum, without considering how the school system as a whole will meet increasingly stringent pollutant limits. The Stratford School has a constrained footprint and it would be challenging to install additional storm water quality infrastructure at a later date. As such, we recommend requesting that APS address how the storm water management approach at Stratford School fits into its overall plan to reach the required reduction across all properties.

- **Community Engagement:** This project has elicited substantial neighborhood interest and participation. We expect that APS will continue to engage the local community about different phases of the project so that nearby residents and current students and families will be prepared for tree loss, potential erosion during land disturbance, changing traffic patterns, and other site issues during project construction.

If the project design changes, resulting in new or different environmental impacts (e.g., further increase in tree loss), we would like the opportunity to review and comment on the revised design, and if necessary, a revised Environmental Assessment.

We appreciate having this opportunity to share our views with you.

Sincerely,



Scott Dicke, Chair
Environment and Energy Conservation Commission

cc: Arlington Public School Board