

Facilities Optimization Study

SY 2017-18



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EXECUTIVE SUMMARY

The Arlington Public Schools (APS) Facilities Optimization Study was conducted over the course of three months during the summer of 2017 in response to the need for capital projects to meet growing student enrollment. The study establishes a maximum occupancy for temporary relocatable classrooms in each school in the APS system. This document provides APS staff with data to make informed decisions around APS budgeting, facilities, and programs. The analysis in this report was conducted by APS staff from Facilities Planning, Design and Construction Services, Maintenance Services and Risk Management. Specific information about each school is provided, as well as total overall impacts by elementary, middle and high schools. See Tables 1, 2 & 3 for the "maximum" and "preferred" number of relocatable classrooms and potential additional seats.

Table 1
Number of Additional Relocatable Classrooms and
Seats for Elementary Schools

1	2	3	4	5
Elementary Schools	Total Maximum Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Total Maximum Number of Potential Additional Seats ¹	Total Preferred Number of Potential Additional Seats²
Abingdon	-	-	589	589
Arl Science Focus	14	12	889	841
Arl Traditional	18	12	897	753
Ashlawn	8	8	876	876
Barcroft	20	20	940	940
Barrett	8	8	768	768
Campbell	8	8	628	628
Carlin Springs	16	16	969	969
Claremont	11	10	863	839
Discovery	-	-	630	630
Drew	32	20	1,442	1,154
Fleet	-	-	-	-
Glebe	12	12	798	798
Henry	12	10	751	703
Hoffman-Boston	22	12	1,094	854
Jamestown	10	10	837	837
Key	20	4	1,133	749
Long Branch	4	4	629	629
McKinley	6	6	828	828
Nottingham	18	12	945	801
Oakridge	8	8	866	866
Randolph	4	4	580	580
Reed Expnasion	-	-	-	-
Taylor	16	8	1,043	851
Tuckahoe	4	4	641	641
TOTAL	271	208	19,636	18,124

Notes:

- 1 Total maximum number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats gained as a result of the potential relocatable classrooms.
- 2 Total preferred number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats gained as a result of the potential relocatable classrooms.

Table 2
Number of Additional Relocatable Classrooms and
Seats for Middle Schools

1	2	3	4	5
Middle Schools	Total Maximum Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Total Maximum Number of Potential Additional Seats ¹	Total Preferred Number of Potential Additional Seats ²
Gunston	36	32	1,688	1,604
Jefferson	7	1	1,233	1,107
Kenmore	48	12	1,993	1,237
Swanson	22	22	1,410	1,410
New MS @ Stratford	-	-	-	-
Williamsburg	30	26	1,627	1,543
New School @ Wilson	-	ı	-	-
TOTAL	143	93	7,951	6,901

Notes:

- 1 Total maximum number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats gained as a result of the potential relocatable classrooms.
- 2 Total preferred number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats gained as a result of the potential relocatable classrooms.

Table 3

Number of Additional Relocatable Classrooms and
Seats for High Schools

1	2	3	4	5
High Schools	Total Maximum Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Total Maximum Number of Potential Additional Seats ¹	Total Preferred Number of Potential Additional Seats ²
Arl Career Ctr	8	8	318	318
Arl Community HS	-		300	300
Arlington Tech	-		150	150
H-B Woodlawn	3	-	453	390
Langston	-	-	150	150
Stratford	1	-	54	33
Wakefield	56	-	3,079	1,903
Washington-Lee	36	22	2,964	2,670
New School @ Wilson	-	-	-	-
Yorktown	-	-	1,879	1,879
TOTAL	103	30	9,293	7,760

Notes:

- 1 Total maximum number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats gained as a result of the potential relocatable classrooms.
- 2 Total preferred number of potential additional seats is the sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats gained as a result of the potential relocatable classrooms.

PHYSICAL IMPEDIMENTS

Relocatable classrooms may be installed to provide additional seating capacity when enrollment at a school exceeds its seating capacity. Although relocatable classrooms are temporary, the physical characteristics of a school site may limit where they may be installed. Installation of relocatable classrooms may also be limited by zoning regulations, unique amenities, underground utilities, resource protection areas and other environmental issues. The following conditions are considered impediments when identifying potential locations for relocatable classrooms on APS property. Illustration 1 provides an example of the physical and environmental constraints for a school site.

- Slope (nothing steeper than 10%)
- Underground utilities (sewer & water mains)
- Notable, significant and champion trees¹
- Resource Protection Areas²
- Floodplains (flood zones A, AE and AO)³
- Community gardens
- Tennis courts
- Synthetic or rubber play surfaces
- Parking lots (unless excess parking exists)
- Preferred setbacks
 - Front yard 25' from right-of-way line
 - Rear yard 25'
 - Side yard 10'
- Minimum construction code separations
 - School building to relocatable classrooms 20'
 - Relocatable classrooms to relocatable classrooms 20' (different type units)
 - Relocatable classrooms to relocatable classrooms 10' (same type units)
- Required access for fire rescue vehicles
- Historic designation4



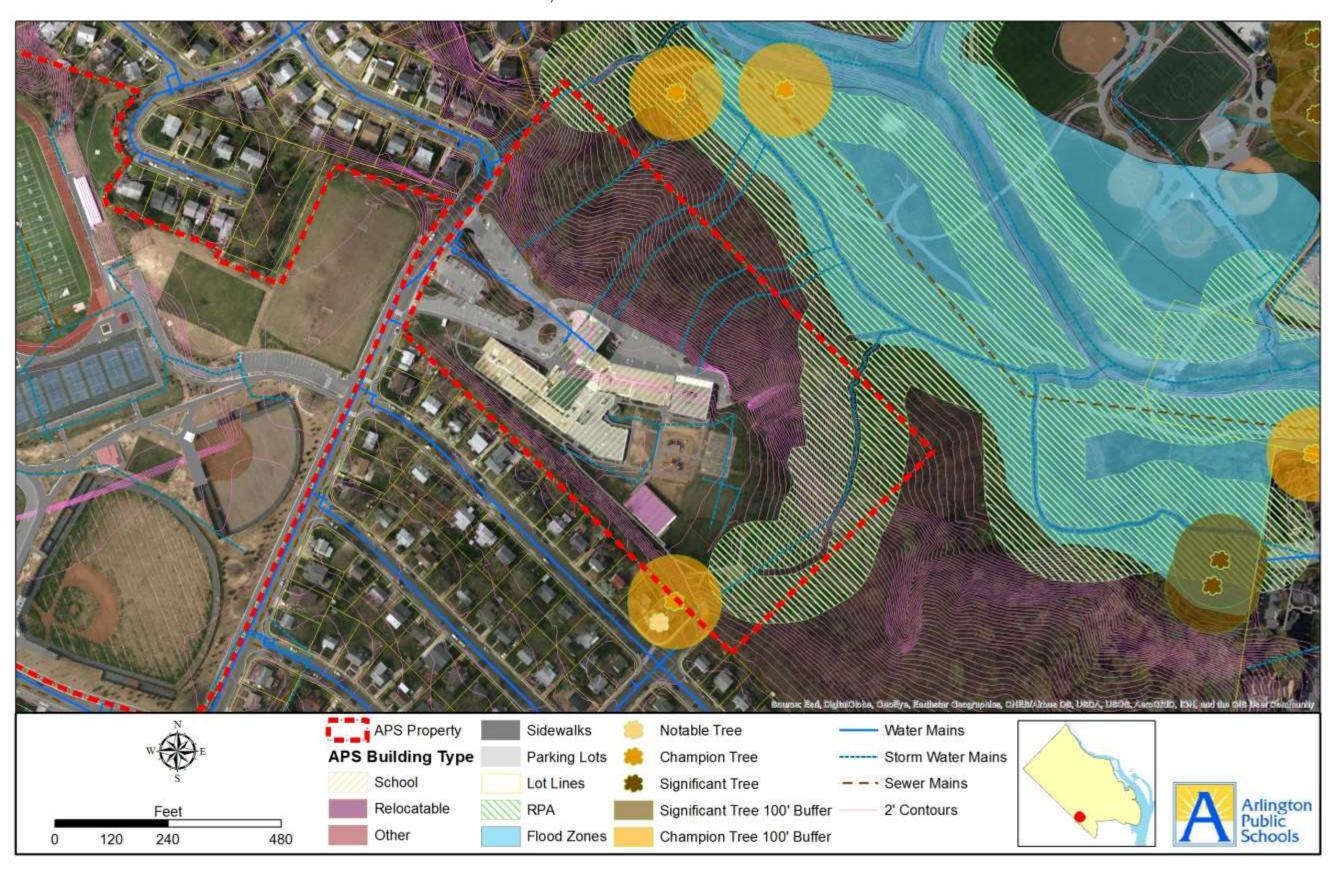


Sources:

- 1-Arlington County, Department of Parks & Recreation, 2017
- 2-Chesapeake Bay Preservation Area Designation and Management Regulations, 1989.
- 3-Flood Insurance Rate Maps, Federal Emergency Management Agency, 2013.
- 4-Historic designation applies to Stratford and Swanson, 2017.

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Illustration 1
Physical and Environmental Constraints



MAPS OF ELEMENTARY SCHOOLS

Illustration 2
Abingdon Elementary School

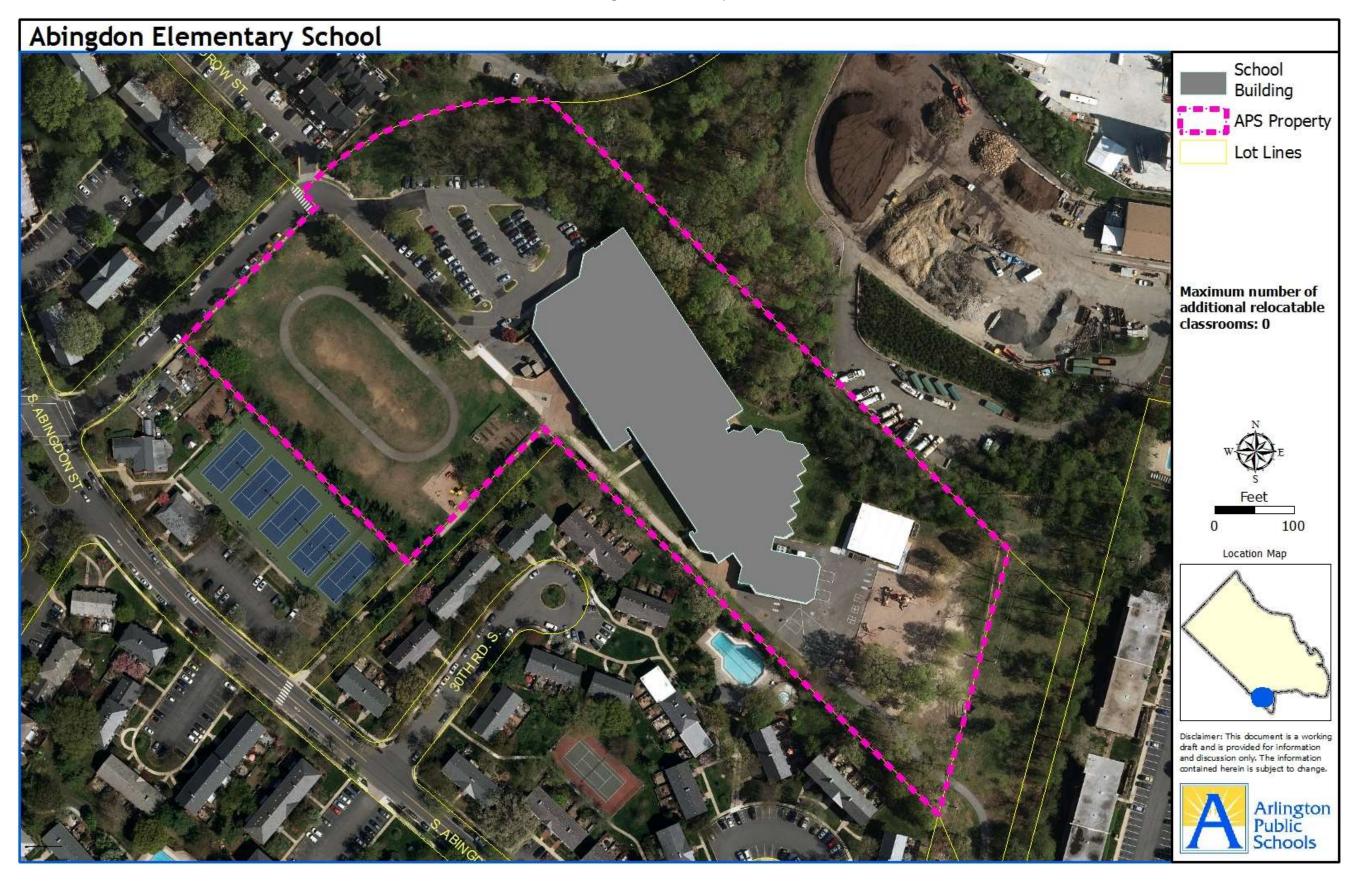


Illustration 3
Arlington Science Focus Elementary School

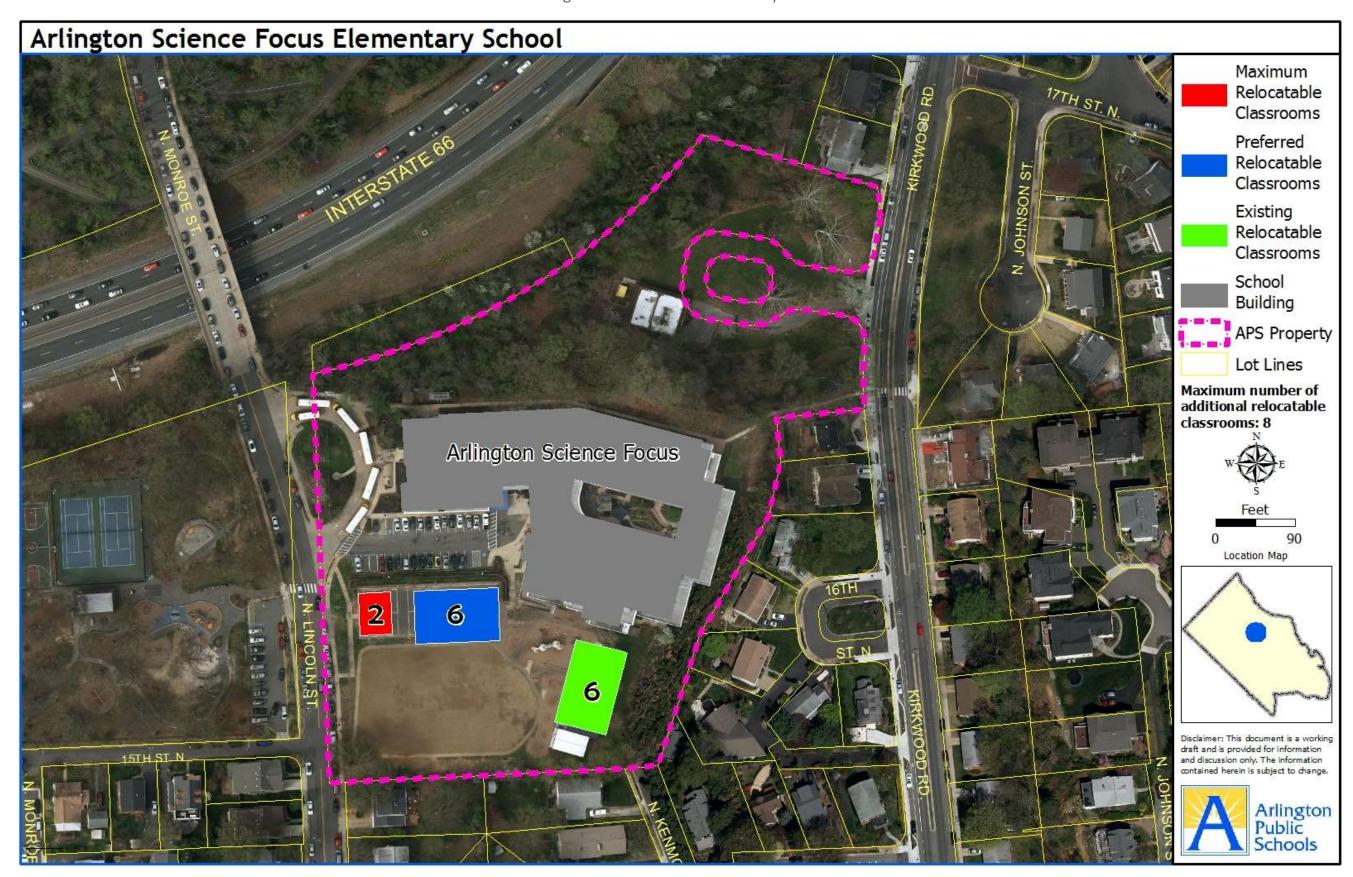


Illustration 4
Arlington Traditional Elementary School

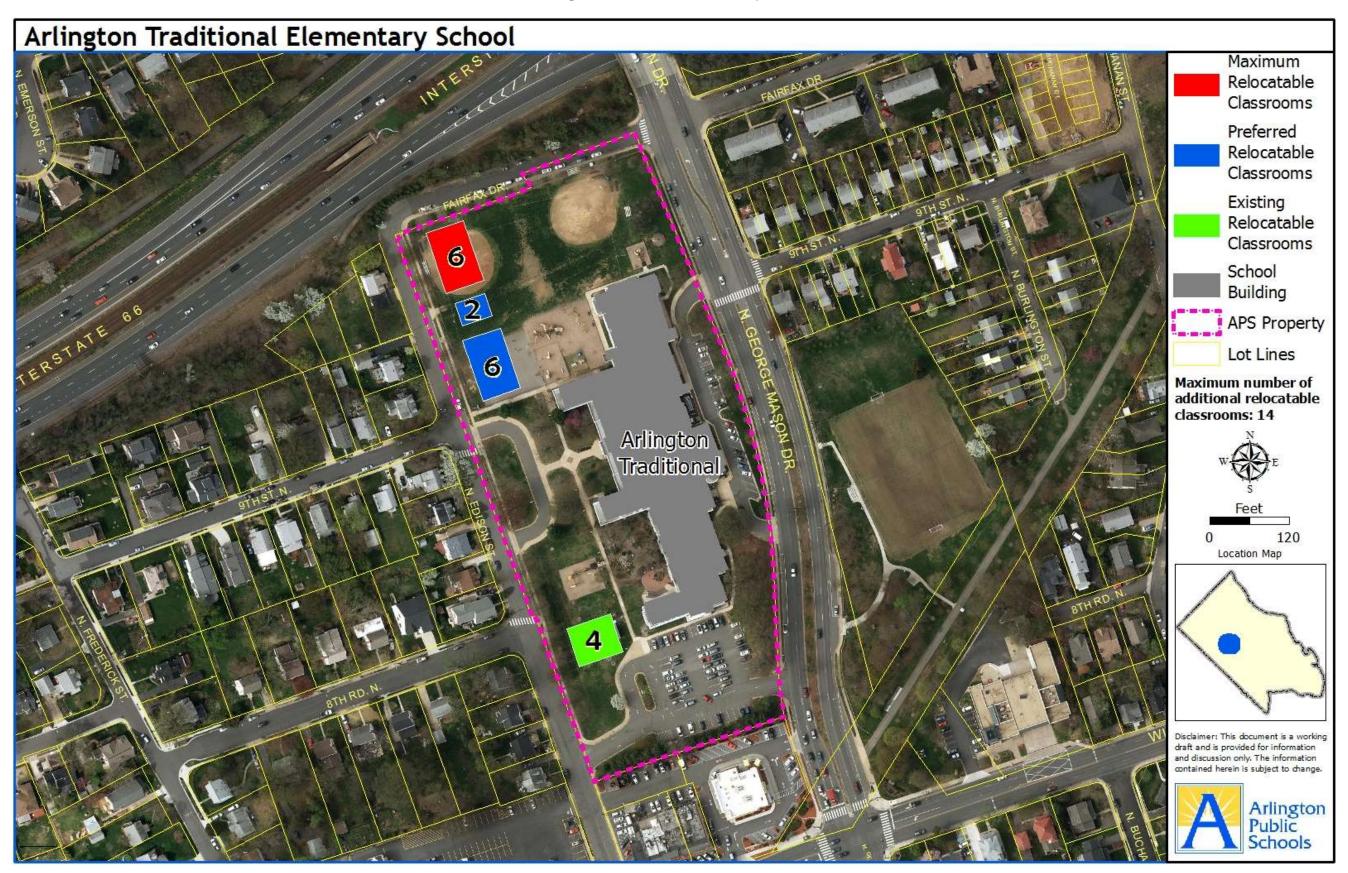


Illustration 5 Ashlawn Elementary School

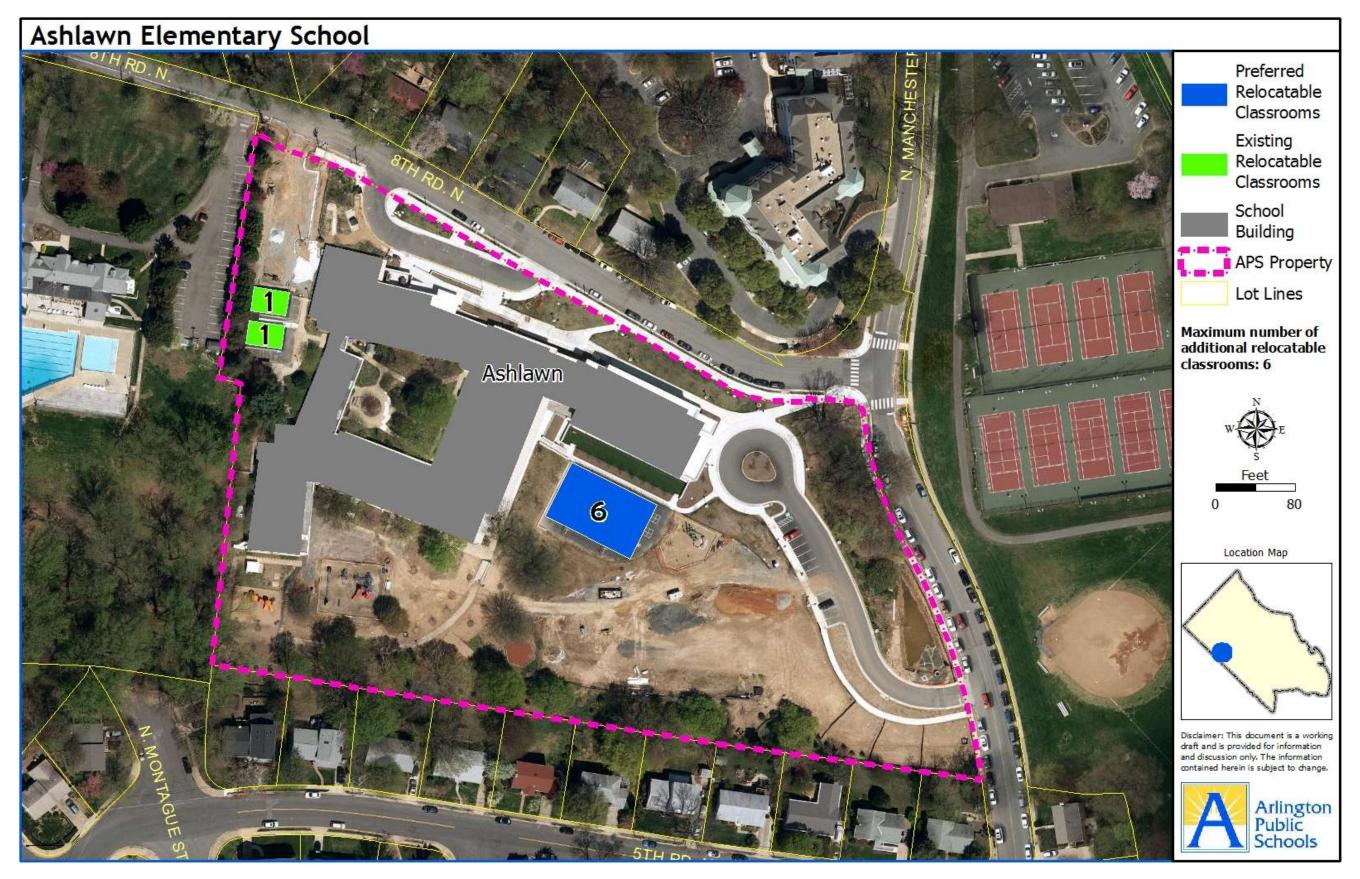


Illustration 6
Barcroft Elementary School

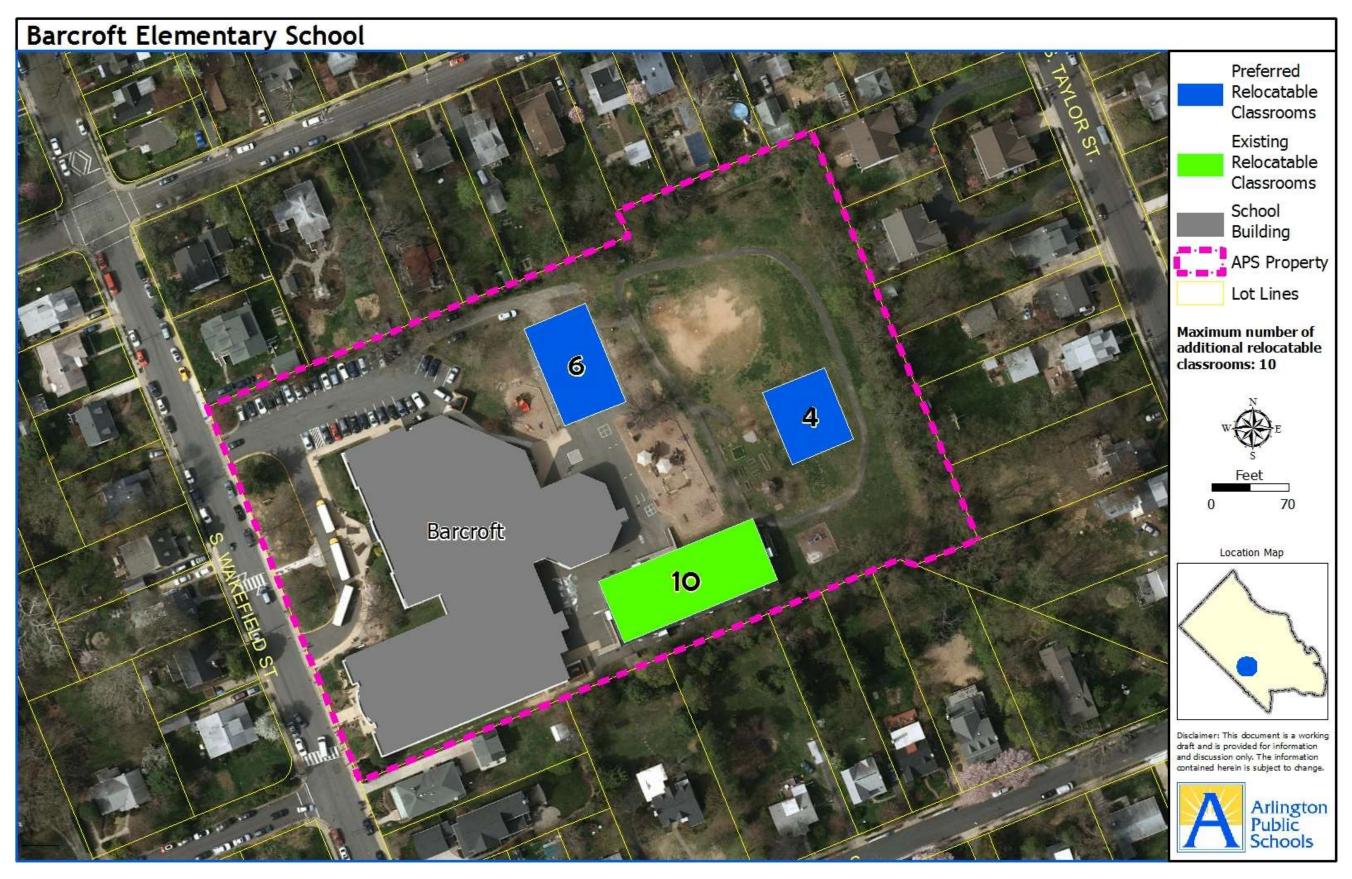


Illustration 7
Barrett Elementary School

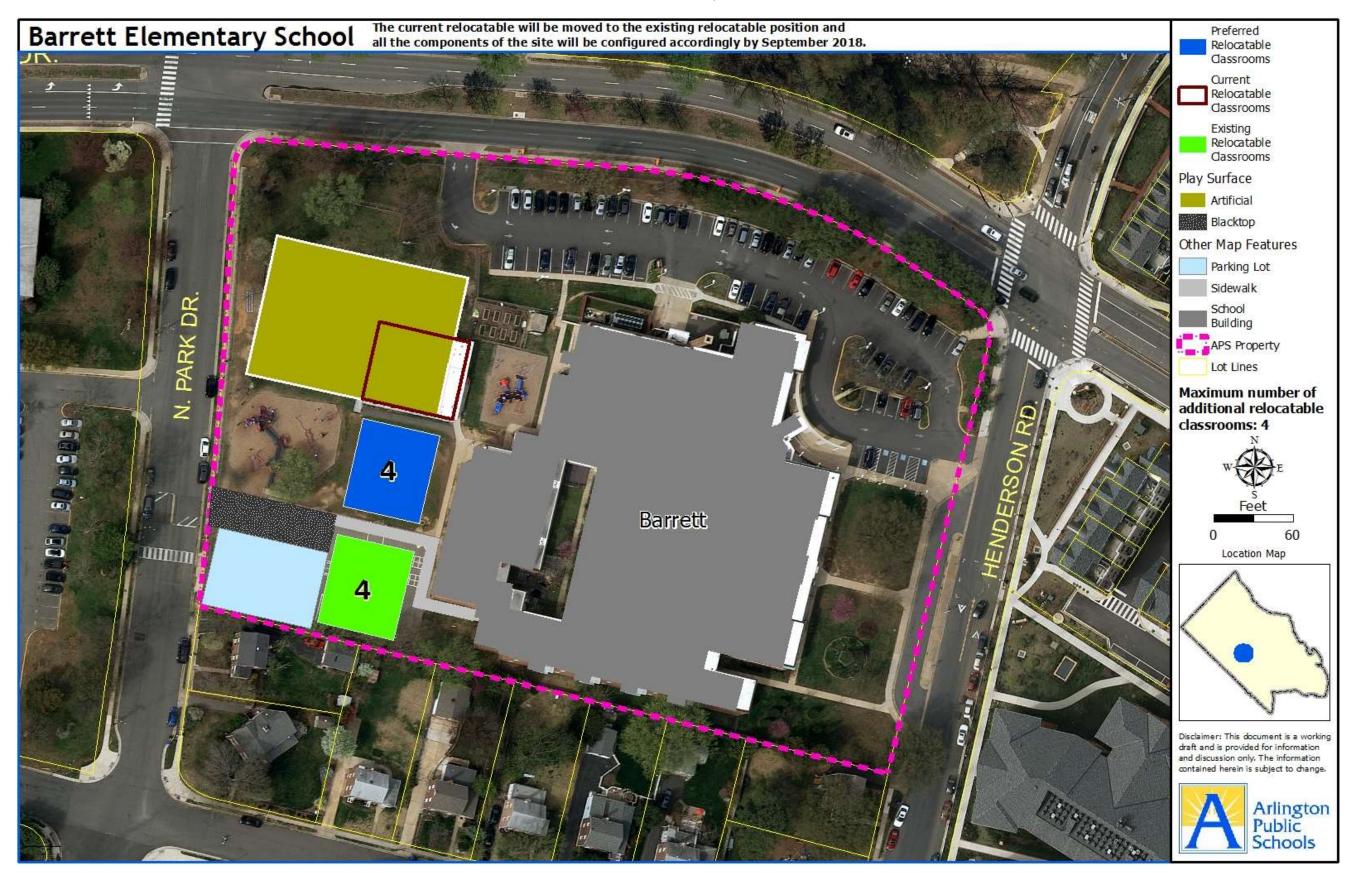


Illustration 8 Campbell Elementary School

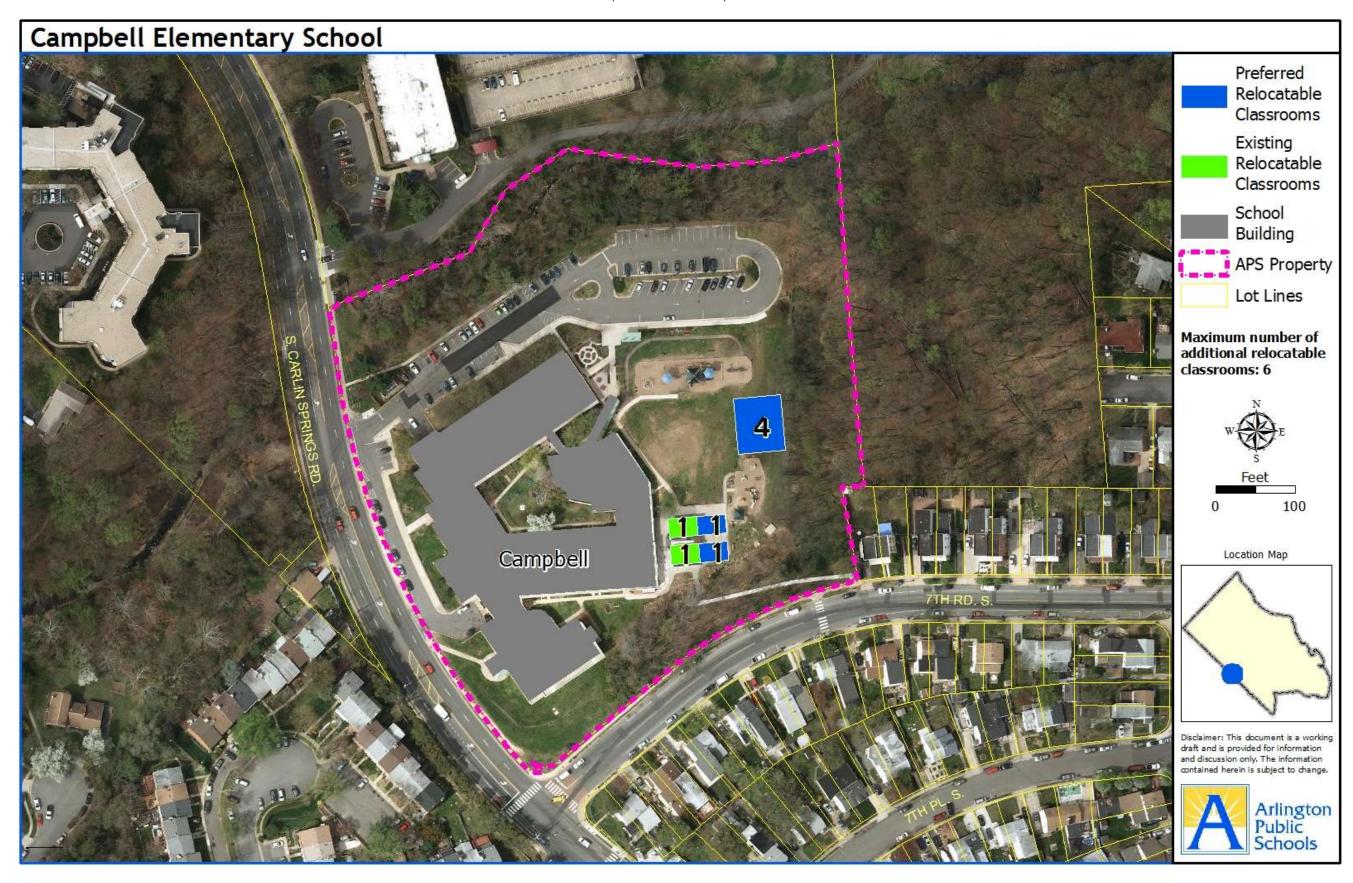


Illustration 9 Carlin Springs Elementary School

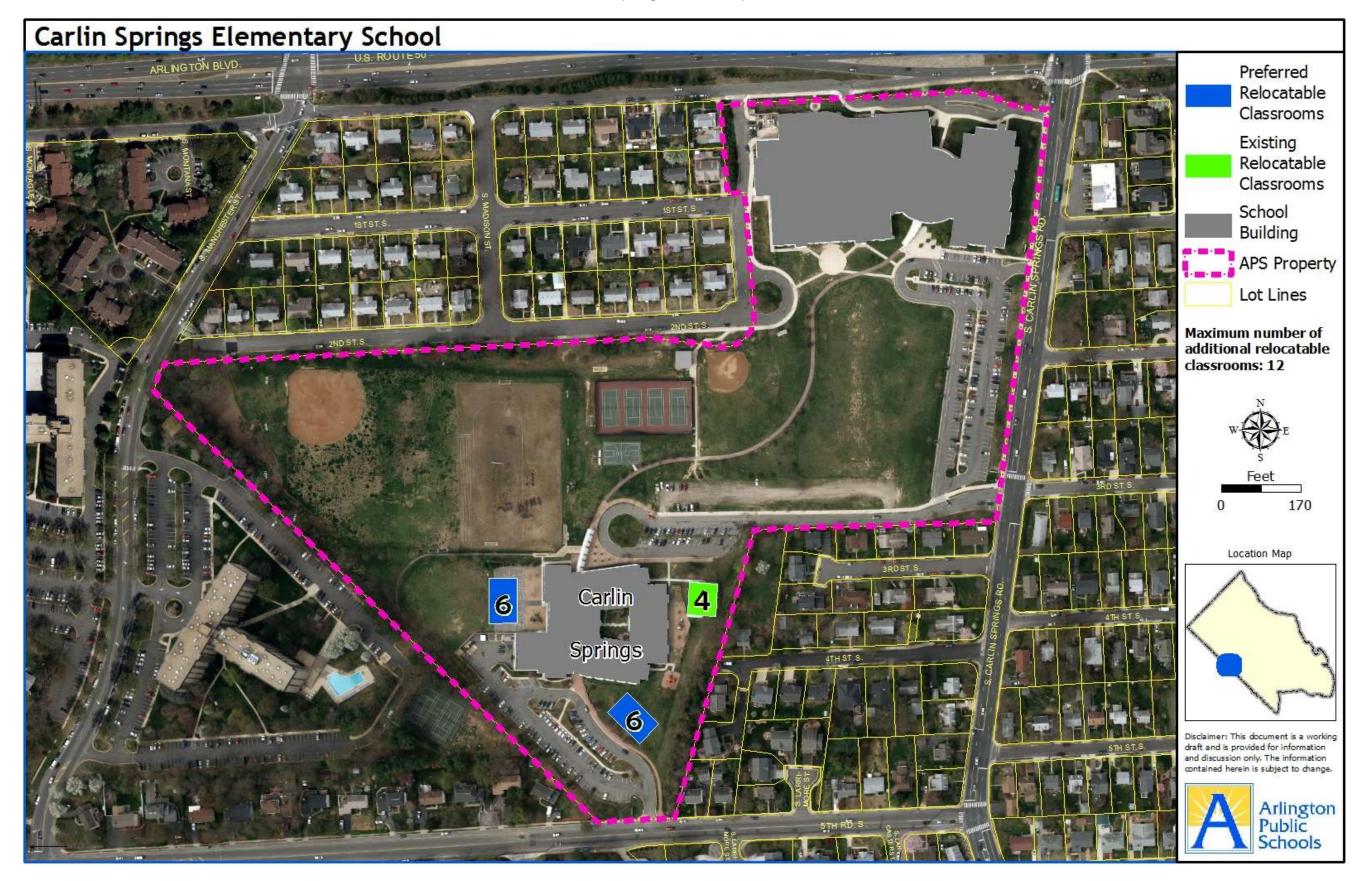


Illustration 10 Claremont Elementary School



Illustration 11 Discovery Elementary School

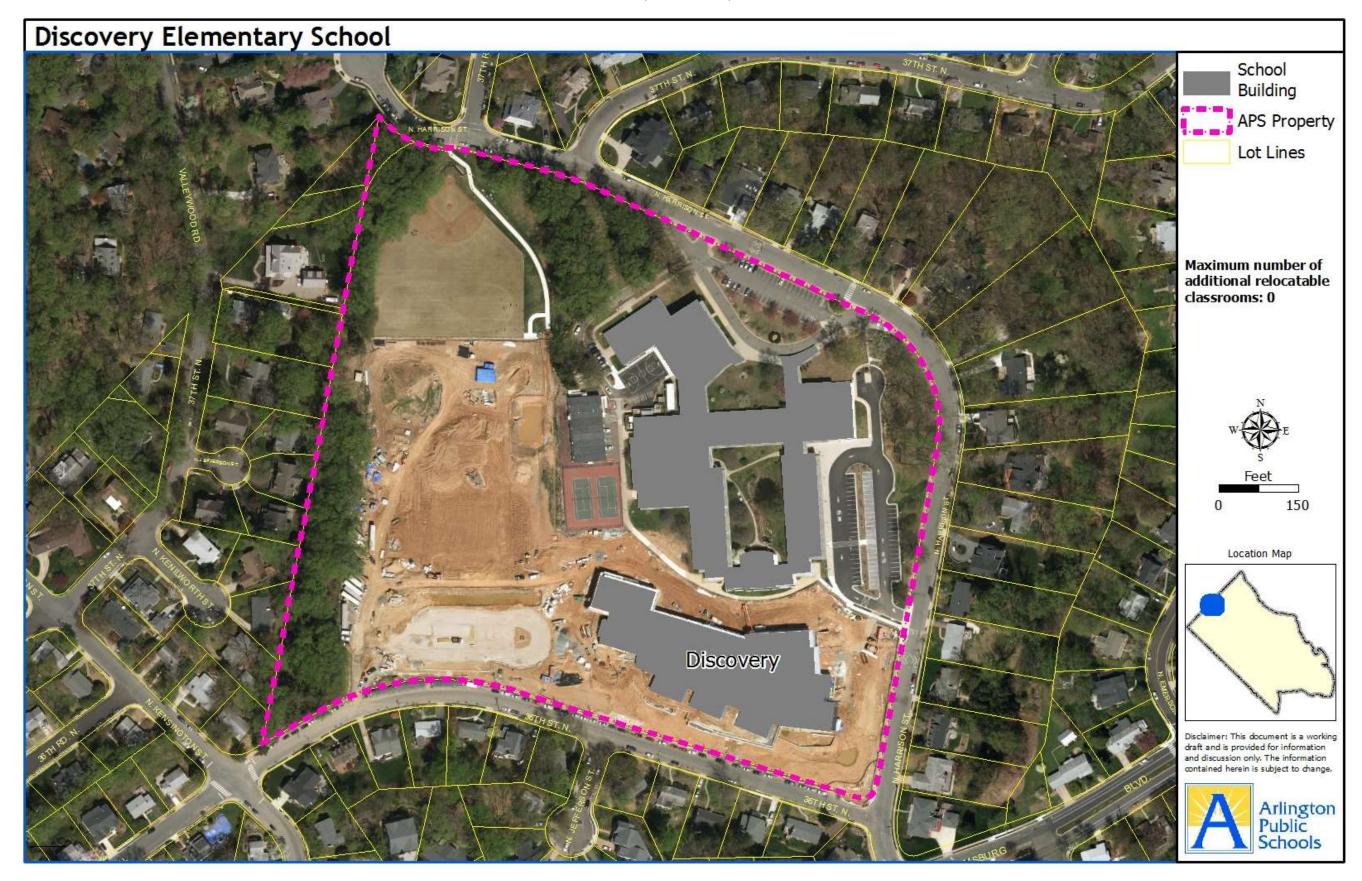


Illustration 12
Drew Elementary School

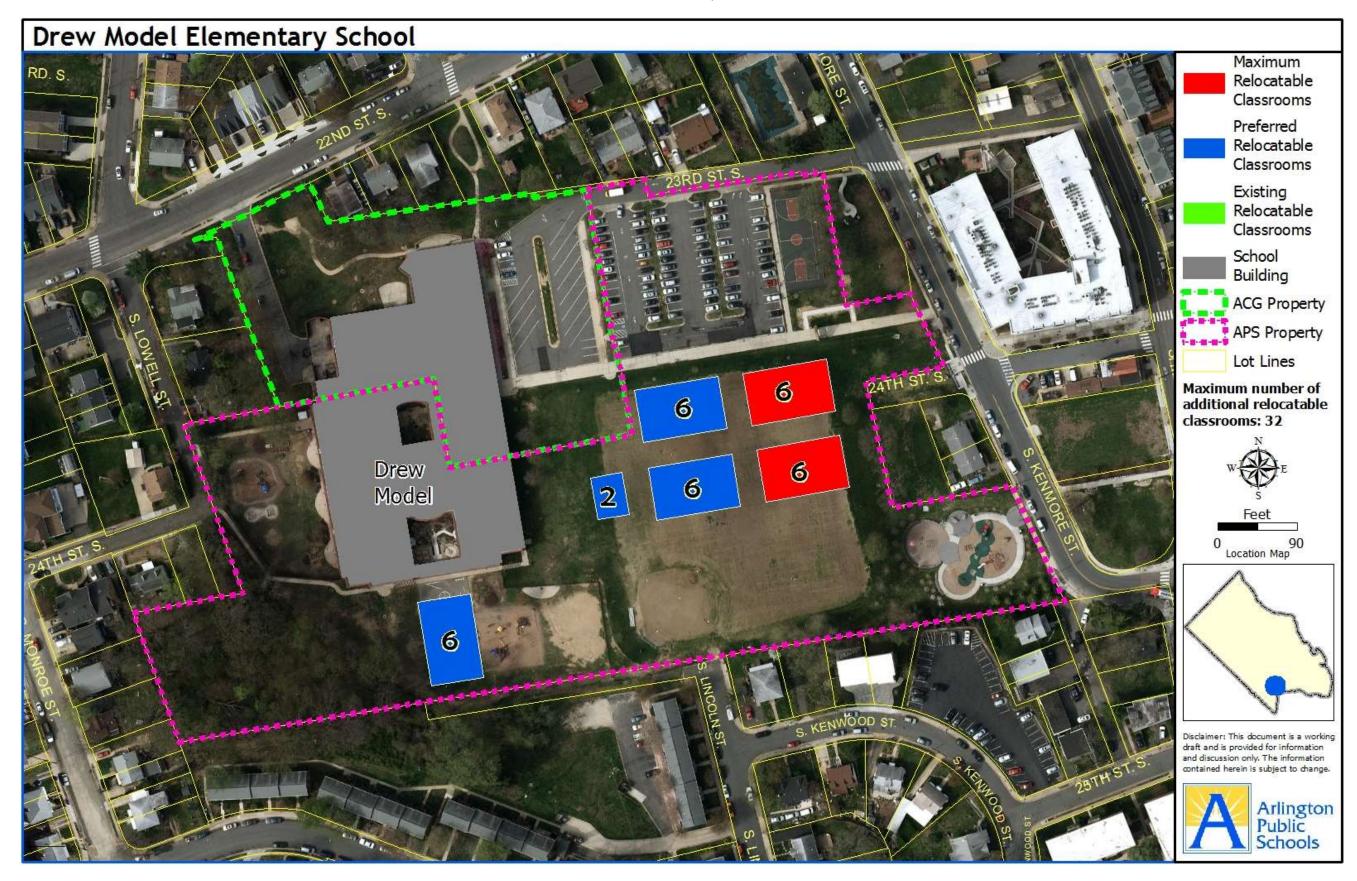


Illustration 13
Fleet Elementary School

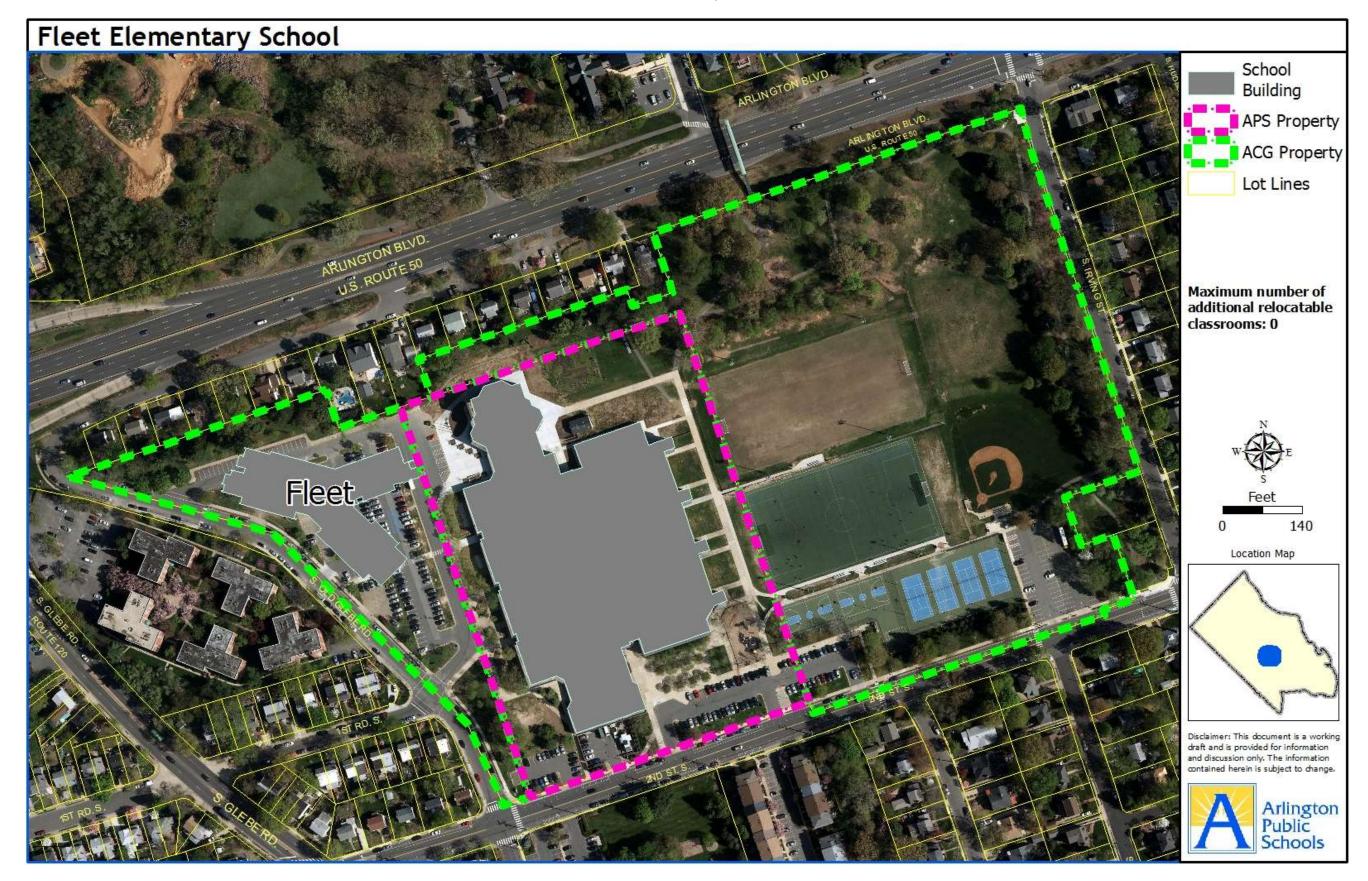


Illustration 14 Glebe Elementary School



Illustration 15 Henry Elementary School

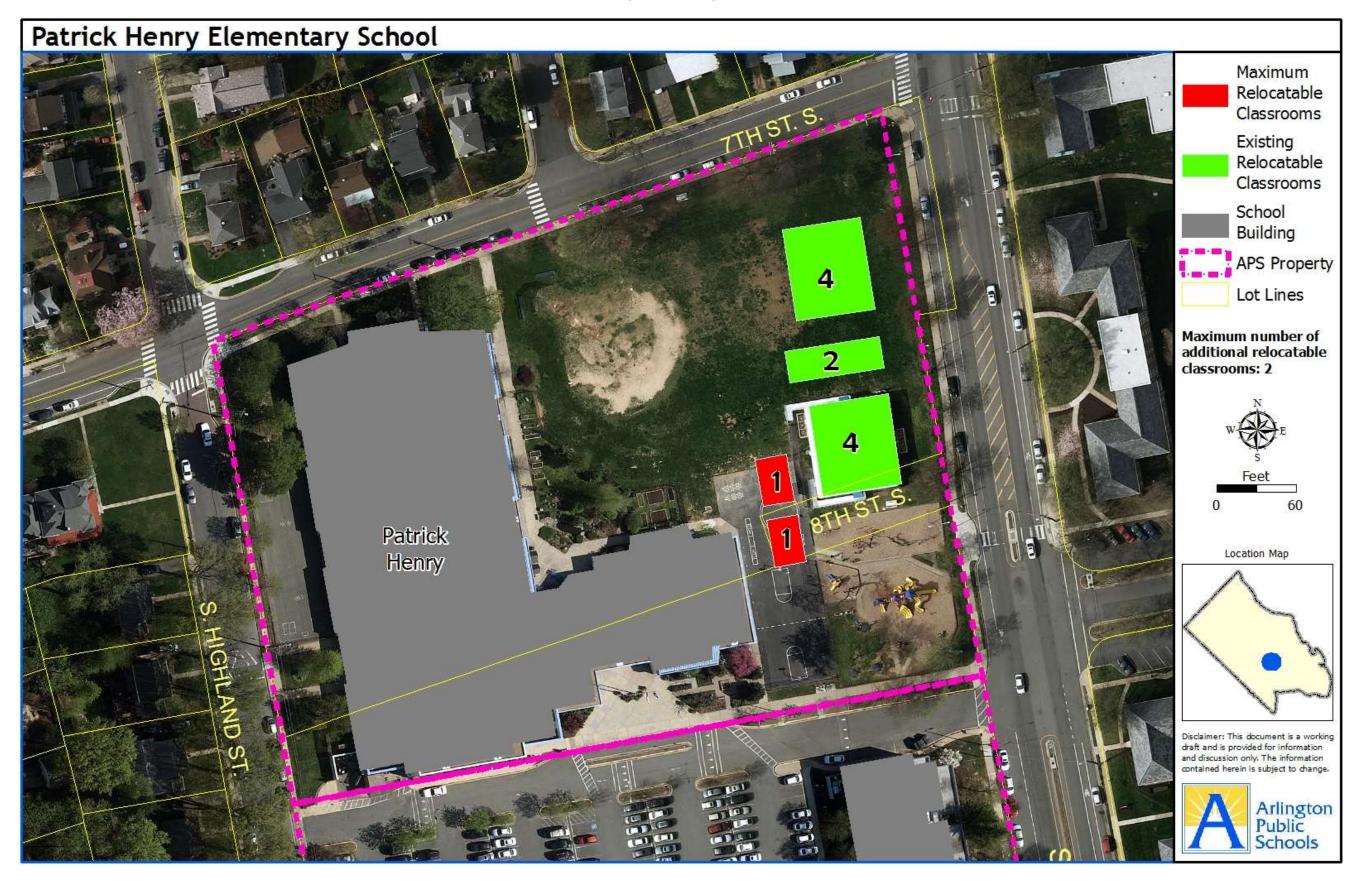


Illustration 16
Hoffman-Boston Elementary School

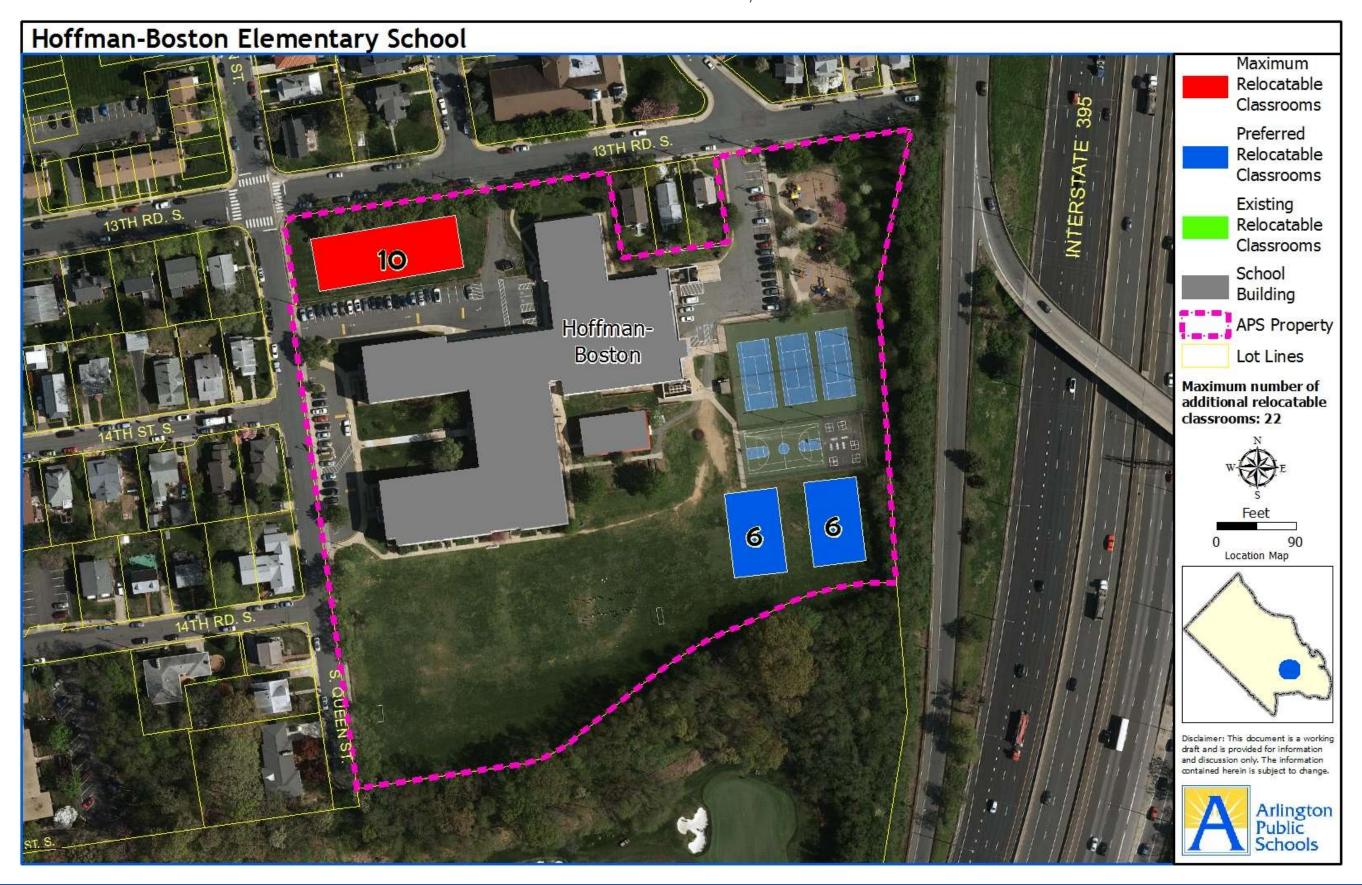


Illustration 17
Jamestown Elementary School



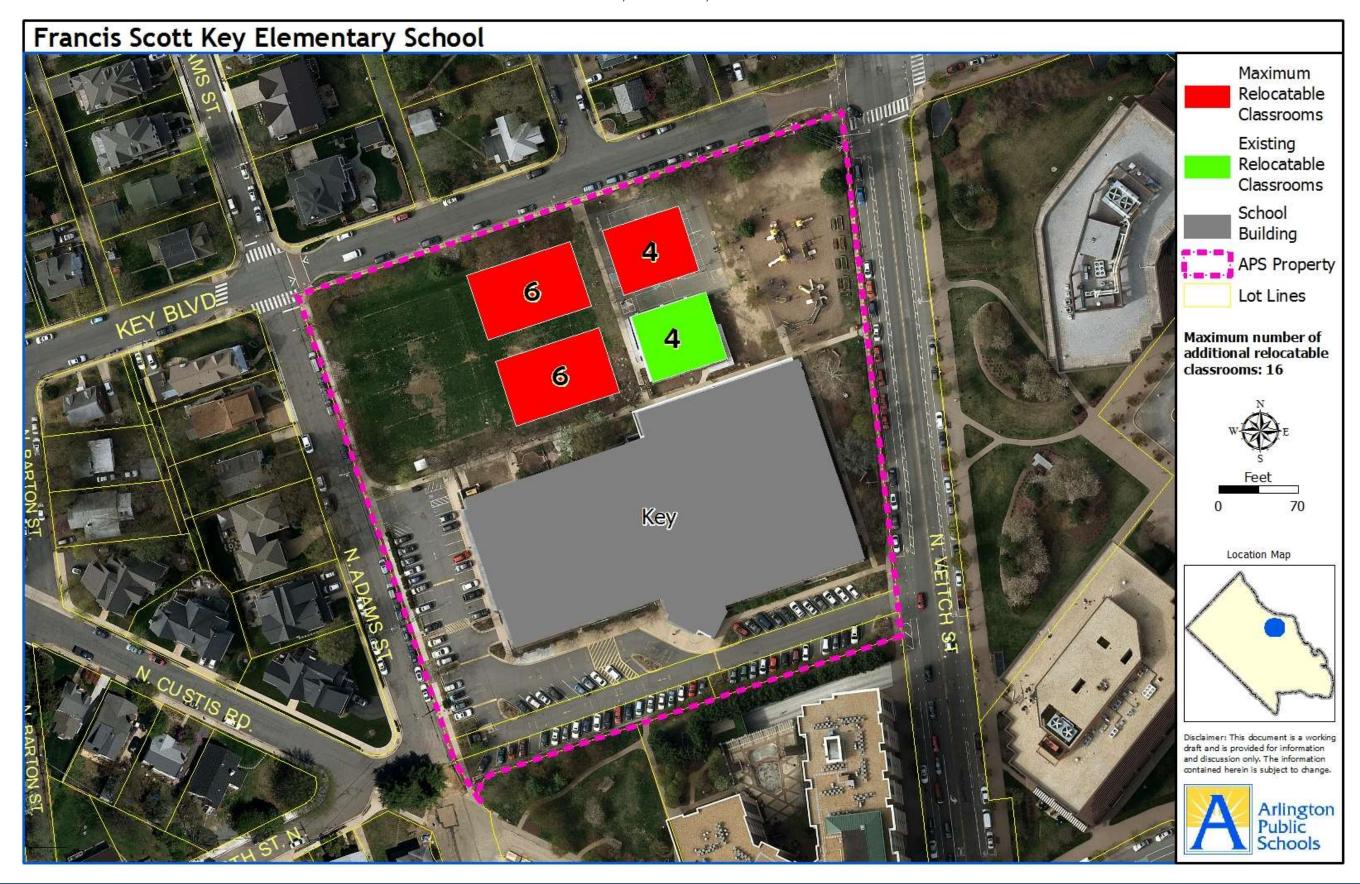
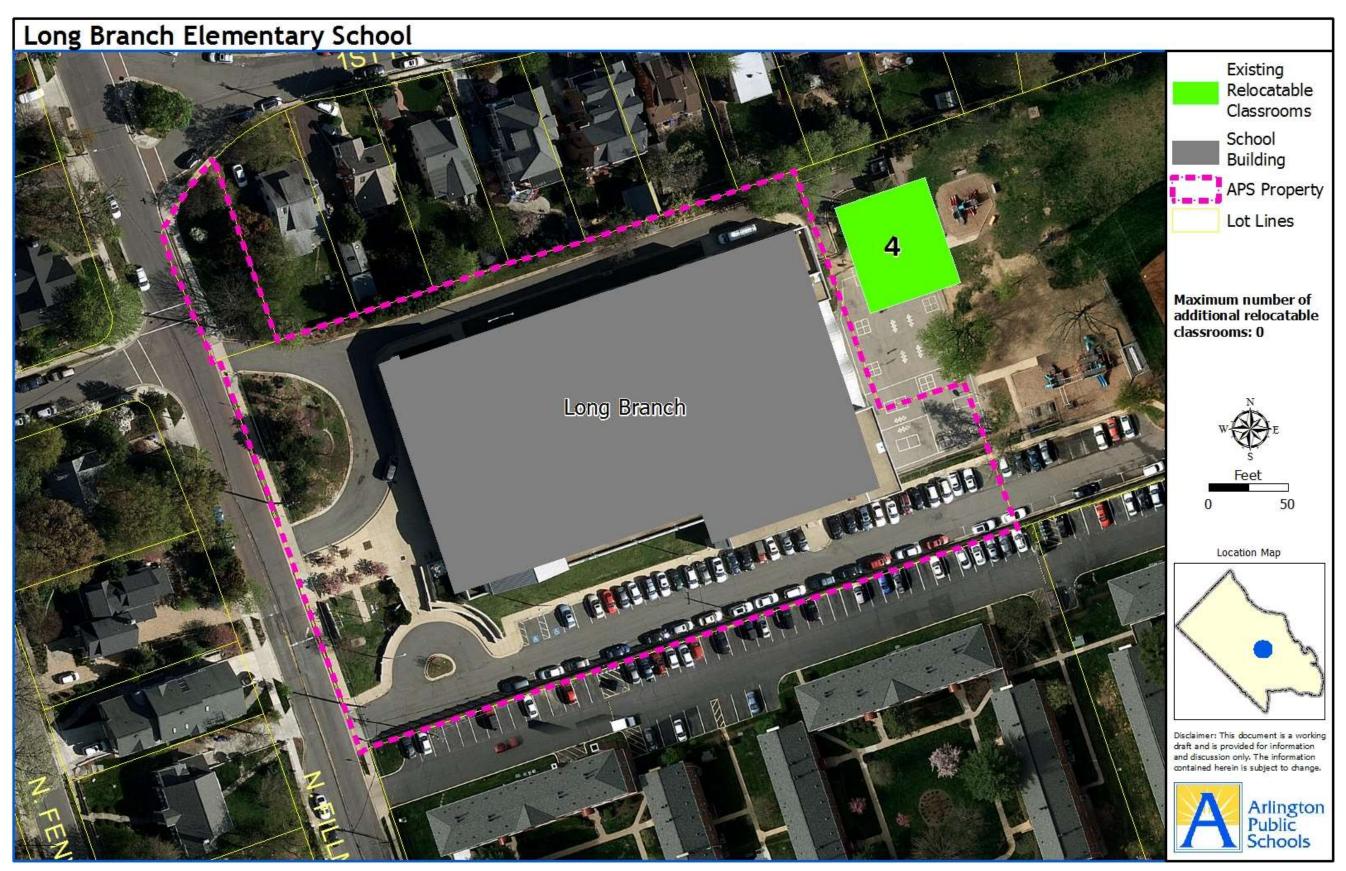


Illustration 19 Long Branch Elementary School



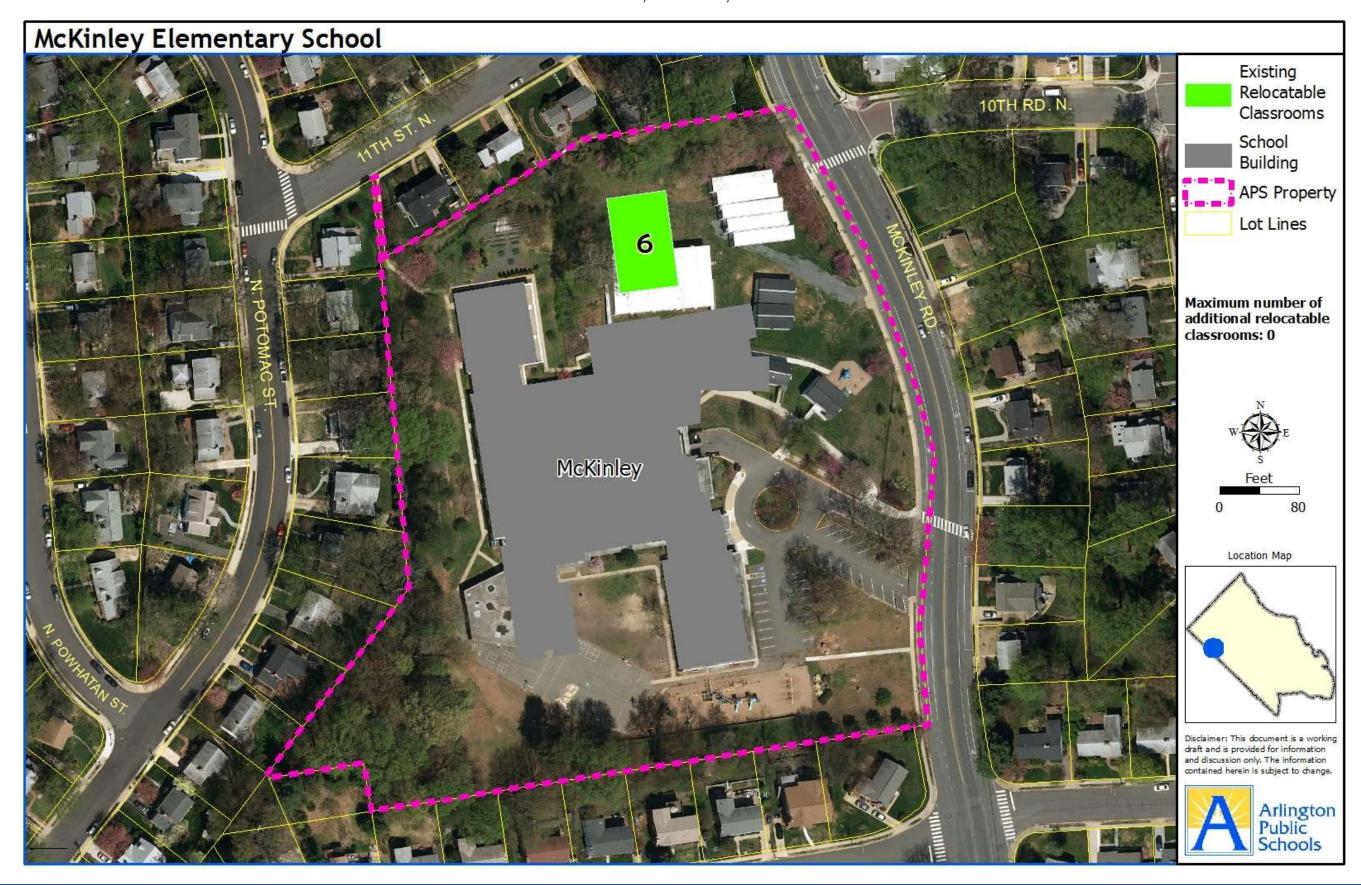


Illustration 21
Nottingham Elementary School



Illustration 22 Oakridge Elementary School

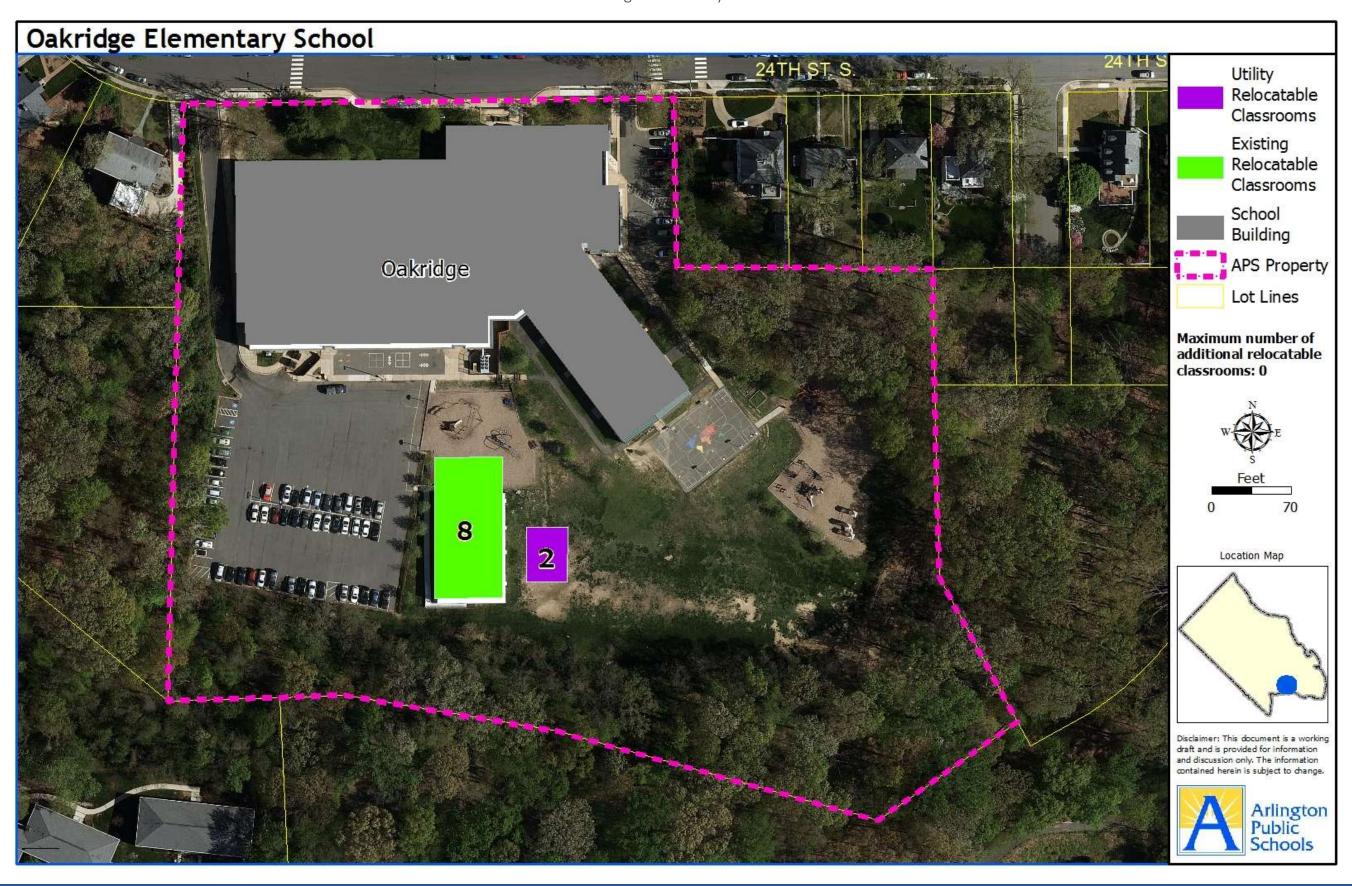


Illustration 23 Randolph Elementary School



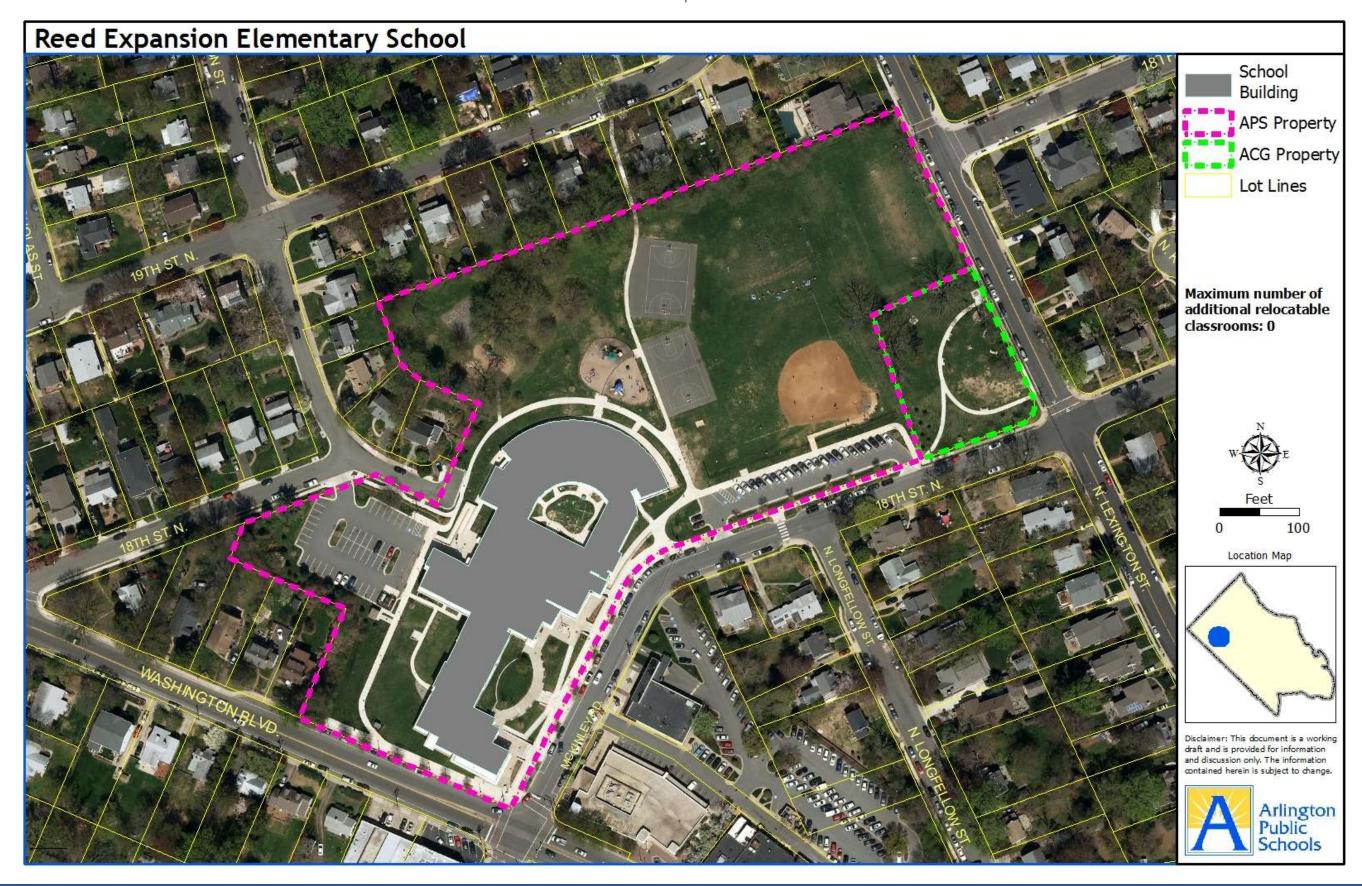


Illustration 25
Taylor Elementary School

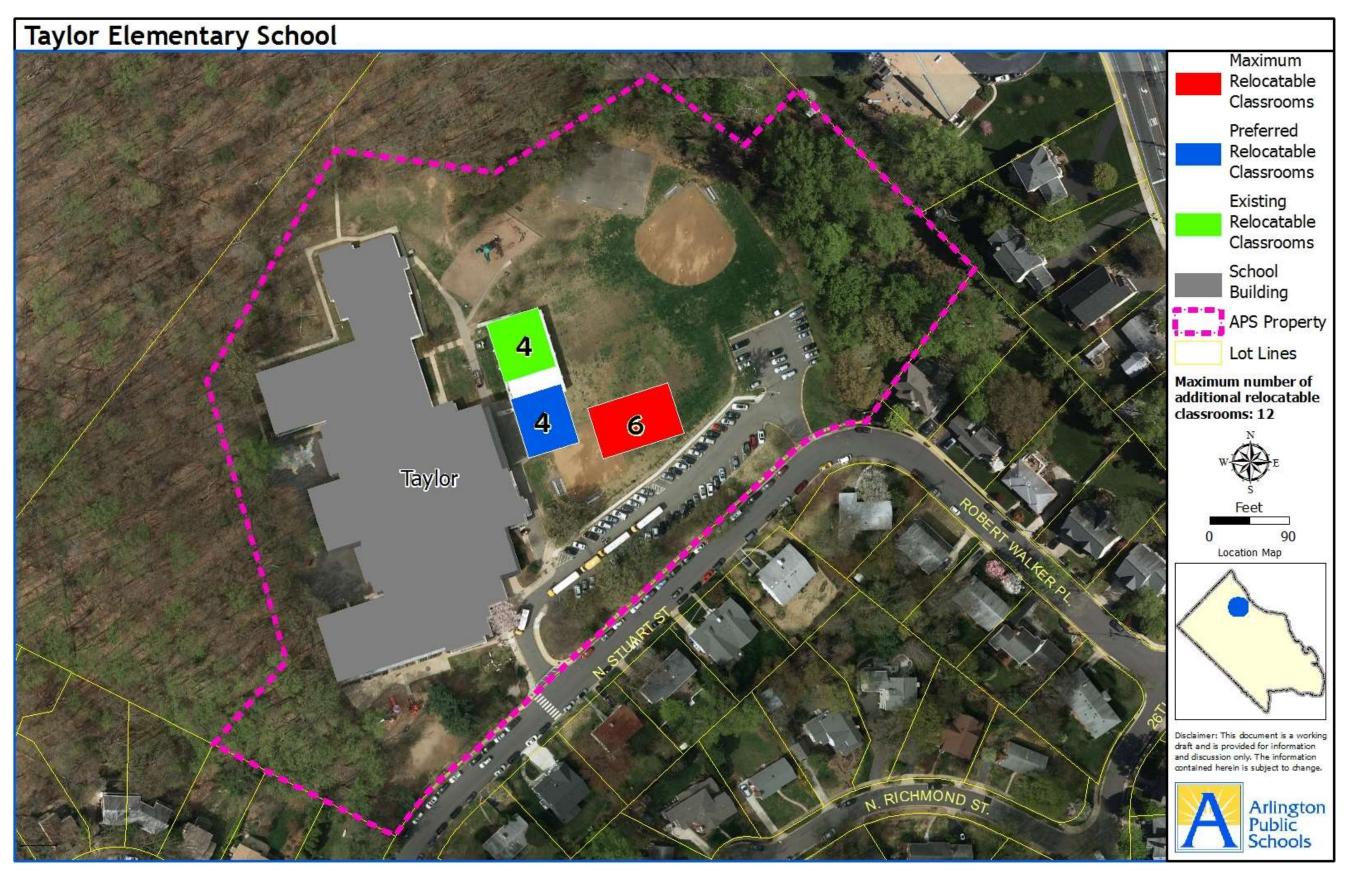
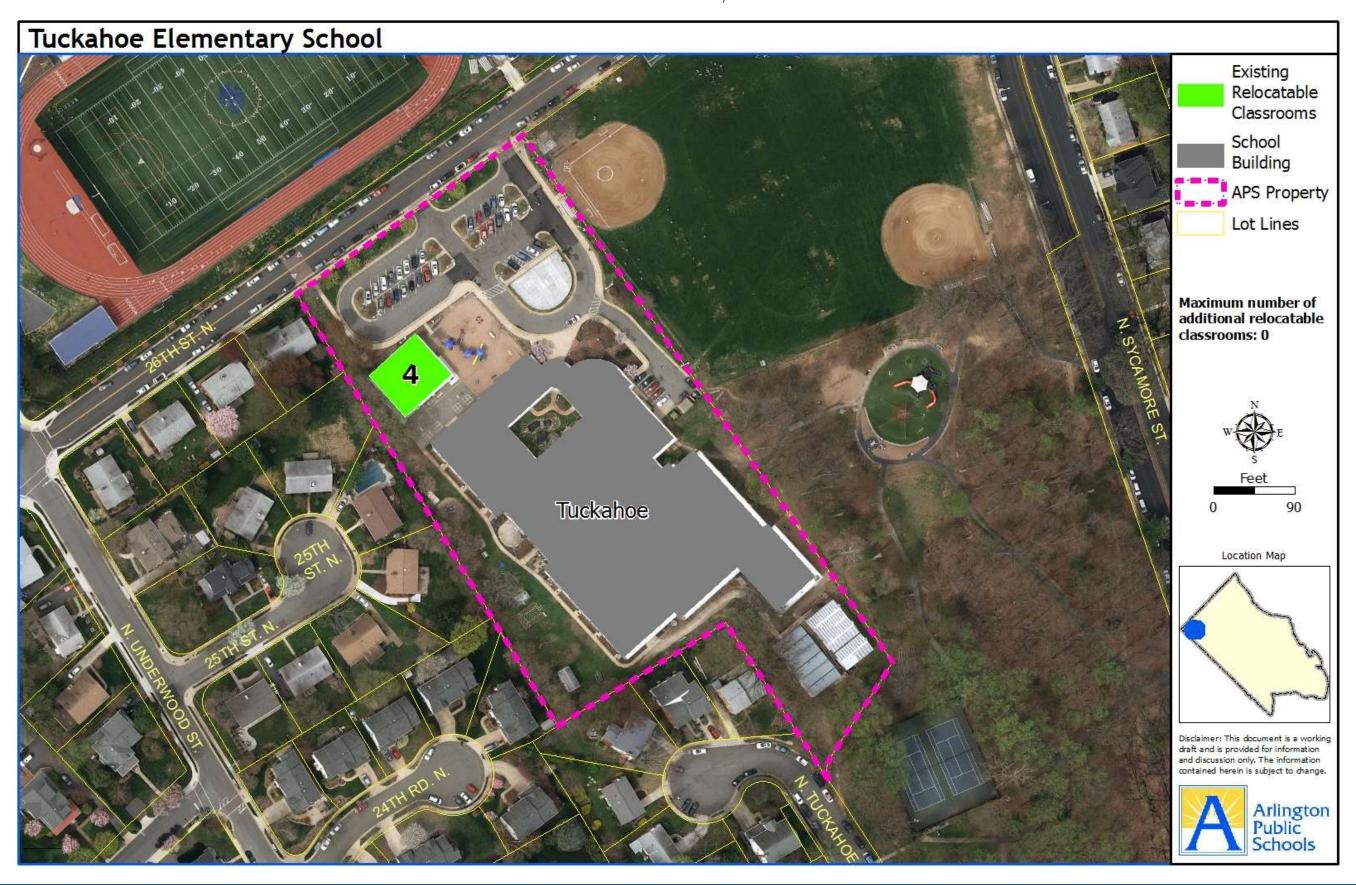
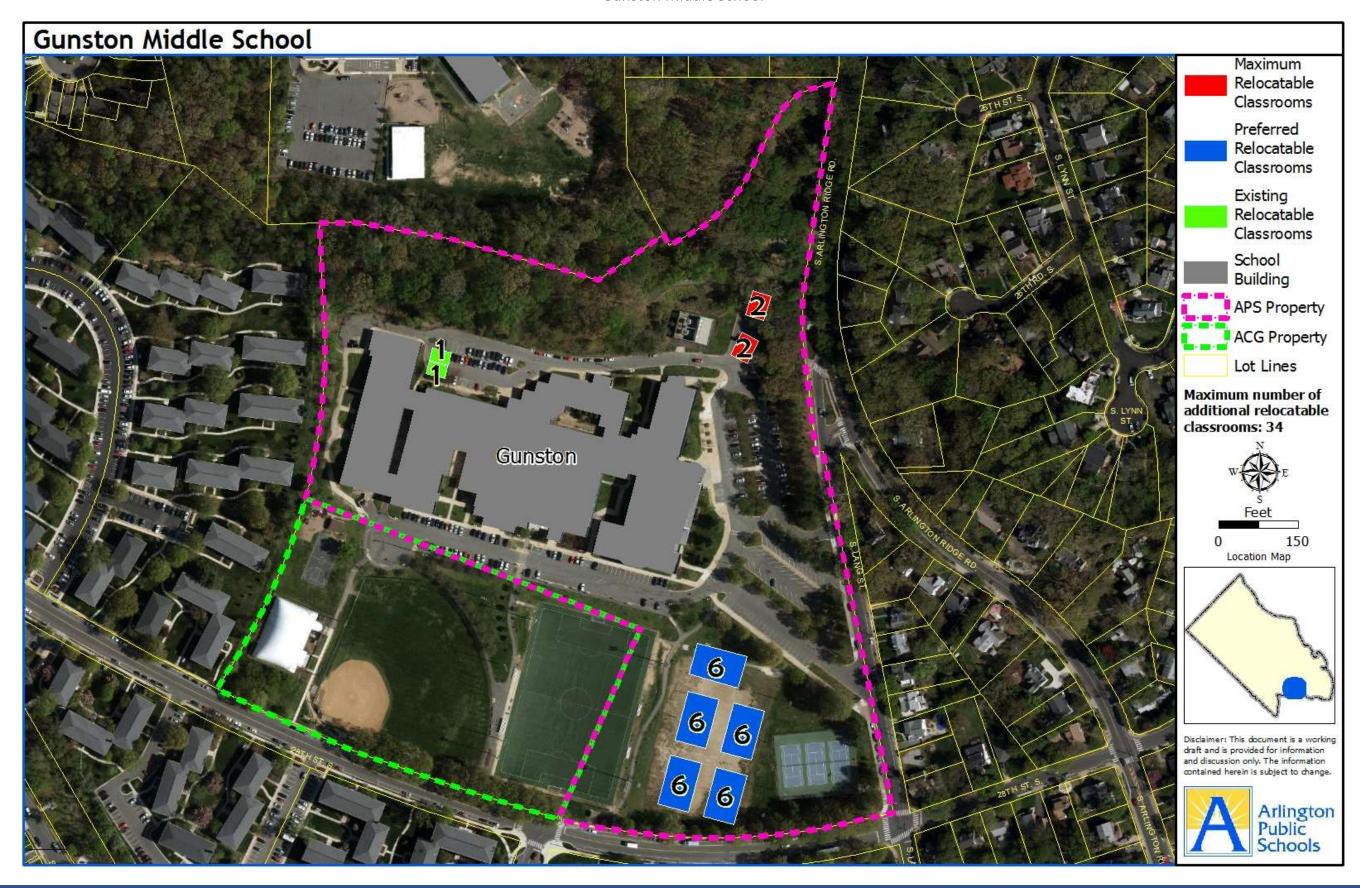
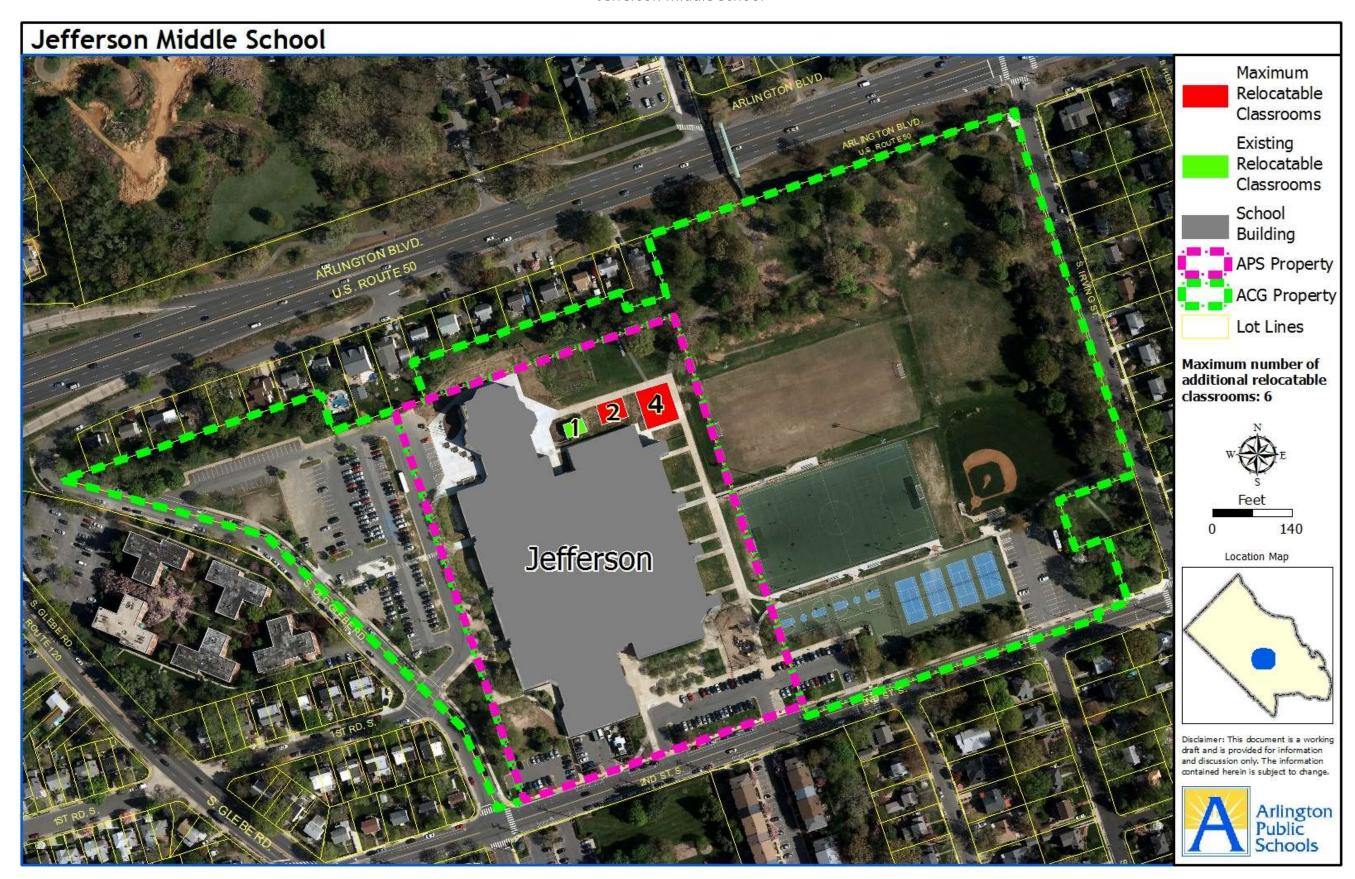


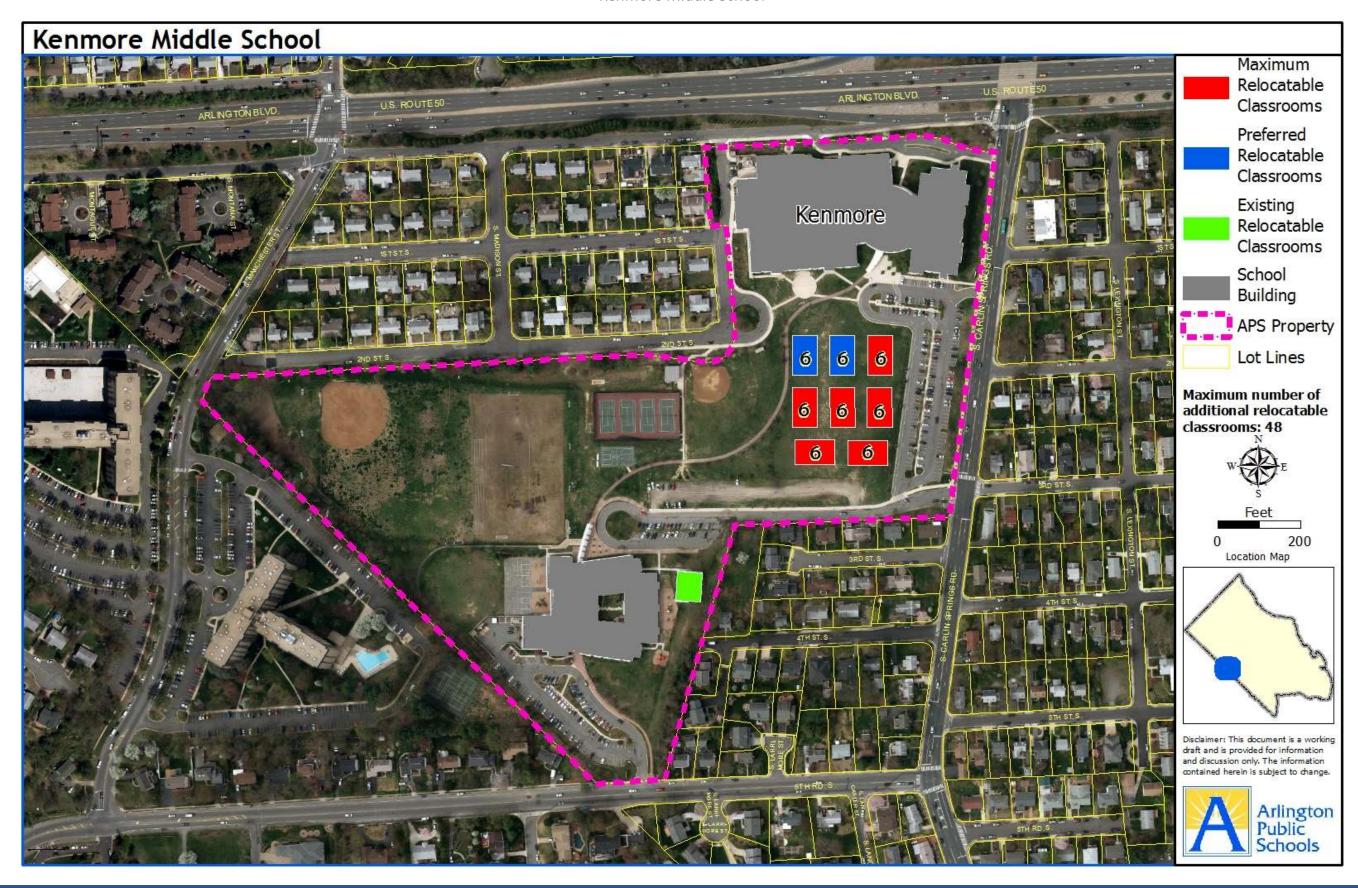
Illustration 26
Tuckahoe Elementary School



MAPS OF MIDDLE SCHOOLS







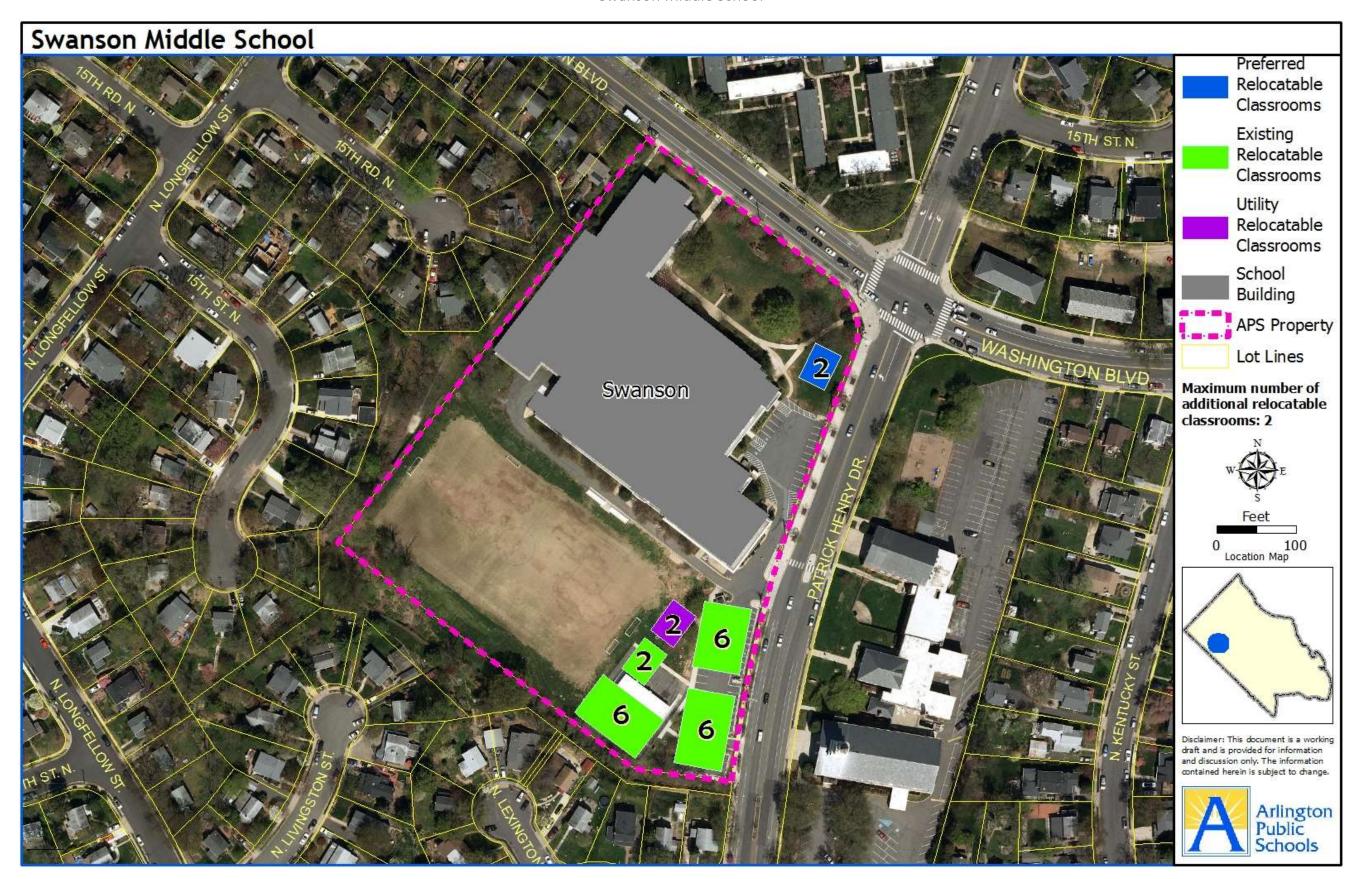
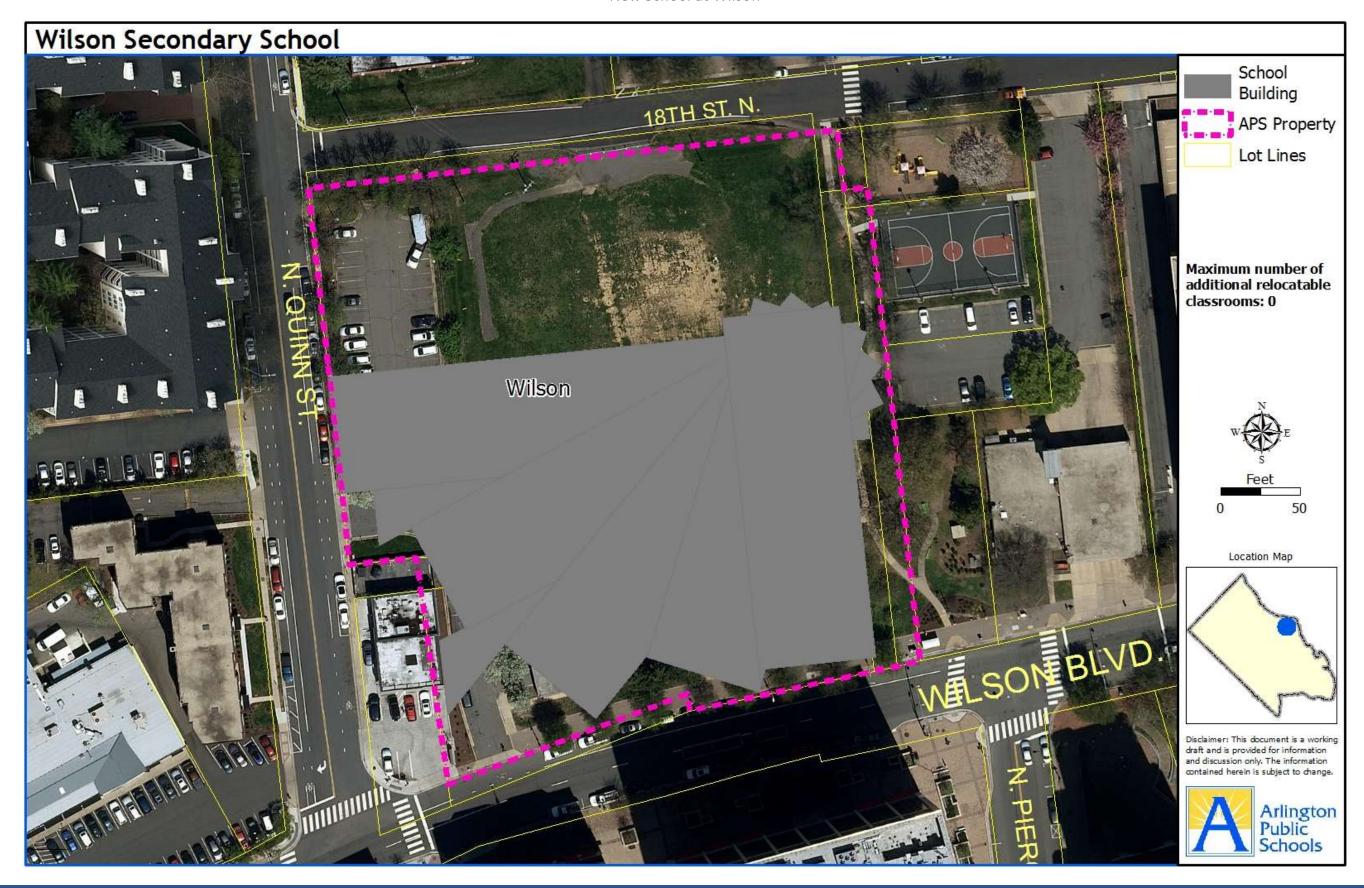


Illustration 31
New Middle School at Stratford



Illustration 32 Williamsburg Middle School





MAPS OF HIGH SCHOOLS

Illustration 34
Arlington Career Center, Arlington Tech and Arlington Community High School

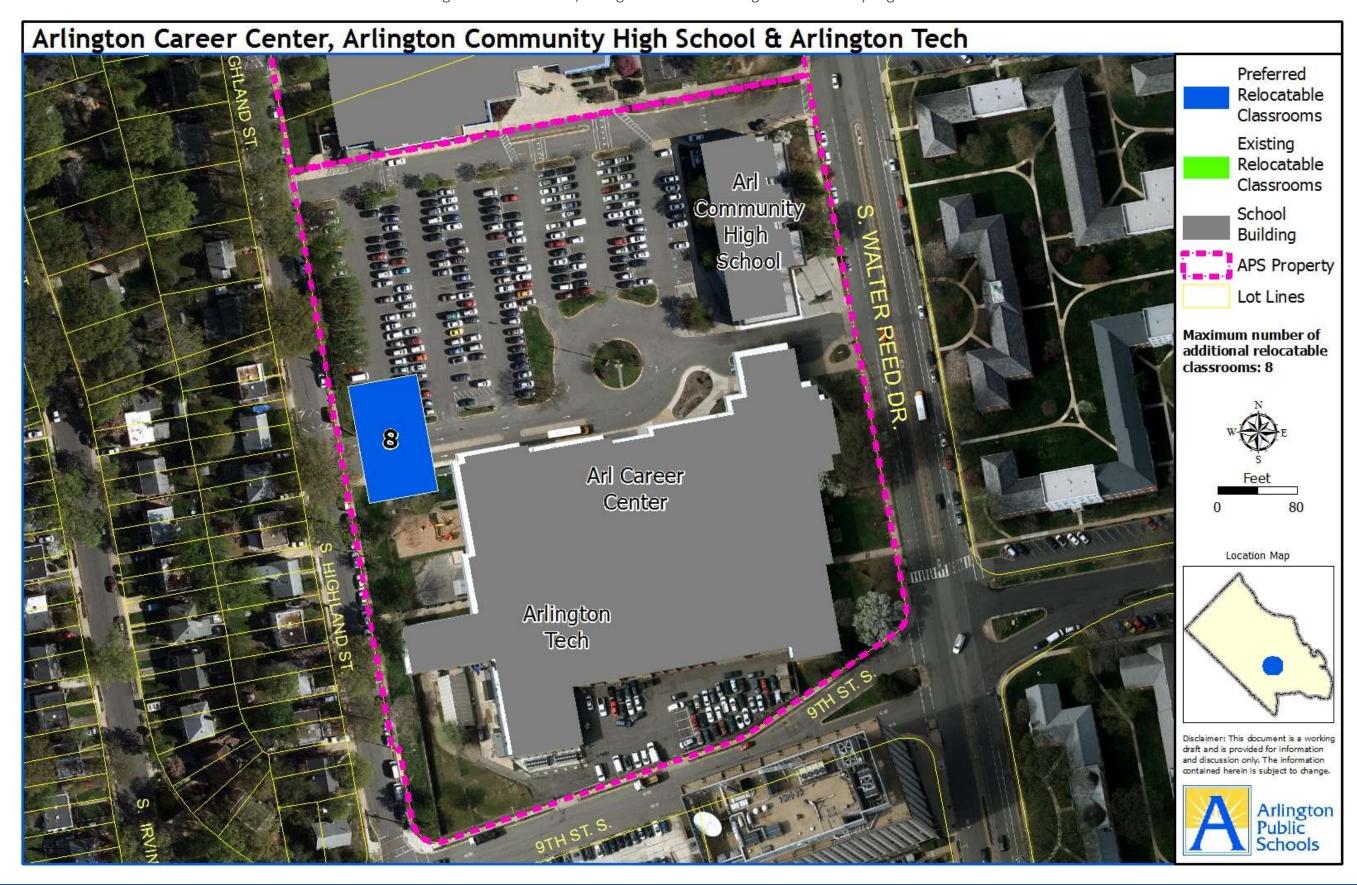
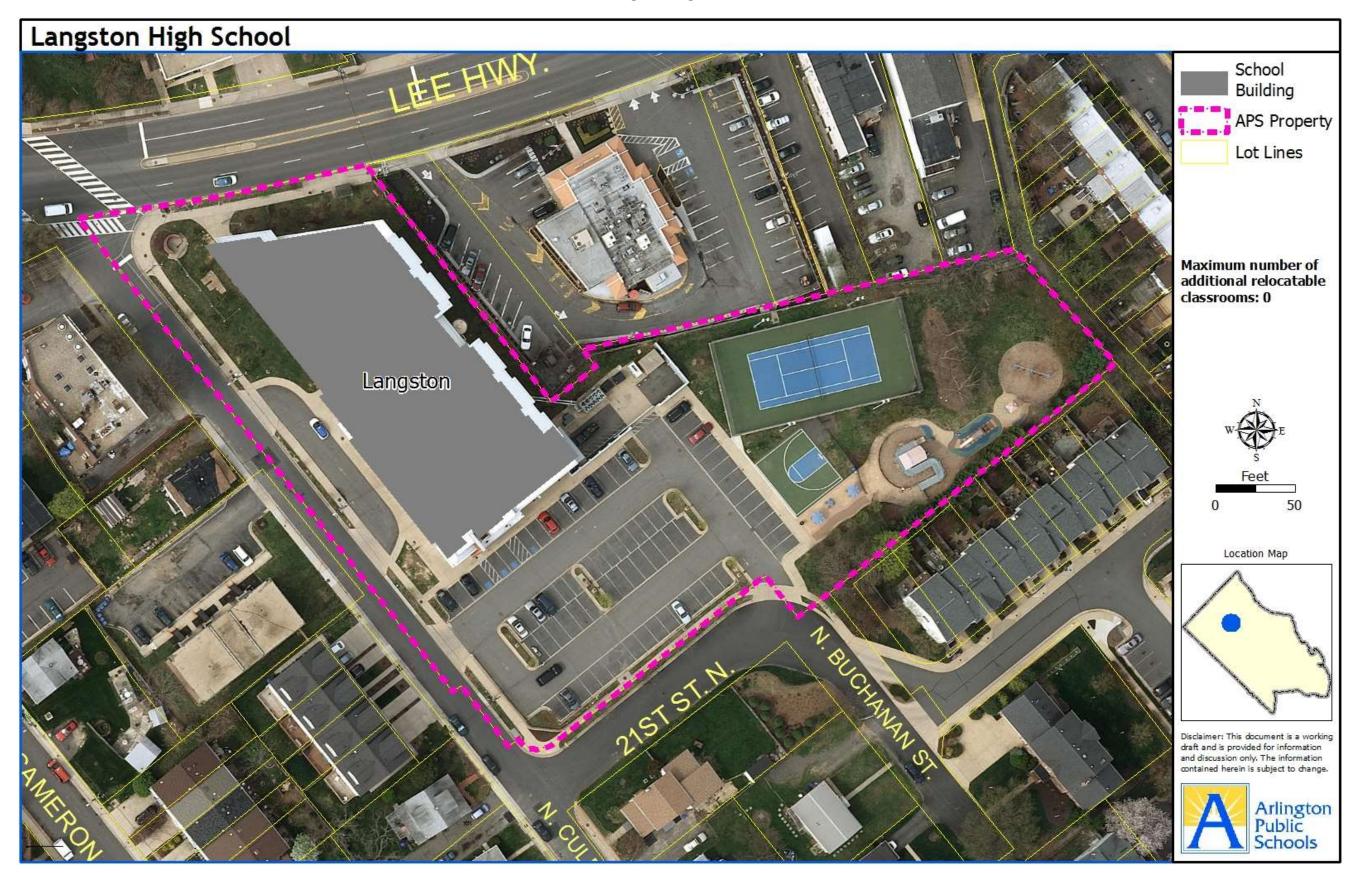


Illustration 35 Langston High School



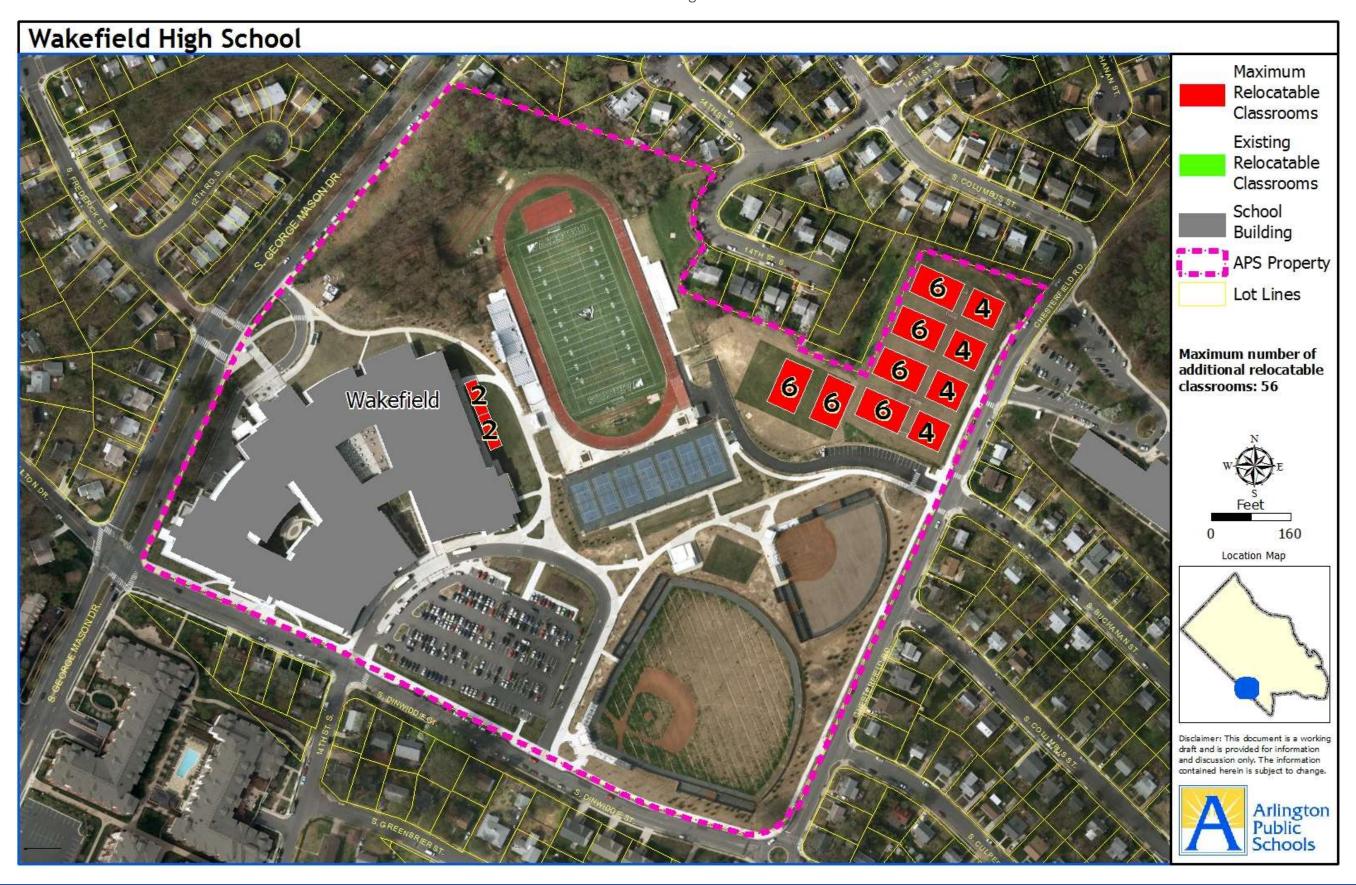
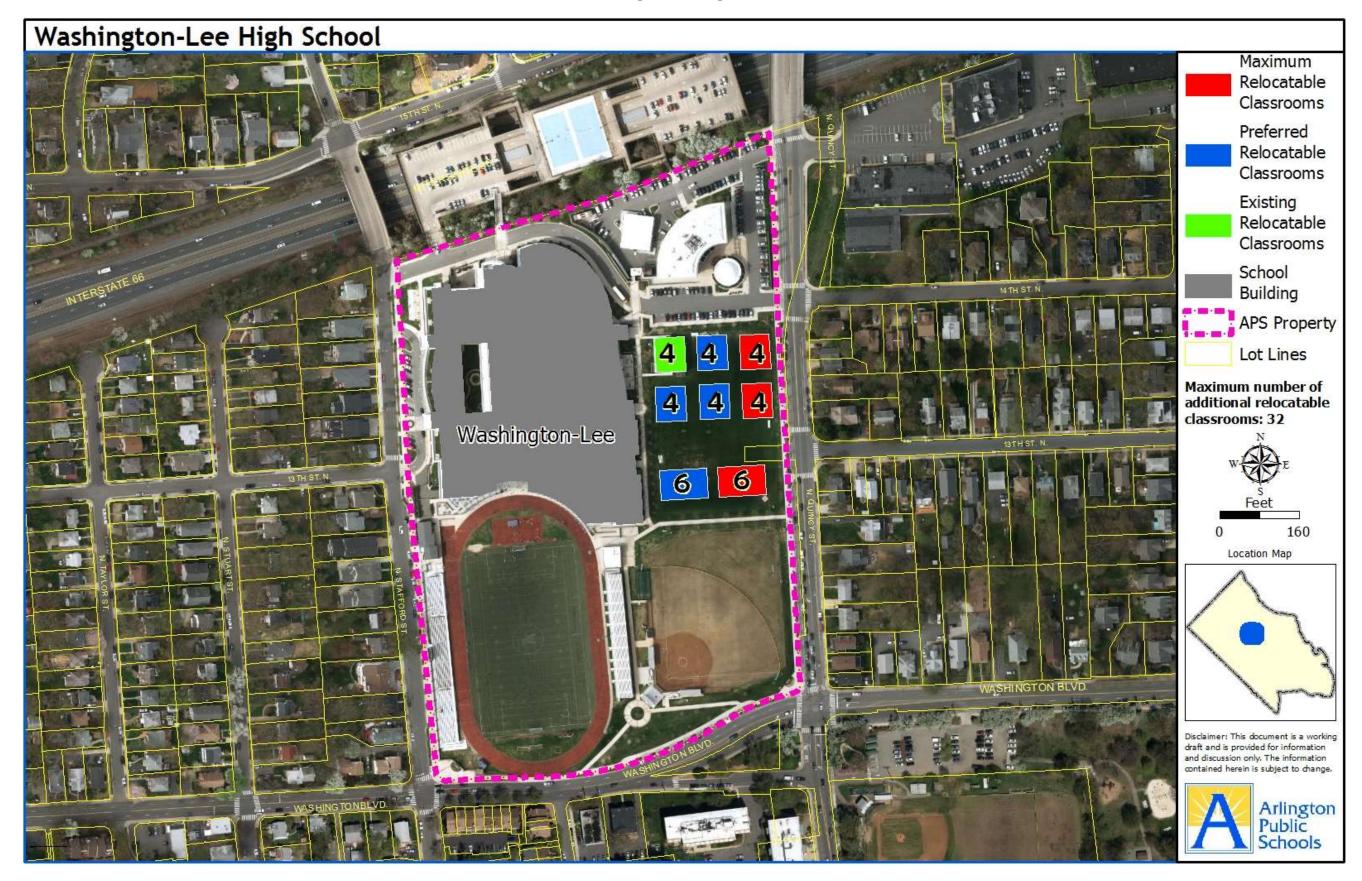
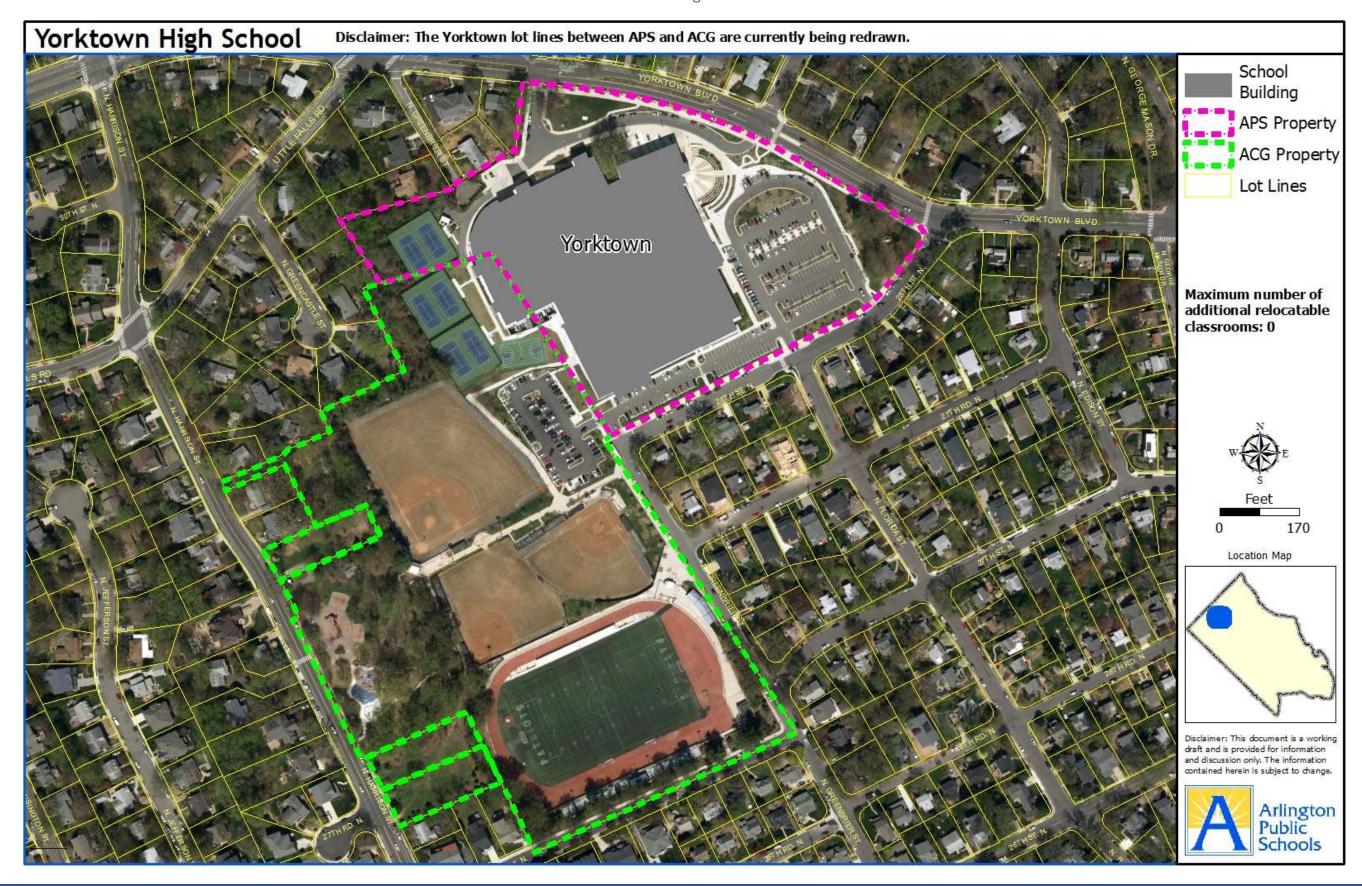


Illustration 37 Washington-Lee High School





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METHODOLOGY

The <u>Current & Projected Utilization Chart</u> published during the fall of 2016 provides a baseline capacity for school facilities but does not include the potential impact of relocatable classroom capacity (Tables 4, 5 & 6, Columns 2). The student enrollment for each school is based on the official enrollment count as of September 30, 2016 (Tables 4, 5 & 6, Columns 3). For the 2017-18 school year 145 relocatables are used across all of APS. Of these relocatables, 139 serve as relocatable classrooms, while another six are identified as utility relocatables, meaning they can be configured as a lunchroom or as a gymnasium (Tables 4, 5 & 6, Columns 4 & 5). Identifying relocatables as either classrooms or utility is important for this study because it allows staff to understand the versatility of a relocatable. However, utility relocatables are not counted in this study as capacity generating classrooms.

For purposes of this report capacity calculations included relocatabale classroom capacity to equitably compare seats between schools and amongst grade levels. Furthermore, the generalized seat capacity calculations do not account for specific programs such as prekindergarten, or specific uses such as special education, which would alter the actual capacity of school. The calculations utilize a planning factor, one for elementary schools and one for middle and high schools (secondary school planning factor), as provided in the <u>Arlington Facilities and Student Accommodation Plan, FY 2016-25</u>. The calculation also uses a classroom utilization factor to quantify percent classroom use at secondary schools. This utilization factor as provided in the <u>Arlington Facilities and Student Accommodation Plan, FY 2016-25</u>.

The number of additional elementary school seats are calculated by multiplying the number of relocatable classrooms by the elementary school planning factor rounded to the next whole number (Tables 4, 5 & 6, Columns 10 & 11). The number of additional secondary school seats are calculated by multiplying the number of relocatable classrooms by the secondary school planning factor rounded to the next whole number and applying a 6/7th utilization factor (Tables 4, 5 & 6, Columns 10-12). The new total capacity is calculated by adding the number of additional school seats provided by the classroom relocatables to the existing capacity of the school (Tables 4, 5 & 6, Columns 13)





The potential placement of relocatables is also subject to restrictions imposed by shared spaces, such as cafeterias and gymnasiums. The <u>Virginia Department of Education</u>'s cafeteria capacity guidelines provide a range of square feet per student as noted in <u>Table 7</u> from this APS has selected 11 square-feet per student for elementary schools and 12 square-feet per student for secondary students (<u>Table 7</u>). Elementary school cafeteria seating capacity is calculated by dividing the existing cafeteria square footage by 11 square feet per seating (<u>Table 8</u>, Column 3). In this study the calculation of elementary cafeterias is based on three seatings but however some elementary schools within APS implement up to six seatings. The maximum number of elementary school students served is calculated by multiplying the maximum seating capacity of a cafeteria by a three seating schedule arrangement (<u>Table 8</u>, Column 5). Secondary school cafeteria seating capacity is calculated by dividing the existing cafeteria square footage by 12 square feet per seating (<u>Tables 9 & 10</u>, Columns 3). The maximum number of secondary school students served is calculated by multiplying the maximum seating capacity of a cafeteria by the three seatings (<u>Tables 9 & 10</u>, Columns 3).

The final step in the facilities optimization study is to categorize a classroom relocatable as either "maximum" or "preferred" based on their impact on the number of cafeteria seats. A classroom relocatable is categorized as "maximum" if the placement on a school facility results in a deficit to the number of available cafeteria seats. Conversely, a relocatable is categorized as "preferred" if the placement on a school facility maintains an overage of available cafeteria seats. See Table 4, Columns 15 & 19 and Tables 5 & 6, Columns 16 & 20 for the "maximum" and "preferred" number of cafeteria seats (+/-).

This report identifies potential placement of relocatable classrooms on all APS properties. As a result of this report, further capacity may be obtained following detailed evaluation of current space utilization on a school by school basis

Table 4
Elementary School Relocatable Analysis

							ICITICITA	y Jeriooi	riciocata	DIE Allaly:	313							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
					MAXIMUM PREFERRED			MAXIMUM				PREFERRED						
Elementary Schools	Capacity (Not including Relocatable Classrooms) 2016-17 ¹	Enrollment September 30, 2016¹	Number of Existing Relocatable Classrooms SY2017-18 ²	Number of Existing Utility Relocatable Classrooms SY2017-18 ³	Maximum Number of Additional Relocatable Classrooms	Total Maximum Number of Additional Relocatable Classrooms	Preferred Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Planning Factor	Students per Classroom (Plan Factor) ⁴	Potential Maximum Number of Additional Seats ⁵	Total Maximum Number of Potential Additional Seats ⁶	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-	Potential Preferred Number of Additional Seats ⁸	Total Preferred Number of Potential Additional Seats ⁹	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-
Abingdon	589	627	-	-	-	-		-	23.3	24	-	589	981	392	-	589	981	392
Arl Science Focus	553	662	6	-	8	14	6	12	23.3	24	336	889	852	(37)	288	841	852	11
Arl Traditional	465	534	4	-	14	18	8	12	23.3	24	432	897	780	(117)	288	753	780	27
Ashlawn	684	661	2	-	6	8	6	8	23.3	24	192	876	1,056	180	192	876	1,056	180
Barcroft	460	452	10		10	20	10	20	23.3	24	480	940	1,074	134	480	940	1,074	134
Barrett	576	545	4	-	4	8	4	8	23.3	24	192	768	768	-	192	768	768	-
Campbell	436	430	2	-	6	8	6	8	23.3	24	192	628	771	143	192	628	771	143
Carlin Springs	585	603	4	-	12	16	12	16	23.3	24	384	969	1,023	54	384	969	1,023	54
Claremont	599	762	7	-	4	11	3	10	23.3	24	264	863	861	(2)	240	839	861	22
Discovery	630	590	-	-	-	-	-	-	23.3	24	-	630	822	192	-	630	822	192
Drew	674	679	-	-	32	32	20	20	23.3	24	768	1,442	1,170	(272)	480	1,154	1,170	16
Fleet ¹⁰	-	-	-	-	-	-	-	-	23.3	24	-	-	-	-	-	-	-	-
Glebe	510	573	4	-	8	12	8	12	23.3	24	288	798	810	12	288	798	810	12
Henry ¹¹	463	615	10	-	2	12	-	10	23.3	24	288	751	576	(175)	240	703	576	(127)
Hoffman-Boston	566	512	-	-	22	22	12	12	23.3	24	528	1,094	888	(206)	288	854	888	34
Jamestown	597	581	-	-	10	10	10	10	23.3	24	240	837	909	72	240	837	909	72
Key ¹¹	653	704	4	-	16	20	-	4	23.3	24	480	1,133	651	(482)	96	749	651	(98)
Long Branch	533	555	4	-	-	4	-	4	23.3	24	96	629	666	37	96	629	666	37
McKinley ¹¹	684	726	6	-	-	6	-	6	23.3	24	144	828	762	(66)	144	828	762	(66)
Nottingham	513	469	1	-	17	18	11	12	23.3	24	432	945	807	(138)	288	801	807	6
Oakridge	674	804	8	2	-	8	-	8	23.3	24	192	866	1,137	271	192	866	1,137	271
Randolph	484	451	2	-	2	4	2	4	23.3	24	96	580	669	89	96	580	669	89
Reed Expansion	-	-	-	-	-	-	-	-	23.3	24	-	-	-	-	-	-	-	-
Taylor	659	686	4	-	12	16	4	8	23.3	24	384	1,043	897	(146)	192	851	897	46
Tuckahoe	545	571	4	-	-	4	-	4	23.3	24	96	641	750	109	96	641	750	109
TOTAL	13,132	13,792	86	2	185	271	122	208	-	-	6,504	19,636	19,680	44	4,992	18,124	19,680	1,556

- 1 Source: Current & Projected Capacity Utilization Chart, Fall 2016-2026.
- 2 Source: Facilities & Operations, School Year 2017-18.
- 3 Utility relocatables can be configured as lunchrooms or as gymnasiums to address the increased student enrollment and are not counted as relocatable classrooms.
- 4 Students per classroom are rounded up to the nearest whole number.
- 5 Potential number of additional seats was calculated using a planning factor of 24. The plan factor was sourced from the Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25.
- 6 Total maximum number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats as a result of the potential relocatable classrooms.
- 7 The maximum number of elementary school students served was calculated under Table 5.
- 8 Potential preferred number of additional seats was calculated using a plan factor of 24. The plan factor was sourced from the <u>Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25</u>.
- 9 Total preferred number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats as a result of the potential relocatable classrooms.
- 10 Additional classrooms may be obtained through room conversion.
- 11 This school currently provides more than three seatings in its cafeteria.

Table 5
Middle School Relocatable Analysis

							IVIIGO	ale School	riciocato	ibic Allai	y 515								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
					MAXI	MUM	PREFE	RRED					MAX]	MUM			PREFE	RRED	
Middle Schools	Capacity (Not including Relocatable Classrooms) 2016-17 ¹	Enrollment September 30, 2016¹	Number of Existing Relocatable Classrooms SY2017-18 ²	Number of Existing Utility Relocatable Classrooms SY2017-18 ³	Maximum Number of Additional Relocatable Classrooms	Total Maximum Number of Additional Relocatable Classrooms	Preferred Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Planning Factor	Flex Factor	Students per Classroom (Plan Factor x Flex Factor) ⁴	Potential Maximum Number of Additional Seats ⁵	Total Maximum Number of Potential Additional Seats ⁶	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-	Potential Preferred Number of Additional Seats ⁸	Total Preferred Number of Potential Additional Seats ⁹	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-
Gunston	932	949	2	-	34	36	30	32	24.3	6/7	21	756	1,688	1,614	(74)	672	1,604	1,614	10
Jefferson	1,086	959	1	-	6	7	-	1	24.3	6/7	21	147	1,233	1,032	(201)	21	1,107	1,032	(75)
Kenmore	985	894	-	-	48	48	12	12	24.3	6/7	21	1,008	1,993	1,251	(742)	252	1,237	1,251	14
Swanson	948	1,179	20	2	2	22	2	22	24.3	6/7	21	462	1,410	1,545	135	462	1,410	1,545	135
New MS @ Stratford	-	-	-	_	-	-	-	-	24.3	6/7	21	-	-	-	-	-	-	-	-
Williamsburg	997	1,215	22	2	8	30	4	26	24.3	6/7	21	630	1,627	1,623	(4)	546	1,543	1,623	80
New School @ Wilson	-		-	-	-	-	-	-	24.3	6/7	21	-		-	-	-	-	-	_
TOTAL	4,948	5,196	45	4	98	143	48	93	-	-	-	3,003	7,951	7,065	(886)	1,953	6,901	7,065	164

- 1 Source: <u>Current & Projected Capacity Utilization Chart, Fall 2016-2026</u>.
- 2 Source: Facilities & Operations, School Year 2017-18.
- 3 Utility relocatables can be configured as lunchrooms or as gymnasiums to address the increased student enrollment and are not counted as relocatable classrooms.
- 4 Students per classroom are rounded up to the nearest whole number.
- 5 Potential maximum number of additional seats was calculated using a planning factor of 21. The plan factor was sourced from the Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25.
- 6 Total maximum number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats as a result of the potential relocatable classrooms.
- 7 The maximum number of middle school students served was calculated under Table 7.
- 8 Potential preferred number of additional seats was calculated using a planning factor of 21. The plan factor was sourced from the Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25.
- 9 Total preferred number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats as a result of the potential relocatable classrooms.

Table 6
High School Relocatable Analysis

-							1 11/61	1 3011001 1	Terocatas	nc Analys	10								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
					MAXI	MUM	PREFE	RRED					MAX]				PREFE		
High Schools	Capacity (Not including Relocatable Classrooms) 2016-17 ¹	Enrollment September 30, 2016¹	Number of Existing Relocatable Classrooms SY2017-18 ²	Number of Existing Utility Relocatable Classrooms SY2017-18 ³	Maximum Number of Additional Relocatable Classrooms	Total Maximum Number of Additional Relocatable Classrooms	Preferred Number of Additional Relocatable Classrooms	Total Preferred Number of Additional Relocatable Classrooms	Planning Factor	Flex Factor	Students per Classroom (Plan Factor x Flex Factor) ⁴	Potential Maximum Number of Additional Seats ⁵	Total Maximum Number of Potential Additional Seats ⁶	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-	Potential Preferred Number of Additional Seats ⁸	Total Preferred Number of Potential Additional Seats ⁹	Maximum Number of Students Served on a Three Seating Schedule ⁷	Cafeteria Seats +/-
Arl Career Ctr	150	141	-	-	8	8	8	8	24.3	6/7	21	168	318	732	414	168	318	732	414
Arl Community HS	300	95	-	-	1	-	-		24.3	6/7	21	-	300	-	(300)	-	300	-	(300)
Arlington Tech	150	42	-	-	1	-	-		24.3	6/7	21	-	150	-	(150)	-	150	-	(150)
H-B Woodlawn	390	433	3	-	1	3	-	1	24.3	6/7	21	63	453	-	(453)	-	390	-	(390)
Langston	150	76	-	-	1	-	-	-	24.3	6/7	21	-	150	-	(150)	-	150	-	(150)
Stratford	33	33	1			1			24.3	6/7	21	21	54	-	(54)	-	33	-	(33)
Wakefield ¹⁰	1,903	1,834	-	-	56	56	-	-	24.3	6/7	21	1,176	3,079	1,839	(1,240)	-	1,903	1,839	(64)
Washington-Lee ¹⁰	2,208	2,266	4	-	32	36	18	22	24.3	6/7	21	756	2,964	2,676	(288)	462	2,670	2,676	6
New School @ Wilson	-		-	-	-	-		-	24.3	6/7	21	-		-	-	-		-	-
Yorktown ¹⁰	1,879	1,842	-	-	-	-	-	-	24.3	6/7	21	-	1,879	2,184	305	-	1,879	2,184	305
TOTAL	7,163	6,762	8	-	96	104	26	30	-	-	-	2,184	9,347	7,431	(1,916)	630	7,793	7,431	(362)

- 1 Source: Current & Projected Capacity Utilization Chart, Fall 2016-2026.
- 2 Source: Facilities & Operations, School Year 2017-18.
- 3 Utility relocatables can be configured as lunchrooms or as gymnasiums to address the increased student enrollment and are not counted as relocatable classrooms.
- 4 Students per classroom are rounded up to the nearest whole number.
- 5 Potential maximum number of additional seats was calculated using a plan factor of 21. The planning factor was sourced from the Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25.
- 6 Total maximum number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential maximum number of additional seats as a result of the potential relocatable classrooms.
- 7 The maximum number of high school students served was calculated under Table 9.
- 8 Potential preferred number of additional seats was calculated using a plan factor of 21. The planning factor was sourced from the Arlington Facilities and Student Accommodation Plan, Facilities Planning, FY 2016-25.
- 9 Total preferred number of potential additional seats was the calculated sum of each school's capacity as of SY2016-17 and the potential preferred number of additional seats as a result of the potential relocatable classrooms.
- 10 Cafeteria deficit is much less significant than elementary and middle school. High school students are not restricted to dining solely in the cafeteria but are allowed to use all the facilities available at their school.

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Table 7
Dining Room Square Footage Guide

	1	2	3			
Grades	Rectangular Tables with Attached Seats	Rectangular Tables with Stacking Chairs	Round Tables with Stacking Chairs			
K - 5	8-10 square feet per student	10-11 square feet per student	11-14 square feet per student			
6 - 8	9-11 square feet per student	11-14 square feet per student	11-14 square feet per student			
9 - 12	11 square feet per student	11-14 square feet per student	11-14 square feet per student			

 $\textbf{Source:} \ \underline{\textbf{Guidelines for School Facilities in Virginia's Public Schools, VDOE-Revised September 2013}.$

Table 8
Elementary School Cafeteria Capacity

Elementary School Careteria Capacity												
	1	2	3	4	5							
Elementary Schools	Cafeteria Square Footage SY2016-17¹	Minimum Number of Square Feet per Student Seating Arrangement ²	Maximum Seating Capacity of Cafeteria	Maximum Number of Scheduled Seatings	Maximum Number of Students Served on a Three Seating Schedule ²							
Abingdon	3,600	11	327	3	981							
Arl Science Focus	3,127	11	284	3	852							
Arl Traditional	2,855	11	260	3	780							
Ashlawn	3,872	11	352	3	1,056							
Barcroft	3,940	11	358	3	1,074							
Barrett	2,815	11	256	3	768							
Campbell	2,825	11	257	3	771							
Carlin Springs	3,747	11	341	3	1,023							
Claremont	3,162	11	287	3	861							
Discovery	3,012	11	274	3	822							
Drew	4,288	11	390	3	1,170							
Fleet	-	11	-	3	-							
Glebe	2,975	11	270	3	810							
Henry	2,113	11	192	3	576							
Hoffman-Boston	3,259	11	296	3	888							
Jamestown	3,335	11	303	3	909							
Key	2,390	11	217	4	868							
Long Branch	2,439	11	222	3	666							
McKinley	2,792	11	254	3	762							
Nottingham	2,955	11	269	3	807							
Oakridge	4,166	11	379	3	1,137							
Randolph	2,450	11	223	3	669							
Reed Expansion	-	11	-	3	-							
Taylor	3,294	11	299	3	897							
Tuckahoe	2,755	11	250	3	750							
TOTAL	72,166	-	-	-	19,897							

^{1 -} Source: Stantec Facilities Layouts, SY2015-2016.

^{2 -} Maximum number of students serviced by a cafeteria was calculated based on a minimum of 11 square feet per student seating arrangement and an overall three seatings schedule. <u>Guidelines for School Facilities in Virginia's Public Schools, VDOE - Revised September 2013</u>.

Table 9
Middle School Cafeteria Capacity

	1	2	3	4	5
Middle Schools	Cafeteria Square Footage SY2016-17¹	Minimum Number of Square Feet per Student Seating Arrangement ²	Maximum Seating Capacity of Cafeteria	Maximum Number of Scheduled Seatings	Maximum Number of Students Served on a Three Seating Schedule ²
Gunston	6,455	12	538	3	1,614
Jefferson	4,129	12	344	3	1,032
Kenmore	5,002	12	417	3	1,251
Swanson	6,182	12	515	3	1,545
New MS @ Stratford	-	12	-	3	-
Williamsburg	6,494	12	541	3	1,623
New School @ Wilson	-	12	1	3	-

^{1 -} Source: Facilities Layouts, 2004-2017.

^{2 -} Maximum number of students serviced by a cafeteria was calculated based on a minimum of 12 square feet per student seating arrangement and an overall three seatings schedule. <u>Guidelines for School Facilities in Virginia's Public Schools, VDOE - Revised September 2013</u>.

Table 10 High School Cafeteria Capacity

	1	2	3	4	5	
High Schools	Cafeteria Square Footage SY2016-17¹	Minimum Number of Square Feet per Student Seating Arrangement²	Maximum Seating Capacity of Cafeteria	Maximum Number of Scheduled Seatings	Maximum Number of Students Served on a Three Seating Schedule ²	
Arl Career Ctr ³	2,925	12	244	3	732	
Wakefield ³	7,352	12	613	3	1,839	
Washington- Lee ³	10,700	12	892	3	2,676	
Yorktown ³	8,738	12	728	3	2,184	
TOTAL	29,715	-	-	-	7,431	

- 1 Source: Facilities Layouts, 2009-2013.
- 2 Maximum number of students serviced by a cafeteria was calculated based on a minimum of 11 square feet per student seating arrangement and an overall three seatings schedule. <u>Guidelines for School Facilities in Virginia's Public Schools, VDOE Revised September 2013</u>.
- 3 Cafeteria deficit is much less significant than elementary and middle school. High school students are not restricted to dining solely in the cafeteria but are allowed to use all the facilities available at their school.