TABLE OF CONTENTS

INTRODUCTION 5 - 16
PROJECT OVERVIEW
PROJECT GOALS
STAKEHOLDER INVOLVEMENT
BUILDING LEVEL PLANNING COMMITTEE (BLPC) COMMENTS
PUBLIC FACILITIES REVIEW COMMITTEE (PFRC) COMMENTS

RECOMMENDED CONCEPT DESIGN 17 - 26
CONCEPT MASSING
SITE PLAN
FLOOR PLANS
BUILDING SECTION
ENVIRONMENTAL IMPACT
HISTORIC PRESERVATION APPROACH
ALTERNATE SITE OPTION
PROJECT COST AND FUNDING

HISTORIC SIGNIFICANCE 27 - 32
ARCHITECTURAL SIGNIFICANCE
HISTORICAL/CULTURAL SIGNIFICANCE
HISTORIC DESIGNATION STATUS

SITE OVERVIEW 33 - 48
EXISTING CONDITIONS
CIRCULATION NETWORK
EXISTING PARKING
EXISTING OPEN SPACE

EXISTING TREES
BUILDABLE AREA
TOPOGRAPHY
EXISTING SITE SECTIONS
EXISTING BUILDING PLANS
ADDITIONS AND ALTERATIONS

PROGRAM / ED SPEC 49 - 56
DEVELOPMENT OF EDUCATION SPECIFICATIONS
APS MIDDLE SCHOOL COMPARISON
PROGRAM DIAGRAM- BLOCKS
PROGRAM SUMMARY
PRELIMINARY MIDDLE SCHOOL PROGRAM
EXISTING BUILDING PROGRAM ASSESSMENT

TRANSPORTATION 57 - 66
EXISTING CONDITIONS
PROGRAM ASSUMPTIONS
RECOMMENDATIONS

ADDITIONAL STUDIES 67 - 71
PHASE 2 STUDY
CONCEPTS STUDIED
INTRODUCTION
Stratford Junior High School opened in 1950 and has been serving the Arlington community ever since. Housing both the H-B Woodlawn and Stratford Secondary School Programs over recent decades, the timeless architecture and striking integration of building with topography lend Stratford a surprisingly contemporary feeling.

In 2014, the Arlington County School Board adopted a plan to relocate the current H-B and Stratford programs to the Wilson School site in Rosslyn and to return Stratford to its original use as a neighborhood middle school. The plan requires increased enrollment at Stratford to one thousand (1,000) students. Implementation of the plan is to be completed for the start of the 2019-2020 school year and bond funds totaling Twenty-nine Million Two Hundred Thousand Dollars ($29,200,000.00) were allocated for the project.

Reinstating a middle school program at Stratford is an intelligent strategy for recapturing the inherent value of the building and site. Most of the instructional spaces dating back to 1950 still retain relevance for the twenty-first century educational mission of Arlington Public Schools (APS). The site contains sufficient open space for middle school educational, recreational, and athletic purposes. After more than six decades and to increase capacity, significant reinvestment is required. However, Stratford has “good bones”, is readily adaptable to contemporary educational needs, and, since it has been well maintained by APS, requires few systemic upgrades.

Concept Design Process

In 2014, Quinn Evans Architects (QEA) was selected by APS to develop concept plans for renovating and expanding Stratford to fulfill the requirements of the School Board’s overall plan for increasing middle school capacity in the County. A feasibility analysis was conducted that tested Stratford’s ability to satisfy contemporary middle school educational specifications and to explore site development and building renovation and addition options including costs. Arlington residents and school communities were integrated into the feasibility study process including a series of public meetings and workshops. The School Board’s selection of the Stratford and Wilson sites and allocation of bond funds was informed by the 2014 study.

Subsequently, APS launched the formal Building Level Planning Committee (BLPC) and Public Facilities Review Board (PFRC) project development process. Meetings began in April 2015. To date, thirteen (13) BLPC meetings and six (6) PFRC meetings have been held. At BLPC Meeting 13 conducted on October 26th, a vote was taken in support of the “West Option” addition and “High Road Option” driveway connecting Vacation Lane with Old Dominion Drive. At PFRC Meeting 6 conducted on October 15th, a vote was taken also supporting the West and High Road options.

Local Historic District Designation

Stratford Junior High School has profound social and cultural importance for the Arlington community and Arlington Public Schools. In February 1959, Stratford became the first public school in Virginia to be racially desegregated. Stratford Junior High School is listed on the National Register of Historic Places and the Virginia Landmarks Register. Designation as a Local Historic District is currently being considered. These designations recognize the building and site for their exemplary architectural character and also acknowledge the history of school desegregation that occurred at Stratford.

As stewards of Stratford, APS embraces its responsibility to protect the integrity of the historic building and site and to enshrine and celebrate its history. Following steps established in the Memorandum of Understanding (MOU) executed in 2004 between APS and the
Integrating with the Neighborhood

Like many schools of its time, Stratford Junior High School was designed to integrate into its neighborhood in the most literal terms. Stratford sits in a natural “bowl” below Old Dominion Drive, surrounded by residences. Five houses along 23rd Street are in close proximity to the School building itself. Houses on 22nd Street and Vacation Lane overlook the play field. There is no “back yard” at Stratford. It is part of the neighborhood in every direction and in every way.

Site utilization is intensive. The apparent site occupied by Stratford is in reality two parcels: a nine (9) acre lot including the School building, soccer field, adjacent parking, and open spaces, owned by APS; and a four (4) acre lot including the baseball field, basketball and tennis courts, adjacent parking, and open spaces, owned by Arlington County Department of Parks and Recreation (DPR). There is no unused portion of the site.

Over the decades, trees and understory vegetation have grown onto the steep slopes along the south and west edges of the site.

Delineated by the primary drainage area of an intermittent stream, a Resource Protection Area (RPA) spans Vacation Lane and incorporates portions of two parking lots. Excluding the athletic fields, nearly half of the site is unpaved open space. Potential impact on the tree canopy and RPA has been carefully assessed. Strategies to reduce and mitigate impacts will be incorporated into any development plan.

Nearly every element of the site is viewed as a community amenity. Throughout conceptual design work, site development strategies emphasized open space preservation. The preferred West and High Road options are planned to retain all major site features including the soccer field, baseball field, basketball and tennis courts, and playgrounds at or near their present locations with little or no modification. The proposed addition covers the lower parking lot west of the School building. Even with the construction of the proposed High Road connecting Vacation Lane with Old Dominion Drive and expanding the parking lot along Vacation Lane to recover parking lost to the addition, open space is reduced by less than ten percent across the site.

As planned in 1950, Stratford is also woven into the fabric of the neighborhood road and pedestrian network. The School faces onto Vacation Lane, a local two-lane street carrying vehicles in both directions between Military Road and Lorcom Lane. As designed, access for buses and parent drop-off and pick-up were accommodated on the loop driveway serving the north entrance.

It is fully appreciated that since Stratford opened in 1950, busing, driving, biking, and walking patterns have altered significantly. Integrating Stratford into vehicular and pedestrian networks presents challenges at three scales: at the school site itself, on the adjacent streets and sidewalks, and throughout the surrounding transportation...
network. All three scales have been surveyed, documented, and analyzed. Comparisons to other APS schools have been assessed, particularly other middle schools and schools similarly located within residential areas.

It is also understood that current vehicular and pedestrian patterns for H-B Woodlawn and the Stratford Program are not the same as those that will emerge with the reinstatement of Stratford as a neighborhood middle school with 1,000 students. On the positive side, the anticipated middle school student population will be drawn mostly from nearby residential enclaves. As “choice” programs, the H-B Woodlawn and Stratford Secondary programs draw students from throughout Arlington County. On the other hand, comings and goings at the proposed middle school will occur on a single bell schedule, meaning that all students will arrive and depart across a smaller time window. Increased numbers of students and faculty will also mean more trips to and from the School.

Both on-site and off-site improvements are proposed to the pedestrian and street network. Sidewalk, crosswalk, and traffic calming enhancements along Vacation Lane and 23rd Street are proposed to improve conditions for pedestrians and bicycles where the greatest concentration of students will be present. Proposals to infill and expand the pedestrian and biking network in all directions from the Stratford site seek to accommodate residents within a one-and-one-half mile “walk zone”. At a minimum, a “hawk” signal is proposed on Old Dominion Drive near the center of the Stratford site to accommodate pedestrians crossing there.

Modifications to Vacation Lane are proposed to accommodate different flows of both passenger vehicles and buses. Existing bus stacking areas will be expanded along Vacation Lane, accommodating all buses at a single time during afternoon pick-up when the greatest concentration of buses is anticipated. Generally, staff vehicles will be parked before parent vehicles enter the adjacent street network and will remain until after students have departed in the afternoon. Parent vehicles will be directed onto the School site via the proposed High Road option. Student drop-off and pick-up will be permitted on the High Road and at sites along Military and Lorcom. Drop-off and pick-up will not be permitted on Vacation Lane and 23rd Street.

The proposed High Road option is perhaps the single design element that has received the most discussion throughout concept design. Emotions appear to run deep, both for and against. The BLPC vote was heavily supportive of including the High Road option. The PFRC vote was close, but did support it. Traffic analysis does not show that a driveway connection from Vacation Lane to Old Dominion Drive is necessary per se. The driveway provides options and redistributes trips and turning movements away from Vacation Lane and onto Old Dominion. This shift onto the nearby intersections at Military and Lorcom does not have an unacceptable impact on the Level of Service (LOS) at those traffic signals.

Should the High Road option be implemented as proposed, vehicles leaving the Stratford site will be permitted to exit onto Old Dominion Drive both east- and west-bound. To accomplish this, a full traffic signal will be installed there in lieu of the “hawk” signal noted previously. The Virginia Department of Transportation (VDOT) must approve a “signal warrant”. In preliminary meetings, VDOT has indicated its openness to the concept; however, the formal warrant process must be successfully completed to permit the installation of a signal on Old Dominion.
Achieving Educational Excellence at Stratford

Of course, the most important objective of the concept design process is to assess the opportunity to institute a middle school educational program at Stratford consistent with the holistic standards of excellence and inclusion required by Arlington Public Schools. Through a strategic program of renovation and expansion, Stratford can become one of Arlington’s finest schools.

The Concept Design study conducted by Quinn Evans Architects included detailed analysis, more detailed than most concept-level studies, of the educational program and sufficiency of the existing Stratford building. Each existing and potential instructional space was assessed for its compliance with established standards and potential to accommodate emerging educational trends.

A model program was developed for a middle school with 1,000 students. A second was developed for 1,300 students to help understand the potential for future growth to the target number for middle schools established by the School Board. The model program was then compared with Stratford’s existing facilities and programs for alternative expansion options were developed. Because so many site and addition options were considered during concept design, more than a dozen program alternatives were considered. Therefore, the recommendations in this Concept Design Report are made with more programming homework completed than most.

The recommended West Option supported by both the BLPC and PFRC calls for a thirty-five thousand square foot (35,000 sf) three-floor addition constructed on the lower parking lot at the west end of the existing school. The addition will contain auxiliary athletic facilities at field level with two floors of classrooms above. The integration of the addition with renovated spaces in the existing school nicely accommodates APS’ preferred middle school “teaching team” structure, housing teams for the Sixth, Seventh, and Eighth Grades each on a single floor level.

Assessment was made of other potential school capacity limitations and factors which might impact educational excellence. Particular attention was paid to APS’ commitment to “educating the whole child”. In addition to core classrooms and athletic facilities noted above, the Media Center, Cafeteria, Auditorium, art and music facilities, science labs, language labs, and “elective” classrooms were analyzed. Because Stratford housed the H-B program, there are a number of facilities, highlighted by the Black Box Theatre, that are not typically part of a middle school educational specification. These facilities provide opportunities beyond the middle school program model. In conjunction with a robust and strategic program of renovation, the proposed 35,000 sf addition will create a comprehensive middle school educational program capable of housing 1,000 students and achieving the standards of excellence and inclusion required by APS.

Lastly, the proposed West Option integrates appropriately with the historic school and site. The proposed addition respects the massing and architectural character of the historic school and extends the building sympathetically. The High Road Option integrates with the topography of the courtyard and play field. Both inside and outside, the proposed addition and renovation and site modifications provide many opportunities to celebrate the people and events associated with the historic desegregation of Stratford Junior High School in 1959. By implementing its plan to expand middle school capacity, the School Board will also revitalize one of Arlington most cherished places, a reinvestment that will assure the continued appreciation of historic Stratford Junior High School for generations to come.
PFRC STRATFORD GUIDING PRINCIPLES:
(6/15/2015)

Principles of Civic Design
1. Incorporate the principles described in the Public Facilities Review Committee’s (PFRC) Principles of Civic Design in Arlington. Implement the principles that are most sensitive to the building, site area, and circulation constraints of the Stratford School property as they relate to: (1) civic values, (2) siting and orientation, (3) building form, and (4) building details and materials.

Historic and Cultural Resources
1. Propose sensitively designed additions and renovations to the Stratford School property that are consistent with the Secretary of the Interior’s Standards for Renovation and Rehabilitation and that are respectful of the front and rear elevations, are sensitive to the historically and culturally significant viewsheds associated with the site and that balance the community needs of the site.

Parks and Open Space
1. Identify the current school and community programming for the APS and DPR outdoor and indoor facilities in order to preserve and enhance these programmed spaces as both building and recreational facilities are renovated/expanded.

Transportation
1. Improve pedestrian accessibility and circulation to and throughout the school site especially along Lorcom Lane, 23rd Street N, Vacation Lane, Military Rd, 22nd Street N., and Old Dominion.

2. Explore and implement design solutions that provide safe, functional, neighborhood sensitive and cost effective access and circulation to the school site via all modes of transportation.

Arlington Public School and Department of Parks and Recreation Joint Use Agreement
1. Prepare a timeline that coincides with APS’ use permit application for the creation of a DPR/APS Memorandum of Understanding that identifies joint use facilities agreement on hours of use, defines maintenance responsibilities, schedule coordination and all other issues which should be addressed as part of the agreement.

Coordinated with APS plans to ensure the park improvements and the school expansion design are cohesive.

3. There should be no net loss of land committed to active recreation or sports programming, and no reduction in school and community sports programming.

4. An opportunity for broader community input on sports and recreational facility locations – within the already established Stratford PFRC timeline – shall be provided.

APS CIP PROJECT GOALS (APPROVED 2014)

Existing on Site: Proposed for Phase 1
- 690 seats (current enrollment)
- 1,000 Seats
- Open by start of 2019 school year
- $29.2m bond funding allocation

Proposed for Phase 2
- Additional 300 seats by 2024

APS MISSION AND VISION

Mission
Arlington Public Schools instills a love of learning in its students and prepares them to be responsible and productive global citizens.

Vision
Arlington Public Schools is a diverse and inclusive school community, committed to academic excellence and integrity. We provide instruction in a caring, safe and healthy learning environment, responsive to each student, in collaboration with families and the community.
STAKEHOLDER INVOLVEMENT

SCHEDULE AND MEETINGS

From April through November 2015 APS Staff and the Design Team met numerous times with the BLPC, the PFRC and the HALRB as part of the concept design process. In addition, several workshops were held with the School Board to keep them updated on concept development. All of the meetings were open to the public. In June 2015 a Gallery Walk was held in the H-B Woodlawn Library with the then-current schemes displayed for the public.

### 2015 Schedule

<table>
<thead>
<tr>
<th>YEAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUN</th>
<th>JUL</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLPC (Bi-weekly)</td>
<td>4/8-#1</td>
<td>5/4-#3</td>
<td>6/1-#5</td>
<td>8/3-#9</td>
<td>9/16-#11</td>
<td>10/13-#12</td>
<td>11/9-#14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/20-#2</td>
<td>5/18-#4</td>
<td>6/15-#6</td>
<td>7/13-#8</td>
<td></td>
<td>10/26-#13</td>
<td>11/23-#15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/15-#1</td>
<td>5/14-#2</td>
<td>6/11-#3</td>
<td>7/16-#4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>6/29-#7</td>
<td></td>
<td>8/31-#10</td>
<td></td>
<td>9/12-#5</td>
<td>10/15-#6</td>
<td>11/12-#7</td>
<td></td>
</tr>
<tr>
<td>PFRC (Monthly)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4/15-#1</td>
<td>5/14-#2</td>
<td>6/11-#3</td>
<td>7/16-#4</td>
<td>8/19-#19</td>
<td>10/6-#10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HALRB</td>
<td>5/20 - Work Session</td>
<td>6/3 - Work Session</td>
<td>7/15 - Work Session</td>
<td>8/19 - Work Session</td>
<td>11/5 - Concept Info Item</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCHOOL BOARD</td>
<td>6/22 Gallery Walk</td>
<td>8/13 - Historic Listing Info</td>
<td>11/16 - Concept Action Item</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**GALLERY WALK**

**SCHOOL BOARD**

**BLPC MEETING**
November 3, 2015

Arlington County School Board
Arlington Education Center
1426 N. Quincy Street
Arlington, Virginia 22207

Dear School Board Members:

The Stratford Middle School Building Level Planning Committee (BLPC) is pleased to share our recommendation for the concept design of this new neighborhood middle school. We recommend “West with High Road” to be further developed in the schematic design phase.

Overview

We have held 14 meetings since April, working closely with APS staff, County staff, design professionals, traffic engineers and community members to identify the best building massing and site access for an addition to support a 1000-student neighborhood middle school by 2019. Our committee includes 5 APS educators, 7 PTA leaders, 8 civic association representatives, 3 historic preservation experts and a Facility Advisory Committee (FAC) member. Together we have carefully studied the many challenges of this site, including three prior building additions, historically protected facades and viewsheds, pedestrian safety challenges, vehicular access by only small yield-to streets, steep topography, stream and tree protection areas, abutting residential properties and existing community recreation amenities.

We considered at least 12 building massing options and 9 site access options, with community input at each meeting and extensive discussions with the Arlington Historic Affairs and Landmark Review Board (HALRB) and Public Facilities Review Committee (PFRC) and county staff liaisons throughout the process.

Our recommendations are summarized below and detailed on the following pages:

1. Phasing – We recommend building once on this complex site, ensuring common spaces are adequate to support maximum student population and maximizing open space for community use.

2. Building site and massing – We recommend the “West” option, building on top of the existing Stratford Program parking and drop off.

3. Access and safety – We recommend the “High Road” and other pedestrian safety improvements.

4. Project Cost – We recommend an estimated total project cost of $36.3M rather than the bare bones $31.26 M base option.

5. History – We recommend that you develop and set aside a dedicated fund for interpretation of the historic events, in addition to the $36.3M project cost described above.

Recommendations

1. Phasing

As we discussed at your August and October work sessions, the BLPC unanimously recommends you build once at this site, expanding the building and ensuring common spaces are adequate for the number of students you plan to serve here for decades to come. All options we considered make it much harder and more costly to maximize use of the site in the future, so we recommend a master plan for the combined school/park parcel.

This is not an easy site and never has been. When selected for the first new Arlington County junior high school in 1950, it was called “Arlington’s most ambitious school building project.” At that time, “the challenges presented by the site [including highly varied topography, steep slopes, heavily wooded, a creek that ran across the property, surrounded by residential development on three sides] were recognized and discussed by the School Board, but ultimately it was felt that these potential difficulties were offset by the convenient and desirable location.” The design and construction expenses incurred in accommodating the site were significant, with the grading contract alone amounting to $49,600, or approximately 3 percent, of the actual construction cost of $1,496,604. This caused considerable controversy among Arlington County taxpayers who felt that the expense could have been avoided by the selection of a more regular site.” 1

Sixty-five years later, several temporary learning cottages have been in place, in front of the historic south façade, since 1972. The north, south, east and west facades have all accommodated additions, in 1995 and 2004. Neither building on top of the existing 3-story building nor tearing down the historic building is cost-efficient or recommended. Thus, we urge you to make the 2019 addition as large as you think it will need to be for the long run. Serving a larger student population (whether in temporary or permanent structures) would require additional gymnasium, cafeteria, media center, classroom space, and parking. These are costly additions, but will be considerably more costly and less space efficient if added in a fifth addition later.

2. Building Site and Massing

We recommend the “West” concept design as the best compromise option to meet instructional needs and open the neighborhood middle school by 2019, while respecting the important cultural history and current budget constraints. While the 45,000 sf Link with Atrium design was preferred by APS staff and some BLPC members, the Arlington HALRB and State Historic Preservation Office shared strong objections and suggested the site could lose National Historic Register designation if Link were built. In addition to the likely delays and costs this could introduce, the initial design of the smaller Link is not favored by the BLPC. Some key elements we discussed in our discussions include:

• More seats. The West design adds classroom space and an auxiliary gym to accommodate 1000 students without relocatable classrooms.

3. Access & Safety
The BLPC recommends critical access and circulation improvements to improve pedestrian safety, including a new on-site driveway connecting Vacation Lane to Old Dominion along the south façade. Converting from the current building use to the 1000-seat Stratford Middle School will likely increase parent trips 300%, pedestrian traffic 700% and bike traffic 300%, while moving the morning arrival time from usually-daylight 9 a.m. today to 7:50 a.m. Combining all modes on Vacation Lane (a yield-to-street, with sharp turns, steep hill and poor visibility) is not acceptable to the BLPC. In addition to the obvious safety concerns, we are concerned that parents will be more likely to drive students if pedestrian safety is not adequate, further increasing the loads and reducing pedestrian safety. Recommended safety improvements include:

- Separate cars, buses and pedestrians on Vacation Lane and improve fire/emergency vehicle access, by including:
  0 driveway from Vacation Lane to Old Dominion, along south building façade, and
  0 bus loop reconfiguration and limited time access signage on Vacation Lane and 23rd/Randolph St.

- Enhance pedestrian infrastructure, through:
  0 pedestrian-activated traffic light at Old Dominion, school zone speed limit flashers and crosswalks on Old Dominion, Military, Lorcom, Vacation Lane and 23rd St, and
  0 all-way stops and crosswalks at school driveway entrances and Vacation/23rd St, and
  0 crossing guards at major crossings (Old Dominion, Military, possibly Lorcom), in partnership with Arlington County Police Department

Further, we recommend implementing low-cost pedestrian improvements immediately (signage, temporary speed control, enforcement, transit demand management incentives) to benefit students and staff currently attending the school.

4. Project Cost
During the site selection process in 2014, staff estimated costs for a 1000-seat school on this site to be $29.2M to $56.5M. The School Board selected the low end of that range as the project goal in the CIP. Since that time there has been unusually high escalation of construction costs, both locally and nationally. In addition, the site complexities highlighted in the phasing discussion above make this an unusually difficult and expensive site to modify. As a result, the initial cost estimates for the proposed 45,000 sf addition to serve 1000 students ranged from $43M to $47M.

At your request, staff presented potential 10,000 square foot and programmatic reductions at your October 6 work session. These options were developed without BLPC involvement and, in our view, they represent very significant compromises. We do not fully support such drastic scope reductions this early in the project. As you directed, we have identified the West option with the most feasible of these options, with a bare bones base project of a 35,000 sf addition with an estimated total project cost of $31.26M. However, we strongly recommend you approve an estimated total project cost of at least $36.3 M, to ensure instructional, safety, historic, recreational, community and environmental
needs are balanced effectively during the schematic design. In addition, we ask that you fund historic signage and interpretation elements separately, to avoid the risk of value engineering during the project limiting our community’s important investment in telling the story of the 1959 racial integration.

We will work through detailed options and compromises during schematic design, bring line item costs for the priority items and any opportunities for additional cost savings in the schematic design presentation, currently planned for February 2016. From our initial discussions, the priority elements added back will likely include some of the following items:

- **Adequate common areas, for student and community use** (for instance, moving media center from 3rd floor to the new addition and public entrance, making media center closer to standard middle school size, expanding gymnasium/recreation space to standard middle school size, reconfiguring cafeterias, maintaining flexible/strata classroom)
- **Improved accessibility for handicapped and for community users** (for instance, adding east elevator, improving handicapped parking access, integrating school and park)
- **Enhanced environmental sustainability** (for instance, reducing or covering hardscape where possible, making all hardscapes permeable, protecting and expanding tree canopy and enhancing outdoor learning opportunities)

We believe many of these elements are necessary to ensure that the new Stratford can well serve generations of students, and the broader community, for generations. These elements will ensure an experience comparable to that of peers attending other neighborhood middle schools in Arlington.

5. **Honoring Our History**

The BLPC unanimously recommends that the School Board **work with County Board and community members to celebrate the historic events of February 2, 1959**, when Stratford Junior High was the first public school in Virginia to be racially integrated.

Following the May 17, 1954 Brown vs. Board of Education Supreme Court ruling that a separate but equal school system was unconstitutional, “Virginia Commonwealth officials had little intention of implementing any desegregation program pursuant to the Brown ruling...Governor Thomas B. Stanley stated that he ‘would use every means at my command to continue segregated schools in Virginia.’” In 1956, the Virginia General Assembly passed a referendum giving local school boards the authority to manage student placement, while reserving the right to close any Commonwealth school where integration occurred — establishing Virginia’s policy of ‘massive resistance’ to school integration.

Arlington then approved a gradual and limited desegregation plan that would permit integration at only a few elementary and junior high schools and one senior high school over the course of three academic years, from 1956 to 1958. ... In response, the Virginia General Assembly voted in 1956 to strip the county of its right to an elected school board and replaced it with a more conservative county-appointed board. The first tentative steps towards an integrated Arlington school system were abruptly ended.”

Arlington citizens, with support from the NAACP and other national leaders, continued to work toward fulfilling the Supreme Court’s ruling. Stratford played a critical role in two tense, but peaceful moments, when integration was attempted, first unsuccessfully by three students (Edward Leslie Hamm, Jr., Joyce Marie Bailey, and George Tyrone Nelson) on September 5, 1957, and then successfully 15 months later when: “On Monday morning, February 2, 1959, under the protection of approximately eighty-five Arlington police officers, Ronald Deskins, Michael Jones, Lance Newman, and Gloria Thompson entered and were admitted to Stratford Junior High School without incident, making Stratford the first public school in the Commonwealth of Virginia to desegregate.”

BLPC members have been honored to have the opportunity to learn more about the important historical events at Stratford Junior High School. For many this was a first opportunity to delve into the local and international news clippings and newsreels from the peaceful racial integration, let alone hear directly from those who attended Stratford at the time. We look forward to supporting School Board, County Board and the broader community in honoring this history for both school students and the broader public, both as part of the Stratford Middle School building and in curricular and community events.

**We recommend separate funding and program commitment** to honor these events now and in perpetuity, through on-site art, photo panels, signage and ongoing community events and curricular connections. In addition, we recommend appointing 1-2 BLPC members from the broader community to help guide this investment. Since the site is already designated on the National Historical Register and the Virginia State Register, the BLPC has had full participation by two representatives from the HALRB and a staff member from CPHD. In addition, the State Historic Preservation Officer has reviewed preliminary designs and shared feedback. HALRB and county staff are currently reviewing a request to designate the school property as a local historic preservation district. If the school is designated as a local historic district, HALRB must issue a Certificate of Appropriateness before a use permit can be issued by the County for any renovation to the property.

**Closing**

We appreciate the many tough decisions you have to make about meeting our student capacity needs. We ask for your concurrence with the West Option, High Road and $36.3M estimated project cost. During the Stratford Middle School schematic design phase, we will continue to work hard to balance community needs and capital budget on this do-once, do-it-right site, while continuing our collaboration with others in our community to complete the renovation for a fall 2019 opening.

Sincerely,

Susan R. Cunningham
Chair, Building Level Planning Committee, Stratford Middle School Project

---

PUBLIC FACILITIES REVIEW COMMITTEE (PFRC) COMMENTS

October 26, 2015

The Honorable Emma Violand-Sanchez, Chair
The Arlington County School Board
1426 N. Quincy St.
Arlington, Virginia 22207

RE: Stratford School – Concept Design

The Public Facilities Review Committee (PFRC) has held six meetings to consider the Arlington Public Schools (APS) concept design plan for an addition and renovation to Stratford School to return it to its previous use as a neighborhood middle school. The PFRC is generally charged with ensuring that the highest quality of land use planning, design, transportation planning and other important community aspects are incorporated into civic projects. The PFRC consists of representatives from County Commissions, as well as project specific representatives. A roster for the PFRC for Stratford is attached.

The PFRC began meeting in April 2015 to review concept designs for the site. The PFRC received a set of site specific principles for urban design along with its charge in June 2015. The primary issues discussed during PFRC review include the historic significance of the site; impacts of the expansion on neighboring park property, trees and Resource Protection Area (RPA); impacts of staff, students, and parents traveling to and from the site; and the associated location of a proposed driveway connection traversing the site and connecting Vacation Lane to Old Dominion Drive.

In August 2015, the School Board and its staff determined that the proposed designs under consideration were too far over budget to proceed. With direction from the School Board, APS staff returned in October with modified designs that reduced the size of the school and came closer to the $29.2 million budget. PFRC met once since those changes were proposed, on October 15. Ten of 18 total PFRC members were able to attend that meeting, at which straw polls were taken of members present on the location of a building addition and on the existence/location of the driveway noted above.

Building Addition

For several months APS presented a variety of 45,000 square foot proposals for a building addition to accommodate 1,000 total students. Consideration was also made for an eventual second addition to allow 1,300 students. In October, APS proposed a reduced 35,000 square foot version of each of the four location/design options that had been previously presented. Of those, two options fell roughly within the allotted budget, known as the “link” option and the “west” option.

After extensive discussion, PFRC members present unanimously supported the “west” option as the preferred option for an addition citing a variety of reasons. Most notably, this option preserves the historically significant approach to the school from Old Dominion Drive. This addition would occupy an existing parking lot that is currently used by the school but is physically located on Department of Parks and Recreation property. The loss of parking is mitigated with the expansion of a parking lot on the northern end of the site, although this area is located in and on the edge of an existing Resource Protection Area.

While the PFRC did not poll on the matter, there was general support that with this addition and location, further expansion to accommodate 1,300 students in the future would not be advisable and perhaps would prove impossible.

Driveway Connection to Old Dominion Drive

APS staff presented three options for vehicle access across the school property: a “high road” close to the school, a “low road” opposite the field from the school, and no driveway. According to APS staff, APS consultants, and County staff, a driveway is not required to safely accommodate parent drop-off and pick-up traffic at the expanded Stratford; rather improvements to Vacation Lane and other design and access changes should suffice. In addition, the driveway would cost at least $2.4 million at a time when space for students is being cut. The PFRC straw poll concerning this driveway resulted in the dismissal of a “low road” connection, which drew no support. Further polling on a “high road” vs. no driveway revealed significant and deep disagreement among the ten members present, with a split 6-4 margin supporting the driveway.

PFRC members in support of the driveway cited concerns for student safety, traffic impacts from the new school on the immediate neighborhood, and convenient student drop-off. PFRC members opposed to the driveway option cited a tradeoff in costs between additional educational space and convenience for parent drop-off, concerns that easier drop-off would induce additional traffic, more vehicles at critical intersections on Old Dominion Drive, and decreased open space due to the driveway.
Next Steps

PFRC has an additional meeting scheduled on November 12, at which time it will review any recommended changes, and give additional members a chance to review the proposals and express opinions. Beyond November, the PFRC will meet during the schematic design phase to continue discussion on parking, street improvements, stormwater management, tree protection, RPA, open space, and other site design issues.

Overall, PFRC consideration of the Stratford concept design has been collaborative and supportive of APS staff and architects. APS has committed to working closely with PFRC to continue to address outstanding issues and the PFRC will be working to ensure they are addressed during the schematic design and use permit phases of the project.

Respectfully submitted

Christopher V. Forinash, Chair (Stratford)
Public Facilities Review Committee

Cc:  Mark Schwartz, Acting County Manager
     Gabriela Acurio, Deputy County Manager
     Bob Duffy, Planning Director, CPHD
     Arlington County Board Members
     Arlington County School Board Members
     Dr. Pat Murphy, Superintendent, APS
     John Chadwick, APS
     Ben Burgin, APS
     Bill Herring, APS
     Chris Forinash, Chair, PFRC Stratford
     Michelle Stahlhut, CPHD
     Steve Sockwell, Chair, PFRC
     PFRC members
RECOMMENDED CONCEPT DESIGN
The recommended concept is for a 35,000 gsf addition at the west end of the existing building on the existing parking lot. It is three stories, connecting to the existing building at all levels. The entrance to the addition is off a new pedestrian plaza to the south of the existing gym facade. This will be a secondary entrance to the facility; the main entrance remains the current north entrance at the Vacation Lane bus loop. The recommended site plan provides a new driveway for parent drop-off and pick-up that is one-way through the site from Vacation Lane to Old Dominion Drive. It will allow the parent vehicles to queue on-site to keep Vacation Lane clear for buses and through-traffic. Replacement parking is provided at the redesigned lower parking lot off of Vacation Lane.

This “West” massing and site concept meets the budget and program goals for the project as well as addresses a variety of community concerns. This massing concept leaves the historic Stratford building intact and does not block views of either the central classroom wing facade or the south-facing gym facade. It does not alter the relationship between the central classroom wing and the field, and it connects to the existing building circulation network at the three main levels of the building. In addition, while the majority of the new addition footprint is located within the DPR (Department of Parks and Recreation Property), the addition does not impact the Stratford Park program.
The site plan for the recommended concept includes a driveway across the site to connect to Old Dominion Drive. This will be one-way, with exit-only access to Old Dominion Drive. It will be used for parent drop-off and pick-up only; during other hours it will be closed to vehicles and available for emergency access only. The drop-off location will be on the right side of the driveway at a new entry plaza located to the south of the existing gym facade. The driveway will be designed so the central area adjacent to the existing courtyard could be an outdoor hardscape space for appropriate programs (market fairs) throughout the school year. There will be a traffic signal at the intersection of the new driveway and Old Dominion. This signal will be pedestrian-actuated to provide a safe crossing across Old Dominion Drive into the site.

As noted above, the parking program for 1,000 students on this site with a TDM plan in place is 144 spaces to be located on site. This includes 10 spaces dedicated for park users. The expanded lower lot will be for visitors and staff, in addition to the existing upper lot and the parking that still remains at the loading dock entrance north of the new addition. The new driveway across the site and the new lower parking lot shift the playing field to the south and west. This shift should not impact the soccer field program requirements.
BUILDING SECTION

HEART OF SCHOOL

EXISTING GYM

AUX. GYM

ENTRY

FIRST FLOOR
292' - 6"

SECOND FLOOR
305' - 10"

THIRD FLOOR
319' - 2"

EXISTING GYM

KEY PLAN
ENVIRONMENTAL IMPACT

The plan will impact the existing trees on the site as shown in the accompanying plan. Trees are impacted by the new parking lot, the shifting of the field, and the driveway to Old Dominion. In Schematic Design the team will continue to refine the alignment of the driveway to reduce the impact on trees as much as possible while balancing the need for a safe condition for pedestrians and drivers.

In addition, there will be an increase in impervious area in the RPA largely from the widening of Vacation Lane to accommodate safety improvements for bus drop off and pick-up. APS and the design team will continue to work with the County throughout the use permit process to meet the requirements of the Chesapeake Bay Preservation Ordinance.

Open space/impervious area across both APS and DPR sites with proposed concept (existing in gray):

**APS Property (383,328 sf)**
- Building Coverage: 15.6% (15.0%)
- Roads/Paving: 31.5% (23.4%)
- Fields/Amenity: 14.2% (15.6%)
- Open Space: 38.7% (46.0%)

**DPR Property (172,609 sf)**
- Building Coverage: 5.7% (0.0%)
- Roads/Paving: 11.2% (20.5%)
- Fields/Amenity: 31.8% (31.8%)
- Open Space: 51.2% (47.0%)
HISTORIC PRESERVATION APPROACH

CELEBRATING AND MARKING A HISTORIC EVENT

Both APS and the community support making the historic events of February 2, 1959 a key part of the site design concept. The recommended scheme presents a number of opportunities for memorializing, celebrating and interpreting the momentous actions that led to the integration of Stratford Junior High. As Schematic Design moves ahead, the team will develop a plan for an interpretative exhibit and experience appropriate for this site.
At the request of Arlington County, APS is preserving an alternate site option that does not bring a driveway through the site to connect to Old Dominion. In this option the lower lot is demolished and a new larger lot that includes a parent drop-off is located off of Vacation Lane. Total parking spaces provided is the same as in the recommended concept (144 spaces). The field shifts west to accommodate the new parking/drop-off.

To connect to Old Dominion it must be demonstrated that the increased drop-off traffic warrants the traffic signal at the proposed drive. Preliminary studies suggest that the warrant would be met and initial conversations with VDOT indicate that they would not be opposed to an exit-only signal in this location.
## PROJECT COST AND FUNDING

### PROJECT COST (IN MILLIONS OF DOLLARS)

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Work (Recommended Site Option)</td>
<td>$6.38</td>
</tr>
<tr>
<td>Addition (35,000 GSF)</td>
<td>$17.56</td>
</tr>
<tr>
<td>Renovation of Existing Building</td>
<td>$6.77</td>
</tr>
<tr>
<td>APS Staff</td>
<td>$0.55</td>
</tr>
<tr>
<td><strong>TOTAL PROJECT COST</strong></td>
<td><strong>$31.26</strong></td>
</tr>
</tbody>
</table>

### PROJECT FUNDING (IN MILLIONS OF DOLLARS)

<table>
<thead>
<tr>
<th>Description</th>
<th>APS</th>
<th>COUNTY</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonds</td>
<td>$26.76</td>
<td>$0.00</td>
<td>$26.76</td>
</tr>
<tr>
<td>Other</td>
<td>$0.80</td>
<td>$0.00</td>
<td>$0.80</td>
</tr>
<tr>
<td>Joint Fund</td>
<td>$1.85</td>
<td>$1.85</td>
<td>$3.70</td>
</tr>
<tr>
<td><strong>TOTAL FUNDING</strong></td>
<td><strong>$29.41</strong></td>
<td><strong>$1.85</strong></td>
<td><strong>$31.26</strong></td>
</tr>
</tbody>
</table>

Note: Figures may not sum to totals due to rounding error.

### BLPC RECOMMENDED ADJUSTMENTS

- The BLPC recommends $5 million in additional funding to ensure instructional, safety, historic, recreational, community and environmental needs are balanced effectively during Schematic Design.
- With the BLPC recommendation the estimated project cost is $36.3 M.
BUILDING HISTORY

The existing school building on the site was designed by a prominent regional architect, Rhees E. Burket, Sr. and was constructed in 1950. It was originally named Stratford Junior High after the birthplace of Robert E. Lee. Currently it is home to two academic programs - the H-B Woodlawn Secondary School and the Stratford Program.

The building is one of the few intact examples of an International Style school building in Arlington County. Burket was a prolific architect who designed many schools in the Washington D.C. metropolitan area. He was renowned for his modern designs and for his understanding of how architects could support the evolving curricula of public schools in the modern era. By the 1950s, the International Style had gained popularity for public buildings because it was understood to be a physical expression of functionality.

The school opened on March 3, 1951. Despite criticism of the high cost of construction ($1.6 million), it was highly regarded and hailed as "state of the art." In later years there were two major additions to the building in 1995 and 2005. These additions will be discussed in the Site Overview section of this report.

On February 2, 1959 Stratford Junior High became the first integrated public school in Virginia. This important day in Virginia history is described in greater detail later on in this section.

For a detailed analysis of the existing building, its historical significance, its character-defining features, and preferred treatment recommendations, refer to the Historic Structures Report (HSR) prepared by Quinn Evans Architects for APS in April 2015.
ARCHITECTURAL SIGNIFICANCE

BUILDING HISTORY

VIEW FROM OLD DOMINION DRIVE (1951)

CENTRAL STAIR FROM MAIN ENTRANCE (1951)

GYM (1951)
Character-defining features of a historic structure are key to developing the preservation treatment and approach appropriate to the building. Character-defining features of a building embody its essence and convey its identity or special quality. These elements may include the form of the building, its materials, details, interior spaces or site and environmental features. For this building, the character-defining features are those that are related to the period of significance (1950 and/or 1959) and have an exemplary degree of craftsmanship, originality and/or connection to important historical events.

Character-defining features should be retained and preserved when possible. The identification of a feature is based on the best assessment at this time and may be subject to new information from a more detailed analysis at a future time. It is important also to consider these individual features within a greater context relative to the building’s overall massing and spatial configuration.

Refer to Section 1.5 of the Historic Structures Report (April 2015) for a detailed description of the character-defining features of the site and existing building.
On February 2, 1959, Stratford Junior High became the first public school in Virginia to integrate. The admission of four African-American students marked the end of the movement of “Massive Resistance” to oppose school integration in Virginia.

In May of 1954 the landmark ruling of the U.S. Supreme Court case *Brown v. Board of Education of Topeka* was handed down. It stated that the separate but equal school system was inherently unequal and violated the constitution. The leaders of the Commonwealth of Virginia were committed to fighting the ruling and a legal battle ensued over the next several years. In 1956 Arlington County was ordered to integrate by a federal judge, but the County used as many loopholes as possible to avoid desegregation. In other jurisdictions public schools were shut down to avoid desegregation. Lawsuits were brought, and by January 1959 the Virginia State Assembly repealed the laws of “Massive Resistance.”

Despite community members who gathered in opposition to the desegregation of Stratford Junior High, the integration on February 2, 1959 proceeded without incident. From photographs and documentation of the event, there is an assumption that the four students, supported by a large police presence, entered the school via the door northeast of the gym at the back of the school on the first day. It is thought that they chose this entrance because a crowd had gathered at the main entrance and the police were looking to protect the students from possible violence. For the remaining days of that first week the four students entered through the central stair tower door located along the central classroom south facade.

The integration of Stratford Junior High was a historic event for Arlington County and the Commonwealth of Virginia, and was the beginning of a lengthy process of integration that was not fully completed until 1971.
Stratford is designated as historic at the national and state levels but not locally. The national and state listings are honorific. Stratford is currently in the process of being considered for designation as a Local Historic District in Arlington County.

National

Stratford is listed on the National Register of Historic Places (NRHP) as “Stratford Junior High School” (listed 02/26/2004, NRHP #4000110). There is one building, one site, and one structure that are contributing resources within the property. There are four buildings and one structure that are noncontributing resources within the property.

State

Stratford is listed on the Virginia Department of Historic Resources’ Virginia Landmarks Register (VLR) as “Stratford Junior High School” (listed 12/03/2003, VDHR #000-9412). The documentation for the listing is the same as that for the National Register.

Local

Stratford is not listed on Arlington’s Local Historic Districts list. Local Historic Districts are designated by the County Board when there is sufficient historic merit. The term “historic district” includes both individual and collections of historic buildings, sites or objects.

If it is designated, the design of the addition will abide by the Stratford School Historic District Design Guidelines that are currently being drafted by the HALRB in collaboration with Arlington County Staff and APS. The Guidelines will incorporate the intent and process outlined in a 2004 Memorandum of Understanding (MOU) between Arlington Public Schools, Arlington County and the HALRB on local historic designation and review.
SITE OVERVIEW
EXISTING CONDITIONS

SITE PLAN

The APS site sits immediately adjacent to a Department of Parks and Recreation (DPR) site. The PFRC Guidelines for this project indicated that the two sites should be considered as one when determining the appropriate site for the building addition.

**APS Property site area**: 383,328 sf (8.80 acres)
**DPR Property site area**: 172,609 sf (3.96 acres)

**APS and DPR Property Zoning**: S-3A Special District

**Zoning of Surrounding Properties**:
- North, East, and West: R-6 (One-Family Dwelling District)
- South: R-5 (One-Family Restricted / Two-Family Dwelling District)

**APS Site Use**: Public Middle and High School (Under Special Use Permit)

The existing building has four levels. The majority of the academic programs are located on the three principal levels. The basement which contains a few elective classrooms, occupies only the easternmost portion of the overall building footprint. Recent construction includes HVAC upgrades and a new music wing. Technology improvements have also been made to the building over the years.
EXISTING CONDITIONS

SITE PHOTOS

1. VIEW WEST FROM N VACATION LANE
2. VIEW OF AUDITORIUM ENTRY
3. VIEW OF MAIN ENTRY AND BUS LOOP
4. VIEW OF WEST FACADE AND LOADING DOCK
5. VIEW NORTH FROM OLD DOMINION DRIVE
6. VIEW OF CENTRAL STAIR TOWER
The existing site is located adjacent to several Arlington neighborhoods including Cherrydale, Maywood, Waverly Hills, Donaldson Run, Woodmont and Lyon Village. Arlington has a robust pedestrian and bike network already in place. Streets outline in purple have dedicated bike lanes. The sidewalk network is outlined in brown; there are very few gaps along the main routes. In the Transportation section of this report there are several improvements recommended for the streets immediately surrounding the site that, if implemented, would succeed in connecting the site to the neighborhood network.
A pedestrian circulation network currently exists around the site. To the north, sidewalks along the south side of Vacation Lane extend into the adjacent neighborhood towards Lorcom Lane and Military Road. There is an existing path up the hill from the school to Old Dominion Drive. There is no pedestrian crossing location across Old Dominion Drive to the APS or DPR site. There are significant accessibility challenges across the site due to the steep topography. Several site strategies are proposed in the Transportation section of this report to improve pedestrian safety across the site. Pedestrian safety and accessibility will continue to be developed in Schematic Design.
Currently, there is no separation of modes on the site. While there is a clear bus loop at the primary entrance on Vacation Lane, there is a significant amount of overlap between parent pick-up and drop-off and the staff and bus circulation routes. In addition, buses serving the Stratford Program use 23rd St to access and exit the site. Because of the overlapping of car and bus traffic, conditions for pedestrians and safe crossings are less than optimal. Due to on-street parking and pedestrian paths, there are portions of 23rd Street and Vacation Lane that become rather narrow for bus traffic. Finally, at peak arrival times, buses back up onto Vacation Lane, presenting traffic congestion for through movement on Vacation Lane.

Increasing the student population to 1000 seats means more buses and cars will serve the site when it houses a new neighborhood middle school. During concept design many approaches for separating modes - including cars, buses, pedestrians and bicyclists - were studied.

Observations and recommendations about site vehicular circulation can be found in the Transportation section of this report.
Visitor and staff parking is distributed throughout the site around the building. Today there are 153 parking spaces on the APS and DPR sites combined: 57 spaces on APS property and 81 spaces on DPR property. Currently the spaces on DPR property adjacent to the school accessed via 23rd Street are used principally by school users. The loading dock is in the upper portion of that parking lot, on DPR property as well. DPR and APS will continue to share the parking spaces on DPR property in the future.
The existing green space on both the APS property and the DPR property consists of playing fields/courts, some unprogrammed occupiable green space, and a reasonable amount of steep slopes densely covered with trees. All field program will be retained with any proposed additions. The Stratford playing field will be able to accommodate soccer (minimum dimensions for adult games), ultimate frisbee, and a variety of other field sports.

In the northwest corner of the site is a Resource Protection Area (RPA), defined as an “extremely sensitive area within 100 ft of a stream, river or water body” by the Chesapeake Bay Preservation Ordinance. New construction (including new impervious area) in this area requires Arlington County review and is subject to the rules and regulations of the Ordinance (Chapter 61 of Arlington County Code).
EXISTING OPEN SPACE

APS Property (383,328 sf)
- Building Coverage: 15.0%
- Roads/Paving: 23.4%
- Fields/Amenity: 15.6%
- Open Space: 46.0%

DPR Property (172,609 sf)
- Building Coverage: 0.0%
- Roads/Paving: 20.5%
- Fields/Amenity: 31.8%
- Open Space: 47.0%
A total of 346 trees were surveyed on the APS site by the arborist and located by the civil engineering team. Trees on the DPR site have not been surveyed; the trees shown on the plan on DPR property are illustrative.

The existing trees on site have been assigned to four preservation priority categories:

**Preservation Priority 1**
1 tree
Special trees that have intrinsic or generational value to the community; a desirable species that could continue to live after site changes. Trees on this level would add considerable value to site if retained.

**Preservation Priority 2**
136 trees
Trees worth effort to save during construction, as may have great characteristics (such as form). Generally in good condition.

**Preservation Priority 3**
131 trees
Trees may be of an undesirable species and may be stressed or in a state of decline.

**Preservation Priority 4**
59 trees
Trees may be dead, severely declining or show presence of disease or pest that warrants removal.

There are 39 trees surveyed that have not yet been prioritized.
BUILDABLE AREA

Several potential opportunities for a building addition were identified during the concept development phase. One location (1) is at the east end of the existing building, on the existing lower parking lot. A second location (2) is to the south of the existing building, including the existing courtyard and extending south into the site to the west of the playing field. A third (3) location is adjacent to the west end of the building on the existing west parking lot. The first two locations are on APS property and the third location is nearly all on DPR property.

The plan below (right) illustrates how the different potential addition locations would connect to the existing building internal circulation. The building site immediately south of the central classroom block presents a strong opportunity to complete an internal circulation circuit with the existing building. Under this scenario, new classrooms will be adjacent to the existing classrooms and no parking spaces would be impacted by Phase 1 construction. The site to the west provides a reasonable connection to existing building circulation at the west end of the existing central corridor. The site to the east does not provide a good opportunity for connecting to the existing classrooms as the auditorium wing in that location does not have through circulation at all levels, and the corridors at that end of the building are narrow.

Required Building Setbacks:

Front Yards: Fifty (50) feet from centerline of any right-of-ways, but no less than twenty five (25) feet from any right-of-way line.

Side and Rear Yards: ten (10) feet plus one additional foot for each two and one half (2.5) feet above twenty five (25) feet in building height, or a minimum of twenty five (25) feet at any rear lot line.

Maximum Building Height: Forty five (45) feet.
Another unique feature of the site is the topography. The site is characterized by many areas of steep slope that are highlighted in orange.
EXISTING SITE SECTIONS

KEY PLAN

NORTH-SOUTH SITE SECTION

KEY PLAN

EAST-WEST SITE SECTION
EXISTING BUILDING PLANS
BASEMENT AND LEVEL 1
EXISTING BUILDING PLANS

LEVEL 2 AND LEVEL 3

- Library
- Food Service
- Physical Education
- Theater/Arts
- Building Support
- Admin
- Counseling/Clinic
- Core Classrooms
- Elective Classrooms
- Circulation

- Main Entrance
- Support Entrance
- Service Entrance

Stratford Middle School Renovation and Addition
Arlington Public Schools

Concept Design Report | 16 Nov 2015
Stratford Middle School Renovation and Addition  Arlington Public Schools  47
The existing building has gone through two major construction efforts in 1995 and 2005. Both increased classroom square footage through renovation and additions.

The 1995 effort included two additions, one in the southwest corner of the building (adjacent to the gymnasium wing) and the other on top of the roof deck outside of the former home economics suite (the north addition). The south addition demolished the stair within the west stair tower and enclosed the stair tower walls. The renovation added rooms on the first floor on the northwest side of the corridor that was previously unexcavated. The first floor auxiliary gymnasium and associated spaces throughout that wing were completely reconfigured to provide additional classrooms. The addition at the southwest corner provided a new stair (the former stair tower repurposed) and additional spaces. The third floor home economics suite was completely reconfigured to provide multiple classrooms. Ramps complying with ADA were added to the main entrance, the auditorium lobby, and from the corridor up to the former home economics suite on the third floor. A parking area was added to the south of the building adjacent to the gymnasium wing.

The 2005 addition made some modifications to the south facade of the auditorium wing. The basement of the addition added a large vocal classroom, library, practice room, a small music theory classroom, one office, and a stair. The first floor added a large band room, several storage rooms, two practice rooms, and a small library.

In addition, there are currently three relocatable classrooms in the existing courtyard (shown in yellow).
**DEVELOPMENT OF EDUCATION SPECIFICATIONS**

**PROCESS SUMMARY**

Development of the programmatic criteria and educational specifications for the new Stratford Middle School is based on comparison and guidance from the following sources: 2004 APS Middle School Education Specifications (for 850 students), comparison to other APS middle schools, the 2013 Guidelines for School Facilities in Virginia’s Public Schools, input from staff and educators, and learning environment trends and developments informed by the design team. APS staff and educators met with the design team on 5/11/15, 6/8/15, and 10/21/15 to discuss the development of the education specifications. This collaboration will continue through Schematic Design when the education specifications will be finalized. The numbers represented in this report represent conceptual level programmatic planning and will continue to evolve in the next phase of the project.

The education specifications are developed in two stages. First, the education specifications are revised to reflect general APS middle facility requirements, then the specifications are analyzed in the context of the site specific challenges and opportunities presented by the existing building.

A target range for the program was identified using the APS 2004 education specifications and comparison to existing APS middle schools. During early phases of concept development the addition was anticipated to be 45,000 SF. Following cost evaluation exercises in August of 2015 the project team was asked to reduce the addition square footage to 35,000 SF.

The chart on this page describes how the proposed 35,000 SF and 45,000 SF additions compare to other Arlington Middle School projects and averages and the education specifications from 2004.

The 35,000 SF addition is just above the current average area per student across Arlington middle schools.

The design team was asked to look at the implications of the program requirements for both 1000 students and consider the impacts of adding 300 students in the event of a future Phase 2 project. See Phase 2 discussion in the “Additional Studies” section.

---

<table>
<thead>
<tr>
<th></th>
<th>GSF*</th>
<th>Capacity</th>
<th>GSF/Student</th>
<th>GSF/Student Adjusted**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing + 45,000 Addition</td>
<td>183,000</td>
<td>1000</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>Existing + 35,000 Addition</td>
<td>173,000</td>
<td>1000</td>
<td>173</td>
<td></td>
</tr>
<tr>
<td>Existing without addition</td>
<td>138,000</td>
<td>~850</td>
<td>~162</td>
<td></td>
</tr>
<tr>
<td>2004 Ed Spec Min (850 s)</td>
<td>157,479</td>
<td>850</td>
<td>185</td>
<td></td>
</tr>
<tr>
<td>2004 Ed Spec Max (850 s)</td>
<td>168,450</td>
<td>850</td>
<td>198</td>
<td></td>
</tr>
<tr>
<td>Kenmore</td>
<td>206,188</td>
<td>985</td>
<td>209</td>
<td>209</td>
</tr>
<tr>
<td>Williamsburg</td>
<td>170,685</td>
<td>997</td>
<td>171</td>
<td>171</td>
</tr>
<tr>
<td>Gunston</td>
<td>209,212</td>
<td>932</td>
<td>224</td>
<td>179</td>
</tr>
<tr>
<td>Jefferson</td>
<td>219,070</td>
<td>982</td>
<td>223</td>
<td>154</td>
</tr>
<tr>
<td>Swanson</td>
<td>132,158</td>
<td>948</td>
<td>139</td>
<td>139</td>
</tr>
<tr>
<td>APS Middle School Average</td>
<td></td>
<td></td>
<td>193</td>
<td>170</td>
</tr>
</tbody>
</table>

2004 MIDDLE SCHOOL ED SPEC: 850 STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>185 GSF/STUDENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>198 GSF/STUDENT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2015 DRAFT MIDDLE SCHOOL ED SPEC: 1,000 STUDENTS

<table>
<thead>
<tr>
<th></th>
<th>MIN</th>
<th>MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>170 GSF/STUDENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 GSF/STUDENT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Building square footage above does not include relocatables.
**GSF/Student Adjusted reflects the gsf/student for each institution adjusted to exclude shared community use space. Gunston GSF does not include the scene shop or the community center. Jefferson GSF does not include the community center or the service wing. Jefferson GSF includes 11,000 sf of the gym, the remainder of the gym is shared with community use.
The footprints of the middle schools in Arlington were overlaid onto the site to understand relative size and scale. Gross building area does not include relocatables or community use areas. The number of floors, building areas, and student capacities are as follows:

Kenmore - 206,188 GSF – 985 students (209 GSF/student)
Williamsburg - 170,865 GSF – 997 students (171 GSF/student)
Gunston - 166,828 GSF – 932 students (179 GSF/student)
Jefferson - 151,228 GSF – 982 students (154 GSF/student)
Swanson - 132,158 GSF – 948 students (139 GSF/student)
Diagrammatic program areas show the distribution of program and area sizes for planning a 183,000 SF school. These areas include existing areas of the school and the new building addition.
10,000 SF of program was removed to support budget alignment efforts. The diagram and list below highlight the program that is proposed to be removed. However, this list is preliminary and will continue to be refined with input from APS staff and educators during Schematic Design.

**Recommended reductions:**
- 3000 SF: Support Space for Additional 10,000 SF (Halls, MEP, etc.)
- 1000 SF: Reduce Size of Locker Rooms
- 600 SF: Remove Student Activity Center
- 1100 SF: Reduce Gym Storage + Offices (Mostly Existing to Remain)
- 600 SF: Remove 2 Special Ed Resource Rooms
- 700 SF: Remove Drama Classroom
- 3000 SF: Maintain Existing Media Center

**Other Options:**
- 100 - 200 SF each: Remove Offices
- 1500 SF: Repurpose Weight Room as Auxiliary Gym
- 1100 SF: Remove Business Lab
- 750 SF: Remove 1 Elective Classroom
- 300 SF: Reduce Teacher Work Areas
- 700 - 1000 SF each: Remove Flex Classroom / Lab

**KEY POINTS**
- 1,000 Students
- 9 Academic Teams
- 138,000 sf existing + 35,000 sf addition = 173,000 sf

**Renovations and Additions:**
- Create Team Communities
- New Auxiliary Gym
- Expansion of Elective Spaces

**Existing to Remain:**
- Performing Arts, Auditorium, and Cafeteria
- Library will be studied to evaluate the budget for relocating or expanding.
The program chart compares the 2004 APS middle school education specification for 850 students with proposed updated general education specification areas for 1000 students, and the preliminary site specific education program projections. This base program is used as a target for the development of the site specific Stratford Middle School program.

The existing building is 138,000 SF. The proposed site specific education specification includes existing areas, renovated areas, and new areas.

The total gross program area includes a 38% factor for circulation, chases, and wall thicknesses and is representative of typical school planning. The existing HB Woodlawn / Stratford building exceeds 38% for gross areas.

<table>
<thead>
<tr>
<th>PRELIMINARY MIDDLE SCHOOL PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREVIOUS ED SPEC (850 STUDENTS), PROPOSED GENERAL ED SPEC (1000 STUDENTS), SITE SPECIFIC ED SPEC (1000 STUDENTS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SSES Dept.</th>
<th>Program</th>
<th>2004 APS ED SPEC (850 Students) SF (Min-Max)</th>
<th>Proposed Ed Spec 1000 Students DEPT. TOTALS SF (Min-Max)</th>
<th>Proposed Stratford SSES 1000 Students DEPT. TOTALS SF (Min-Max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>1970</td>
<td>2680</td>
<td>2880</td>
<td>2935</td>
</tr>
<tr>
<td>Counseling Services</td>
<td>570</td>
<td>920</td>
<td>912</td>
<td></td>
</tr>
<tr>
<td>Student Services</td>
<td>1670</td>
<td>1950</td>
<td>2050</td>
<td>1540</td>
</tr>
<tr>
<td>Clinic</td>
<td>865</td>
<td>815</td>
<td>915</td>
<td>722</td>
</tr>
<tr>
<td>Food Services</td>
<td>8060 - 9860</td>
<td>9130</td>
<td>10830</td>
<td>8753</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>4000</td>
<td>4500</td>
<td>6000</td>
<td>4935</td>
</tr>
<tr>
<td>Kitchen</td>
<td>1000</td>
<td>1000</td>
<td>1200</td>
<td>509</td>
</tr>
<tr>
<td>Auxiliary Services</td>
<td>4200</td>
<td>4800</td>
<td>5550</td>
<td>4533</td>
</tr>
<tr>
<td>Book Storage</td>
<td>300</td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Teacher Work Areas</td>
<td>1000</td>
<td>1000</td>
<td>1250</td>
<td>1000</td>
</tr>
<tr>
<td>Staff Lounges</td>
<td>450</td>
<td>450</td>
<td>725</td>
<td></td>
</tr>
<tr>
<td>Library</td>
<td>5520 - 6520</td>
<td>6970</td>
<td>8820</td>
<td>3925</td>
</tr>
<tr>
<td>Reading Room</td>
<td>3500 - 4500</td>
<td>4000 - 5000</td>
<td>2538 - 4000</td>
<td></td>
</tr>
<tr>
<td>Group Instruction / Performing Arts</td>
<td>5400</td>
<td>4555</td>
<td>8195</td>
<td>6467</td>
</tr>
<tr>
<td>Auditorium</td>
<td>3500 - 4500</td>
<td>3500 - 4500</td>
<td>3638</td>
<td></td>
</tr>
<tr>
<td>Stage</td>
<td>1200</td>
<td>1200</td>
<td>1241</td>
<td></td>
</tr>
<tr>
<td>Drama</td>
<td>700 - 750</td>
<td>700 - 750</td>
<td>779</td>
<td></td>
</tr>
<tr>
<td>Core Classrooms**</td>
<td>29620 - 30970</td>
<td>35170</td>
<td>37920</td>
<td>34838</td>
</tr>
<tr>
<td>6th Grade Core</td>
<td>700 - 750 (9)</td>
<td>700 - 750 (9)</td>
<td>650 - 800 (9)</td>
<td></td>
</tr>
<tr>
<td>6th Grade Science</td>
<td>1200</td>
<td>1100 - 1200</td>
<td>800 - 1200</td>
<td>800 - 1200</td>
</tr>
<tr>
<td>6th Grade Flex Classroom</td>
<td>700 - 750</td>
<td>700 - 725</td>
<td>725 - 800</td>
<td></td>
</tr>
<tr>
<td>6th Grade Science</td>
<td>900</td>
<td>1100 - 1200</td>
<td>950 - 1200</td>
<td>1200</td>
</tr>
<tr>
<td>7th Grade Core</td>
<td>700 - 750 (9)</td>
<td>700 - 725</td>
<td>725 - 800</td>
<td></td>
</tr>
<tr>
<td>7th Grade Science</td>
<td>1000 - 1200</td>
<td>1014 - 1200 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7th Grade Flex Classroom</td>
<td>700 - 750</td>
<td>700 - 750 (9)</td>
<td>700 - 750 (9)</td>
<td>700 - 750</td>
</tr>
<tr>
<td>8th Grade Core</td>
<td>900</td>
<td>1100 - 1200</td>
<td>1014 - 1200</td>
<td>1200</td>
</tr>
<tr>
<td>8th Grade Science Lab</td>
<td>700 - 750</td>
<td>700 - 750 (9)</td>
<td>700 - 750 (9)</td>
<td>700 - 750</td>
</tr>
<tr>
<td>8th Grade Flex Classroom</td>
<td>700 - 750</td>
<td>700 - 750</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art</td>
<td>3400</td>
<td>3300</td>
<td>3500</td>
<td>2622</td>
</tr>
<tr>
<td>Art Lab</td>
<td>1650</td>
<td>1650</td>
<td>1388</td>
<td>1650</td>
</tr>
<tr>
<td>Computer Graphics Lab</td>
<td>850</td>
<td>1000 - 1200</td>
<td>815 - 1000</td>
<td></td>
</tr>
<tr>
<td>Music</td>
<td>6300</td>
<td>4860</td>
<td>6510</td>
<td>5175</td>
</tr>
<tr>
<td>Band</td>
<td>1800</td>
<td>1800 - 2000</td>
<td>1917</td>
<td></td>
</tr>
<tr>
<td>Vocal</td>
<td>1500</td>
<td>1500</td>
<td>1629</td>
<td></td>
</tr>
<tr>
<td>Instrumental/Orchestra</td>
<td>1200</td>
<td>0 - 1200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Preliminary Middle School Program - cont.

<table>
<thead>
<tr>
<th>SSESDepartment</th>
<th>Program</th>
<th>2004 APS ED SPEC (850 Students)</th>
<th>Proposed Ed Spec 1000 Students</th>
<th>Proposed Stratford SSE 1000 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SF (Min-Max)</td>
<td>DEPT. TOTALS</td>
<td>SF (Min-Max)</td>
</tr>
<tr>
<td>Work &amp; Family Studies</td>
<td></td>
<td>3050</td>
<td>3050</td>
<td>3250</td>
</tr>
<tr>
<td>Nutrition Lab/Demo/Sewing</td>
<td></td>
<td>1850</td>
<td>1850</td>
<td>1908</td>
</tr>
<tr>
<td>Storage</td>
<td></td>
<td>200</td>
<td>200</td>
<td>200</td>
</tr>
<tr>
<td>Interior Design &amp; CADD/Tech ED</td>
<td></td>
<td>1000</td>
<td>1000 - 1200</td>
<td>1079</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
<td>3000</td>
<td>19040 - 22140</td>
<td>18090 - 27990</td>
</tr>
<tr>
<td>Gym</td>
<td></td>
<td>8000 - 10500</td>
<td>8000 - 15600</td>
<td>7077</td>
</tr>
<tr>
<td>Auxiliary Gym</td>
<td></td>
<td>2000</td>
<td>2500</td>
<td>2500 - 2500</td>
</tr>
<tr>
<td>Locker/Shower/Toilet</td>
<td></td>
<td>3000</td>
<td>2000 - 3000</td>
<td>1500 - 2000</td>
</tr>
<tr>
<td>Health Classroom</td>
<td></td>
<td>700 - 750 (2)</td>
<td>700 - 750 (2)</td>
<td>700 - 1000 (2)</td>
</tr>
<tr>
<td>Technology Education</td>
<td></td>
<td>2780 - 3280</td>
<td>500</td>
<td>2780 - 3280</td>
</tr>
<tr>
<td>Tech Lab</td>
<td></td>
<td>1000 - 1200</td>
<td>1000 - 1200</td>
<td>948</td>
</tr>
<tr>
<td>Tech Lab-machine / R&amp;D</td>
<td></td>
<td>1200 - 1500</td>
<td>1200 - 1500</td>
<td>1142</td>
</tr>
<tr>
<td>Elective Classrooms</td>
<td></td>
<td>3530 - 3630</td>
<td>5980</td>
<td>6630</td>
</tr>
<tr>
<td>Exemplary Projects</td>
<td></td>
<td>650</td>
<td>700</td>
<td>0 - 700</td>
</tr>
<tr>
<td>Business Lab/Decision Theater</td>
<td></td>
<td>830</td>
<td>830</td>
<td>1038</td>
</tr>
<tr>
<td>Journalism</td>
<td></td>
<td>700</td>
<td>700</td>
<td>725</td>
</tr>
<tr>
<td>Foreign Language</td>
<td></td>
<td>700 - 750 (1)</td>
<td>700 - 750 (1)</td>
<td>500 - 900 (4)</td>
</tr>
<tr>
<td>Reading Classroom</td>
<td></td>
<td>700 - 750 (3)</td>
<td>700 - 750 (3)</td>
<td>600 - 700 (3)</td>
</tr>
<tr>
<td>Special Education &amp; Instructional Support</td>
<td></td>
<td>3970</td>
<td>7820</td>
<td>8120</td>
</tr>
<tr>
<td>HILT/HILTEX</td>
<td></td>
<td>700 - 750 (1)</td>
<td>700 - 750 (2)</td>
<td>650 - 700 (2)</td>
</tr>
<tr>
<td>Special Education Support Class</td>
<td></td>
<td>500 (2)</td>
<td>700 - 750 (3)</td>
<td>650 - 700 (3)</td>
</tr>
<tr>
<td>Interlude</td>
<td></td>
<td>700 - 750</td>
<td>700 - 750</td>
<td>700</td>
</tr>
<tr>
<td>Special Education Resource</td>
<td></td>
<td>500 (1)</td>
<td>500 (3)</td>
<td>430 - 500 (2)</td>
</tr>
<tr>
<td>OT/PT</td>
<td></td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>Life Skills Lab</td>
<td></td>
<td>500</td>
<td>500</td>
<td>500</td>
</tr>
<tr>
<td>In School Alternative</td>
<td></td>
<td>300</td>
<td>300</td>
<td>300</td>
</tr>
<tr>
<td>Custodial Support</td>
<td></td>
<td>1710</td>
<td>1950 - 2050</td>
<td>1328</td>
</tr>
<tr>
<td>Building Support</td>
<td></td>
<td>11960</td>
<td>11960</td>
<td>11766</td>
</tr>
<tr>
<td>Student Spaces</td>
<td></td>
<td>500</td>
<td>800</td>
<td>1000</td>
</tr>
<tr>
<td>Student Activities Room</td>
<td></td>
<td>500</td>
<td>600</td>
<td>800</td>
</tr>
<tr>
<td>Student Store</td>
<td></td>
<td>150</td>
<td>150</td>
<td>86</td>
</tr>
<tr>
<td>Gross Area - Circulation, Chases, Wall Thickness</td>
<td></td>
<td>43364 - 46385</td>
<td>49202</td>
<td>58072</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>157479 - 168450</td>
<td>178682 - 210892</td>
<td>172788 - 185892</td>
</tr>
</tbody>
</table>
Challenges:
• Insufficient Main Entry
• No current “heart of School”
• Instructional spaces without daylight
• Size and location of Media Center
• Size of Gym
• Size of Cafeteria
• Isolated location of arts and music classroom

Opportunities:
• Retain use of Main Entry and site features for bus drop-off
• Create “heart of school” in addition
• Find compatible uses for spaces without daylight (i.e. not classrooms)
• Provide new Media Center and repurpose existing
• Add Auxiliary Gym
• Relocate teacher lunchroom(s) to expand cafeteria capacity for students
• Improve basement level circulation and connection

LOCATIONS OF LARGE PROGRAM AREAS

POTENTIAL ADDITION SITES

POTENTIAL CIRCULATION CONNECTION
EXISTING CONDITIONS
ROAD AND PARKING NETWORK

1. H-B Bus Loop
2. Vacation Lane
3. Upper Lot
4. Lower Lot
5. 23rd Street
6. Old Dominion Drive
7. Military Road
8. West Parking Lot

DPR PROPERTY
APS PROPERTY
EXISTING CONDITIONS

GENERAL ARRIVAL / DISMISSAL OBSERVATIONS

Seven site visits were conducted in the spring of 2015 to observe drop-off and pick-up from buses and cars as it occurs today for the H-B Woodlawn program. The following pages summarize key observations from these visits:

- At H-B, arrival and dismissal are currently staggered as bell times are staggered.
- H-B bus and parent drop-off/pick-up via Vacation Lane.
- Stratford Program bus and parent drop-off/pick-up in back lot via 23rd Street.
- No formalized parent drop-off and pick-up procedure.
- Minimal staff support for H-B arrival and dismissal, and no formal process for drop-off and pick-up.

The graphic above compares the existing arrival trips for the staggered bell times at H-B Woodlawn with the expected arrival trips at the proposed new MS with 1,000 seats for one starting bell time.
**SITE OBSERVATIONS**

**H-B Bus Loop**
- Bus loop holds a maximum of 9 buses.
- Bus loop is sometimes used by parents for drop-off/pick-up, usually when buses not present.
- Buses headed westbound on Vacation Ln can have difficulty turning out of the bus loop.

**Vacation Lane**
- Students walk on the north side of Vacation Ln and across the bus loop island on south side of Vacation Ln, where there are no sidewalks.
- Street is not wide enough for passing two-way traffic throughout. Buses and parent vehicles must sometimes yield to oncoming traffic before proceeding.
- Parent behavior sometimes contributes to back-ups (e.g., dropping-off/picking-up in no parking zones).
- During early dismissal, 10 buses fit between the upper parking lot and 23rd (including the bus loop) and 3 are lined up on Vacation between 23rd and Lorcom.
- Special education bus parks east of bus loop exit, sometimes blocking traffic.
- School bus stop at Vacation Ln and 23rd St serves Taylor Elementary and Arlington Traditional.
- At times there is an ice cream truck at intersection of Vacation Ln and 23rd St.

**Upper Lot**
- Parents drop-off/pick-up in upper lot. This is the primary drop-off/pick-up location as observed.
- Parents queue near western exit for pick-up, blocking parked cars.
- Students crossing to waiting parents often use the most direct path to the waiting car, and do not always use the marked crosswalk.

**Lower Lot**
- Parents drop-off/pick-up in lower lot.
- Parents queue at pick-up, blocking parked cars.
- Limited parent drop-off/pick-up observed at lower lot.

**Parent Pick-up on Vacation Lane Blocks Traffic**

**Existing Bus Loop**

**Bus Dropping off Outside of Bus Loop Blocks Traffic**
EXISTING CONDITIONS

SITE OBSERVATIONS

23rd Street
• No sidewalks, except for a short segment between Lorcom and Stratford driveway access.
• Driveway access narrow and steep. Buses and parent vehicles must sometimes yield to opposing traffic before proceeding.
• Poor visibility at 23rd and Lorcom for cars exiting onto Lorcom.

Old Dominion
• No pedestrian crossing between Military and Lorcom.
• No vehicular access to site.
• Observed 85th percentile speed was 45 mph but speed limit is 35 mph, indicating potential speeding issues.
Surrounding the site are several key intersections that present challenges for both pedestrians, bicyclists and drivers.

1. **“Five Points” Intersection**
   Five-legged signalized intersection of Old Dominion Dr, Lee Hwy, Military Rd, Lee Hwy, and Quincy St. Complicated geometry makes intersection challenging for all modes, particularly pedestrians and bicyclists. The County has a plan underway to improve this intersection for pedestrians.

2. **Old Dominion and Lorcom Lane**
   Signalized intersection with a skew, which requires some channelized right turns, increases intersection size, and increases crossing distances for pedestrians.

3. **Lorcom Lane and Vacation Lane**
   Stop controlled for traffic on Vacation Ln with high-visibility crosswalk markings across Lorcom Ln.

4. **Military Road and Vacation Lane**
   Stop controlled for traffic on Vacation Ln with high-visibility crosswalks across Vacation Ln and across the south side of Military Rd.
KEY INTERSECTIONS AROUND THE SITE - CHALLENGES

Intersection Challenges:

Five Points
• Challenging for pedestrians and bicyclists to navigate.
• Currently operates at level of service (LOS) F for vehicular traffic.

Intersection of Old Dominion and Lorcom
• Northbound movement currently operates at LOS E/F for vehicular traffic.

Intersection of Lorcom and Vacation
• At arrival, difficult for pedestrians and bicyclists to find gaps in traffic across Lorcom.
• North and southbound movements from Vacation operate at LOS E/F for vehicular traffic.

Intersection of Military and Vacation
• At arrival, difficult for pedestrians and bicyclists to find gaps in traffic across Military.
• Currently operates without significant delays for vehicular traffic.
Estimated Buses

It is estimated that 13 buses will need to serve the students at the proposed MS. Bus estimates are based on the number of buses serving Swanson and Williamsburg and were vetted with the APS Routing and Planning Coordinator.

Estimated Vehicle Trips

It is estimated that during the AM peak hour there will be 804 trips and 505 trips for the PM peak hour. Estimated AM and PM vehicle trips include parent, staff, visitor, and bus travel to and from the Stratford site. Each parent-drop off or pick-up results in two trips—one trip to the school and one trip from the school. Likewise each bus drop-off or pick-up includes two trips.

For a 1,000 seat middle school, parent trips are estimated based on a 35% drive rate, which is the 75th percentile for APS neighborhood middle schools and roughly equivalent to the average drive rate for Williamsburg Middle School in 2013 and 2014 based on survey data. The average drive rate for neighborhood middle schools in the County is approximately 29%.

Recommended On-Site Parking

Parking Recommended parking on-site parking is based on projected staff for Stratford site and staff drive rate of 87%, 5% less than the existing average staff drive rate for APS neighborhood middle schools of 92%. Recommended on-site parking also includes 10 reserved spaces for park users and assumes that 14 on-street spaces can be used by Stratford staff and visitors. It is estimated that up to 49 spaces on-street spaces are utilized by the students, staff, and visitors connected with the existing programs. Therefore, if the recommended number of spaces is provided, parking impacts on neighborhood streets would actually be diminished.

TDM Potential

In the context of schools, Transportation Demand Management (TDM) means implementing strategies to reduce traffic impacts by encouraging and enabling students, staff, and visitors to travel to school by walking, bicycling, riding the school bus, taking transit, carpooling, or other alternatives to a single occupancy vehicle.

At Stratford there is significant potential to support student walking and bicycling due to the area’s existing pedestrian and bicycle infrastructure and the number of APS students who live within walking and bicycling distance of the school site.
RECOMMENDATIONS

Old Dominion Drive at School Property
- Install signal or pedestrian hybrid beacon (HAWK) for pedestrian crossing of Old Dominion Drive to school site.
- Complete sidewalk on south side of Old Dominion to support.

Lorcom Lane from Military Road to Old Dominion Drive
- Adjust bike lanes and shared lane markings on Lorcom so bike lane is provided in the uphill direction (climbing lane).

Lorcom Lane and Old Dominion Drive
- Provide two northbound thru lanes for motor vehicles.
**RECOMMENDATIONS**

**VACATION LANE IMPROVEMENTS**

**Intersection of Vacation Lane and Lorcom Lane**
- Mark high-visibility crosswalks on north and south legs of intersection (i.e., where crosswalks currently missing).
- Upgrade curb ramps to meet current ADA guidelines.
- Install rapid flashing beacon.
- Crossing guard.
- Install curb extension to support Lorcom Lane crossing.

**Vacation Lane from Lorcom Lane to Military Road**
- Complete sidewalk network on both sides of Vacation between Military and Lorcom.
- Carry sidewalk across parking lot driveway openings to indicate pedestrian priority.
- Mark crosswalks for bus loop crossings.
- Implement curb extensions to support Military Road crossings and shorten pedestrian crossing distances.
- Upgrade curb ramps to meet current ADA guidelines.
- Mark high-visibility crosswalk on north leg.
- Install rapid flashing beacon.
- Crossing guard.

**Intersection of Vacation Lane and Military Road**
- Implement curb extensions to support Military Road crossings.
- Reduce curb radius on northeast corner.
- Mark high-visibility crosswalks on all legs (west leg already has high-visibility crosswalks).

**Vacation Lane at Bus Loop Exit**
- Install raised crosswalk across Vacation.
- Provide curb extension on south side.
- Provide curb lane on south side between curb extension and lower lot entrance.

**Intersection of Vacation Lane and 23rd Street**
- Install raised intersection.
Throughout the Concept Design phase, a possible Phase 2 addition for 300 additional students was studied with all site and massing options. For the recommended option, the additional sites are shown here. The courtyard site and the site at the lower lot were explored as Phase 1 sites, and remain valid options for Phase 2. In addition, the recommended addition at the west of the existing building could be expanded to the north. The west expansion and the site on the lower lot would require structured parking as part of the addition as they are on existing parking lots. The west expansion also would require a reduction (or relocation) of part of the existing DPR Stratford Park program.
Phase 2 for 300 additional students (total 1,300 students) would require an addition of 45,000 gsf - 52,000 gsf for a total of 218,000 gsf - 225,000 gsf on the site. Buses, car trips and parking required are shown in the table at right.

300 additional students would create 3 additional Academic Teams at the Middle School. Other key program elements are listed below:

**Key Renovations and Additions:**
- Create New Team Communities
- New Media Center (if not provided in Phase 1)
- New Orchestra Room and Main Gym
- Expansion of Cafeteria and Elective Spaces
- New Structured Parking

**Existing to Remain:**
- Auditorium

Program areas and phasing for the large program spaces - Library, Cafeteria, Gym, Auxiliary Gym, Auditorium, and Music rooms - were studied to understand the impact in choosing to renovate these spaces in Phase 1, Phase 2 or in both. The chart to the right describes the amount of area each of these large box areas requires for Phase 1 and 2.

Phase 2 would require building a new gym and would transform the existing gym into a larger auxiliary gym and make the renovated Phase 1 auxiliary gym into a dance room.

<table>
<thead>
<tr>
<th>Library - Reading Room</th>
<th>EXISTING SF 691 Students</th>
<th>PHASE 1 SF 1000 Students</th>
<th>PHASE 2 SF 1300 Students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2500</td>
<td>2500</td>
<td>5000</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>5650</td>
<td>5650</td>
<td>6100</td>
</tr>
<tr>
<td>Gym</td>
<td>7100</td>
<td>7100</td>
<td>10800</td>
</tr>
<tr>
<td>Auxiliary Gym</td>
<td>None</td>
<td>2500</td>
<td>7100</td>
</tr>
<tr>
<td>Auditorium</td>
<td>± 450 seats</td>
<td>± 450 seats</td>
<td>± 450 seats</td>
</tr>
<tr>
<td>Vocal</td>
<td>1600</td>
<td>1600</td>
<td>1600</td>
</tr>
<tr>
<td>Band</td>
<td>1900</td>
<td>1900</td>
<td>1900</td>
</tr>
<tr>
<td>Orchestra</td>
<td>None</td>
<td>None</td>
<td>1200</td>
</tr>
</tbody>
</table>

All numbers unless otherwise noted indicate square foot area.

**TRANSPORTATION PROGRAM - PHASE 2**

<table>
<thead>
<tr>
<th>Estimated Buses</th>
<th>17 buses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated Vehicle Trips—AM peak hour</td>
<td>898 trips</td>
</tr>
<tr>
<td>Estimated Vehicle Trips—PM peak hour</td>
<td>567 trips</td>
</tr>
<tr>
<td>Recommended On-Site Parking</td>
<td>188 spaces</td>
</tr>
</tbody>
</table>
CONCEPTS STUDIED
SITE ACCESS

Concept Design began in April 2015 and continued through November. In conjunction with Toole’s transportation analysis, the design team presented a variety of site access options to the BLPC and PFRC which were studied and discussed at length. The options included everything from virtually no change in the site road network to a study of a new drop-off loop off of Old Dominion Drive to several options for a site drive through the site. Along with the site access options the design team identified potential sites for the new addition and tested numerous massing possibilities. All viable sites were tested, including the possibility of building below-grade. The site and massing studies led to four developed concepts with Phase 1 at 45K gsf and Phase 2 with additional 45K gsf. After the program was reduced to 35K gsf the options were revisited, and the West was ultimately chosen as the preferred option.
CONCEPTS STUDIED
BUILDING MASSING

INITIAL MASSING STUDIES - 45K GSF

- LOW BAR - 2 STORIES
- CENTRAL BAR - 3 STORIES
- MASSING ON LOWER LOT
- MASSING SOUTH OF THE GYM

FOUR OPTIONS - 45K GSF PHASE 1, 45K GSF PHASE 2

- TERRACE - 45K, WITH PHASE 2
- LINK - 45K, WITH PHASE 2
- HILL - 45K, WITH PHASE 2
- WEST - 90K, PHASE 1 + PHASE 2

FOUR OPTIONS - 35K GSF PHASE 1 ONLY

- TERRACE
- LINK
- EAST
- WEST (RECOMMENDED)