

WILSON SCHOOL

1601 Wilson Boulevard, Arlington, VA

SCHEMATIC DESIGN REPORT

July 1, 2016



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SPACE PROGRAMMING

During the Schematic Design phase, the Design Team worked with the staff of APS and the Stratford and H-B Woodlawn Programs to refine the preliminary program produced during Concept Design. Through several meetings and workshops, the team developed a revised and inclusive program, and published a Schedule of Spaces & Planning Diagrams that guided the planning efforts throughout Schematic Design.

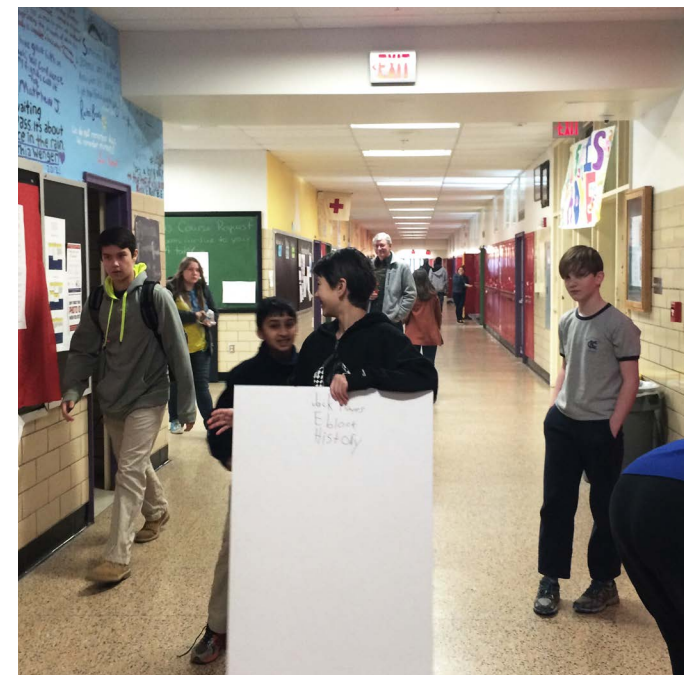
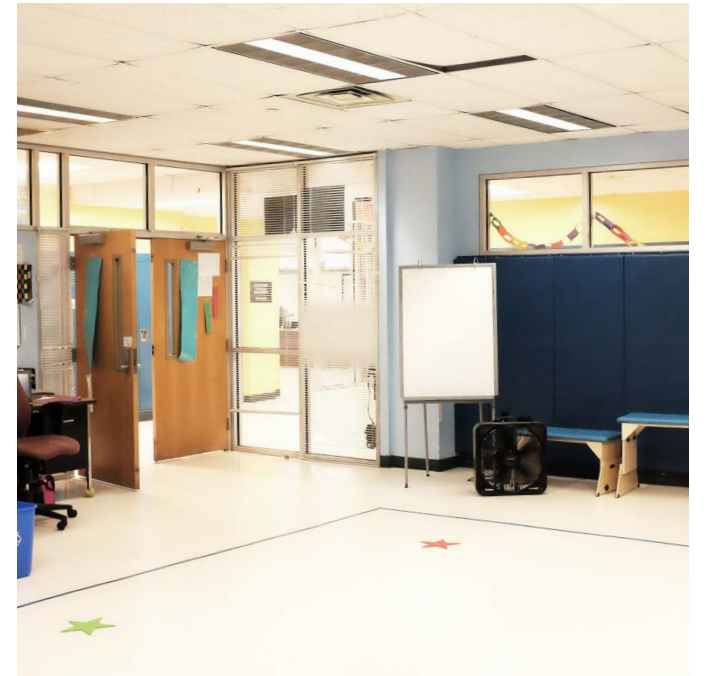
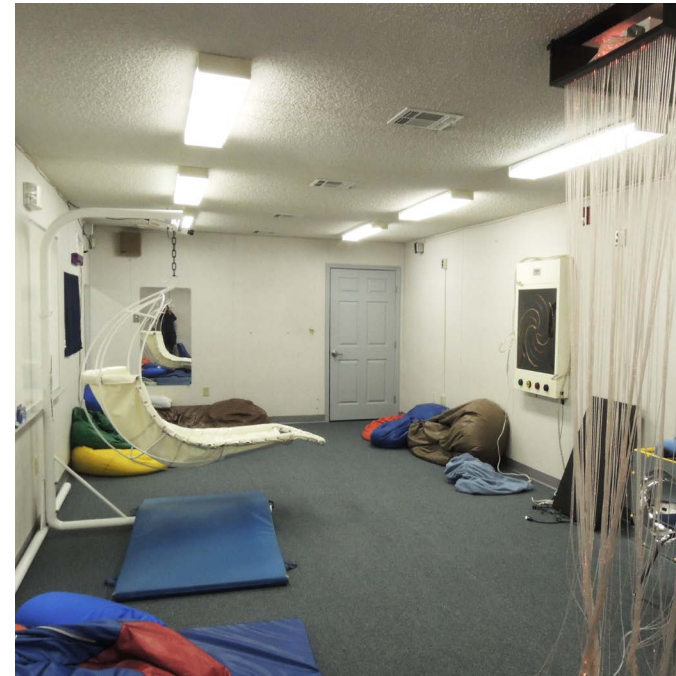
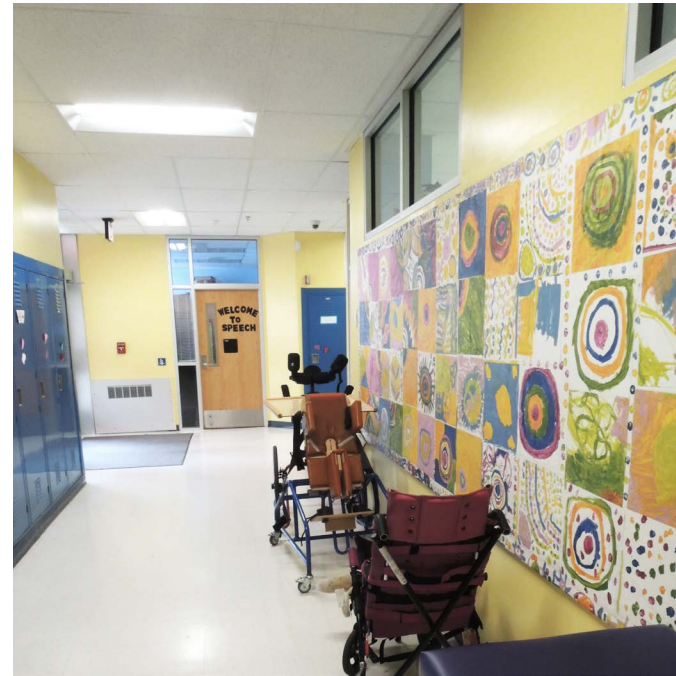
The major goal for these workshops was to find ways to increase collaboration between the Stratford and H-B Woodlawn Programs and make the new school inclusive for all students.

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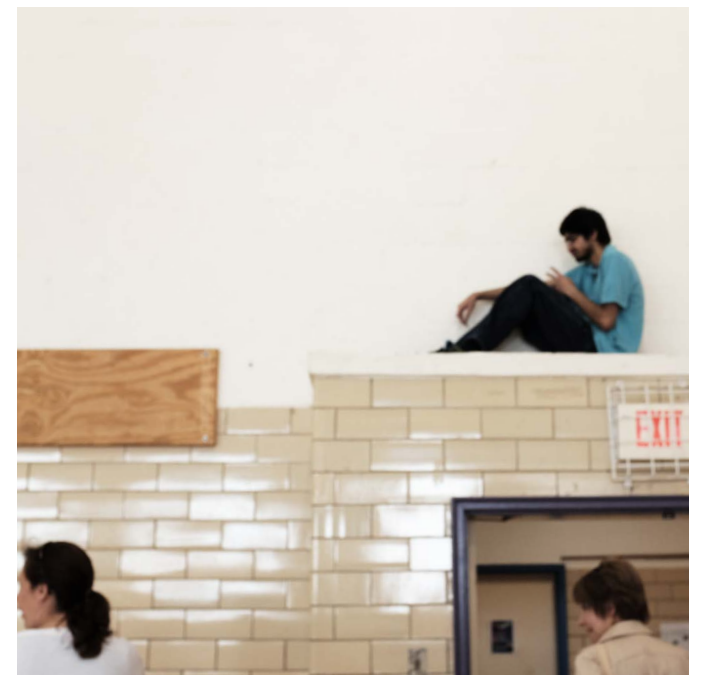
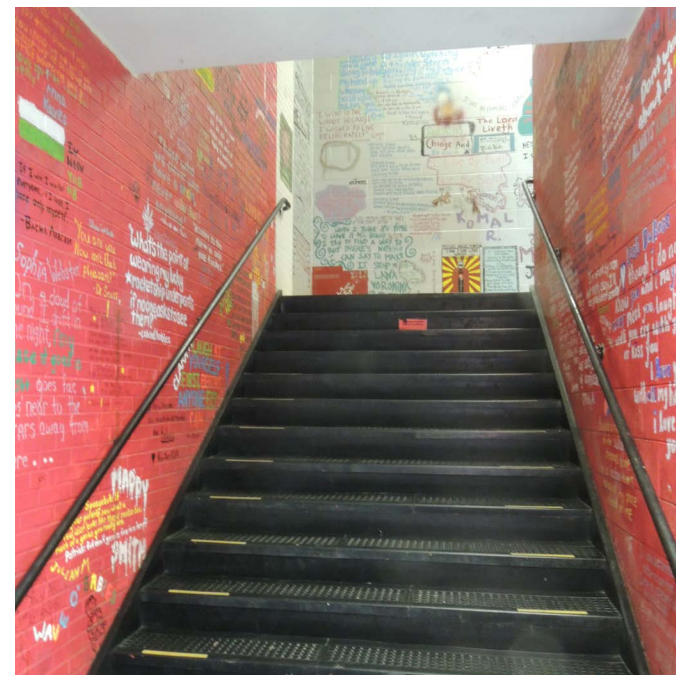
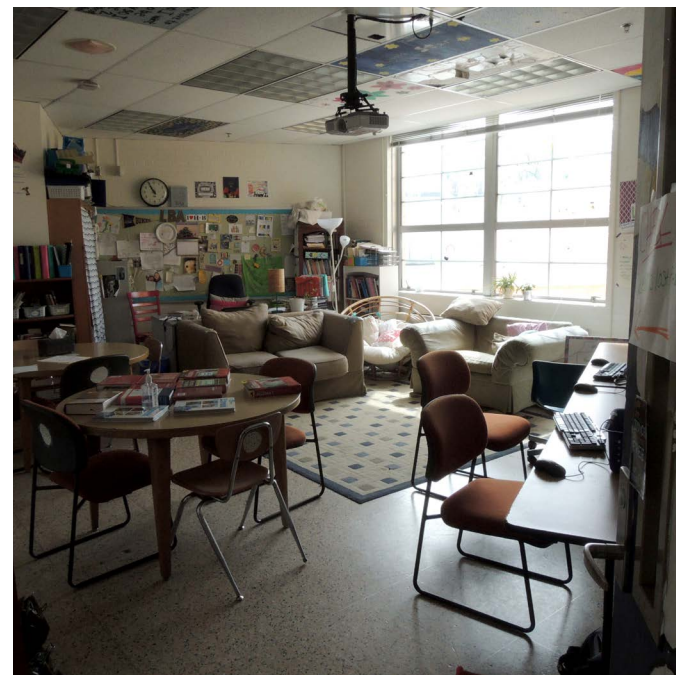
CURRENT FACILITIES
STRATFORD AND H-B WOODLAWN PROGRAMS



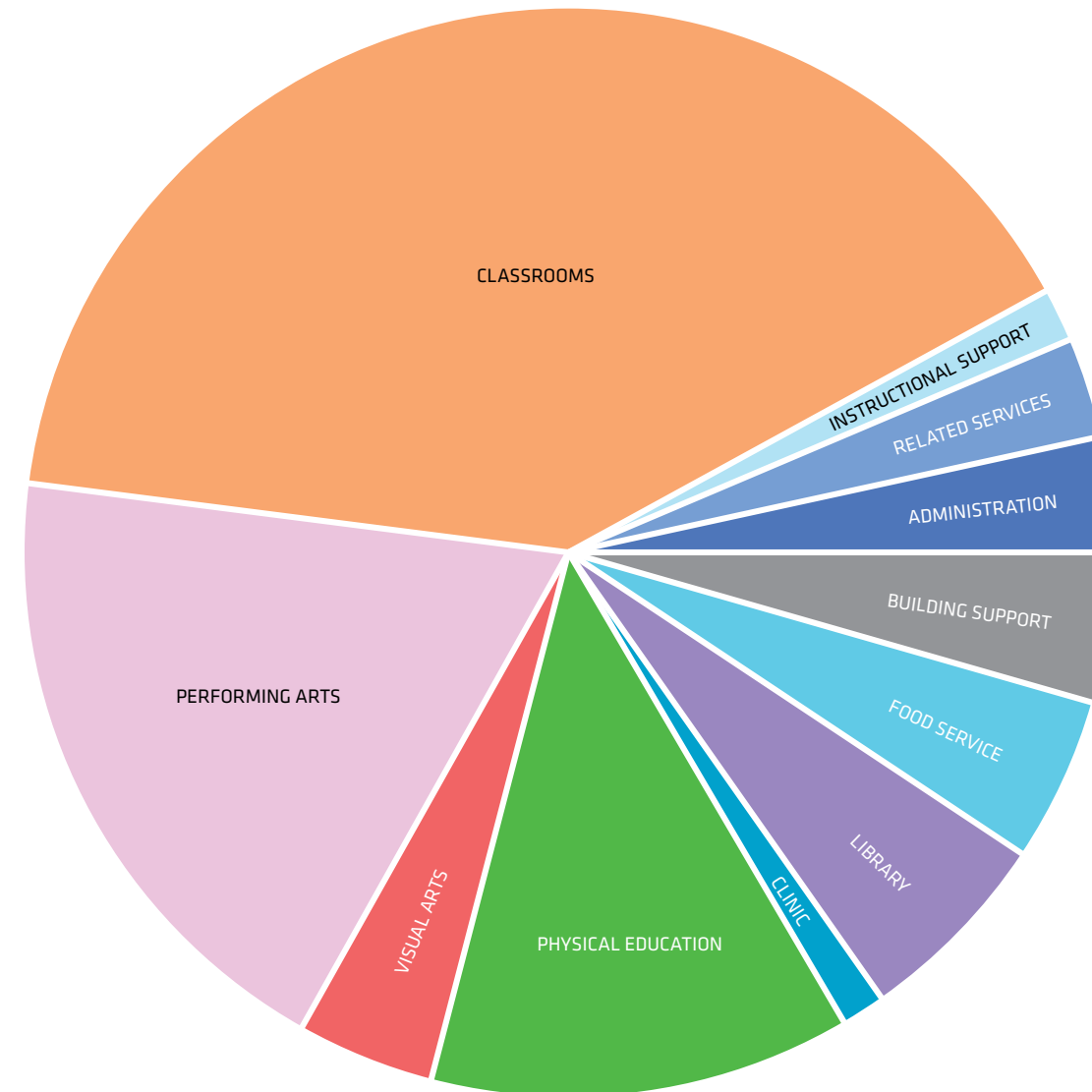
CURRENT STRATFORD PROGRAM FACILITY



CURRENT HB-WOODLAWN PROGRAM FACILITY



PROGRAM BREAKDOWN



TWO PROGRAMS / ONE SCHOOL

The new Wilson School building will provide a singular identity for all students who attend.

The space program of the new building will provide opportunities for the students and faculty to share rooms and spaces in the new building in order to foster collaboration between Stratford & H-B Programs and as a result minimize the footprint of the building.

PROGRAM COMPARISON TABLES

Name of Space	Proposed			Actual			Delta
	Qty.	Size	Total area (NSF)	Qty.	Size	Total area (NSF)	
Administration							
Reception 1	1	400 sf	400	1	402 sf	402	1%
Reception 2	1	620 sf	620	1	647 sf	647	4%
Principal's Office	2	200 sf	400	2	220 sf	439	10%
Office Type 1	3	150 sf	450	3	146 sf	438	-3%
Office Type 2	3	100 sf	300	3	109 sf	327	9%
Office Type 3	1	150 sf	150	1	154 sf	154	3%
Conference Room	2	200 sf	400	2	213 sf	425	6%
Conference Room - Small	1	120 sf	120	1	116 sf	116	-3%
Records Storage	1	100 sf	100	1	126 sf	126	26%
Supply Room	2	100 sf	200	2	112 sf	223	12%
Staff toilet	2	65 sf	130	2	52 sf	103	
Subtotal			3,270			3,400	4%
Instructional Support							
Staff Lounge	2	450 sf	900	2	283 sf	566	-37%
Staff Work Room	1	250 sf	250	1	251 sf	251	0%
Copy Room	3	150 sf	450	2	134 sf	267	-11%
Instructional Material Storage	1	200 sf	200	1	204 sf	204	2%
IT Work Room	1	250 sf	250	1	300 sf	300	-25%
IT Storage	1	150 sf	150	1	-	-	
Subtotal			2,200			1,588	-28%
Related Services							
Occupational / Physical Therapy Room	1	500 sf	500	1	484 sf	484	-3%
Shared Office Suite	1	300 sf	300	1	300 sf	300	0%
Office Type 1	3	150 sf	450	3	144 sf	432	-4%
Office Type 2	2	100 sf	200	2	95 sf	190	-5%
Office Type 3	1	150 sf	150	1	150 sf	150	0%
Resource Office for Gifted Program	1	200 sf	200	1	154 sf	154	-23%
Conference Room - Small	2	175 sf	350	2	187 sf	374	7%
Sensory Cottage	1	500 sf	500	1	468 sf	468	-6%
Assistive Technology Storage	1	100 sf	100	1	110 sf	110	10%
Adaptive Equipment Storage	1	300 sf	300	4	74 sf	296	-1%
Subtotal			3,050			2,958	-3%
Classrooms							
Classroom A	28	700 sf	19,600	28	677 sf	18,968	-3%
Classroom B	8	550 sf	4,400	8	536 sf	4,285	-3%
Resource Consultation Room	4	100 sf	400	4	80 sf	322	-20%
Classroom C	4	800 sf	3,200	4	735 sf	2,939	-8%
W/C	2	60 sf	120	2	56 sf	112	-7%
Classroom D	2	900 sf	1,800	2	839 sf	1,677	-7%
W/C	1	60 sf	60	1	56 sf	56	-7%
Classroom E	2	800 sf	1,600	2	745 sf	1,490	-7%
W/C	1	60 sf	60	1	56 sf	56	-7%
Family Consumer Science / Extended Day Room	1	1100 sf	1,100	1	1077 sf	1,077	-2%
Extended Day Storage	1	200 sf	200	1	214 sf	214	7%
Transition Suite	1	450 sf	450	1	615 sf	615	-5%
Storage	1	200 sf	200	1	-	-	
HILT Workroom & Office	1	500 sf	500	1	415 sf	415	-17%
Chemistry Classroom / Lab	1	1300 sf	1,300	1	1124 sf	1,124	-14%
Storage	1	150 sf	150	1	185 sf	185	23%
Physics Classroom / Lab	1	1200 sf	1,200	1	1043 sf	1,043	-13%
Storage	1	50 sf	50	1	66 sf	66	32%
Biology Classroom / Lab	1	1200 sf	1,200	1	1043 sf	1,043	-13%
Storage	1	50 sf	50	1	66 sf	66	32%
MS Science Classroom	3	1000 sf	3,000	3	1095 sf	3,284	8%
Storage	1	50 sf	50	1	-	-	
Engineering / Robotics Lab	1	850 sf	850	1	776 sf	776	-9%
Subtotal			41,540			39,813	-4%

Name of Space	Proposed			Actual			Delta
	Qty.	Size	Total area (NSF)	Qty.	Size	Total area (NSF)	
Performing Arts							
Music							
Instrument Rehearsal	1	1900 sf	1,900	1	1956 sf	1,956	3%
Instrument Storage	1	750 sf	750	1	208 sf	208	-72%
Music Office	2	150 sf	300	2	156 sf	312	4%
Choir Rehearsal	1	1300 sf	1,300	1	1525 sf	1,525	17%
Large Practice Room	1	100 sf	100	1	129 sf	129	29%
Small Practice Room	3	60 sf	180	3	81 sf	243	35%
Music Library	2	125 sf	250	1	261 sf	261	4%
Subtotal			4,780			4,634	-3%
Theater / Drama							
Auditorium Theater	1	4725 sf	4,725	1	4918 sf	4,918	4%
Sound and Light Locks	4	120 sf	480	4	128 sf	512	7%
Follow Spot Booth	1	200 sf	200	1	200 sf	200	0%
Auditorium Control Room	1	225 sf	225	1	332 sf	332	-1%
Dimmer Room	1	100 sf	100	1	88 sf	88	
Amp Rack Room	1	100 sf	100	1	-	-	
Auditorium Stage	1	1950 sf	1,950	1	2011 sf	2,011	3%
Orchestra shell storage	1	250 sf	250	1	118 sf	118	-53%
Piano storage	1	100 sf	100	1	94 sf	94	-6%
Male Dressing Room	1	300 sf	300	1	178 sf	178	-41%
Female Dressing Room	1	300 sf	300	1	178 sf	178	-41%
Costume Shop & Storage	1	500 sf	500	1	467 sf	467	-7%
Set Shop	1	500 sf	500	1	536 sf	536	7%
Set Storage	1	500 sf	500	1	485 sf	485	-3%
Backstage Bathrooms	2	120 sf	240	2	67 sf	134	-44%
Black Box Theater	1	1760 sf	1,760	1	2393 sf	2,393	36%
Sound and Light Locks	2	100 sf	200	3	58 sf	173	-14%
Black Box Control Booth	1	200 sf	200	1	155 sf	155	-23%
Green Room	1	250 sf	250	1	223 sf	223	-11%
Platform and Chair Storage	1	250 sf	250	1	176 sf	176	-30%
Tech Theater Classroom / Drama Classroom	1	800 sf	800	1	755 sf	755	-6%
Subtotal			13,930			14,125	1%
Visual Arts							
Art Studio	1	1650 sf	1,650	1	1555 sf	1,555	-11%
Arts Supply Storage	1	400 sf	400	1	445 sf	445	
Artwork Storage	1	200 sf	200			-	
Kiln Room	1	100 sf	100	1	101 sf	101	
Visual Arts Office	1	150 sf	150	1	130 sf	130	-13%
Art Room	1	900 sf	900	1	851 sf	851	-5%
Film / Photography Studio	1	900 sf	900	1	985 sf	985	-10%
Storage	1	200 sf	200	1	-	-	
Subtotal			4,500			4,067	-10%
Physical Education							
Main Gymnasium	1	6750 sf	6,750	1	6972 sf	6,972	3%
PE Storage	2	150 sf	300	2	100 sf	200	-33%
Custodial Storage	1	60 sf	60	1	52 sf	52	-13%
Outdoor Athletic Storage	1	200 sf	200	1	221 sf	221	11%
Fitness Center/Weight Room	1	1000 sf	1,000	1	1174 sf	1,174	17%
Health Classroom	1	850 sf	850	1	802 sf	802	-6%
PE Office	4	125 sf	500	4	114 sf	456	-9%
Auxiliary Gym	1	2000 sf	2,000	1	1889 sf	1,889	-2%
Cardio / Fitness Room	1	400 sf	400	1	319 sf	319	
Storage	1	100 sf	100	1	337 sf	337	
Table / Chair Storage	1	100 sf	100	1	-	-	
Subtotal			12,260			12,422	1%

PROGRAM COMPARISON TABLES

Name of Space	Proposed			Actual			Delta
	Qty.	Size	Total area (NSF)	Qty.	Size	Total area (NSF)	
Clinic							
Clinic Entry	1	100 sf	100	1	71 sf	71	-29%
Treatment Area	2	200 sf	400	2	290 sf	580	45%
Rest Area	2	200 sf	400	2	153 sf	306	-24%
Nurse's Office	1	100 sf	100	1	141 sf	141	41%
Consultation / Exam Room	1	125 sf	125	1	140 sf	140	12%
Toilet	1	60 sf	60	1	61 sf	61	2%
Subtotal			1,185			1,299	10%
Library							
Library	1	3150 sf	3,150	1	4744 sf	4,744	51%
Conference/Break Out Room	2	150 sf	300	2	150 sf	300	0%
Librarian's Office	1	100 sf	100	1	152 sf	152	52%
Library Classroom	1	500 sf	500	1	700 sf	700	40%
Subtotal			4,050			5,896	46%
Food Service							
Dining Room	1	2500 sf	2,500	1	2124 sf	2,124	-15%
Cafeteria Storage	1	200 sf	200	1	199 sf	199	-1%
Custodial Closet	1	50 sf	50	1	49 sf	49	-2%
Serving Area	1	825 sf	825	1	590 sf	590	-28%
Kitchen	1	1070 sf	1,070	1	1141 sf	1,141	7%
Dry Storage	1	370 sf	370	1	372 sf	372	1%
Refrigerator	1	150 sf	150	1	150 sf	150	0%
Freezer	1	75 sf	75	1	79 sf	79	5%
Food Service Staff Locker Area	1	25 sf	25	1	25 sf	25	0%
Food Service Office	1	100 sf	100	1	93 sf	93	-7%
Staff Toilet	1	60 sf	60	1	60 sf	60	0%
Subtotal			5,425			4,882	-10%
Support							
Building Support							
Custodial Lounge / Locker Room	1	400 sf	400	1	397 sf	397	-1%
Head Custodian's Office	1	100 sf	100	1	111 sf	111	11%
Custodial Supply Storage	1	250 sf	250	1	276 sf	276	10%
Furniture Storage / Attic Stock	1	300 sf	300	1	433 sf	433	44%
Subtotal			1,050			1,217	16%
IT Support							
Main Telecom Room	1	200 sf	200	1	-	-	-100%
Telecom Room	6	120 sf	720	6	123 sf	740	3%
IDF Room	6	50 sf	300	6	50 sf	300	0%
Subtotal			1,220			1,040	-15%
Additional Support							
Single-Occupancy Toilets	8	60 sf	480	8	60 sf	480	0%
Gang Toilets	7	300 sf	2,100	7	343 sf	2,401	14%
Restroom / Changing Room	2	120 sf	240	2	113 sf	226	-6%
Exterior Building Support Storage	1	200 sf	200	1	200 sf	200	0%
Subtotal			3,020			3,307	10%

Name of Space	Proposed			Actual			Delta
	Qty.	Size	Total area (NSF)	Qty.	Size	Total area (NSF)	
Basement MEP (counted in Gross only)							
Main Mechanical Room	1	1100 sf	1,100	1	1100 sf	1,100	0%
Secondary Mechanical Room	1	450 sf	450	1	450 sf	450	0%
Main Electrical Room	1	200 sf	200	1	200 sf	200	0%
Emergency Power Room	1	75 sf	75	1	75 sf	75	0%
Generator Room	1	150 sf	150	1	150 sf	150	0%
Domestic Water and Fire Pump Room	1	450 sf	450	1	450 sf	450	0%
Water Heater Room	1	75 sf	75	1	75 sf	75	0%
Gas Meter	1	100 sf	100	1	100 sf	100	0%
Gray Water Treatment ECM	1	300 sf	300	1	300 sf	300	0%
Rain Water Treatment ECM	1	350 sf	350	1	350 sf	350	0%
Subtotal			3,250			3,250	0%
Above-grade MEP (counted in Gross only)							
Upper Level Mechanical Rooms (DOAS)	6	450 sf	2,700	6	450 sf	2,700	0%
Upper Level Mechanical Rooms (Package Units)	2	550 sf	1,100	2	536 sf	1,072	-3%
Level 1 Electrical Room	1	45 sf	45	1	45 sf	45	0%
Upper Level Electrical Rooms	4	30 sf	120	4	30 sf	120	0%
Subtotal			3,965			3,937	-1%
Program Subtotals							
Administration			3,270			3,400	4%
Instructional Support			2,200			1,588	-28%
Classrooms			41,540			39,813	-4%
Performing Arts			18,710			18,759	0%
Visual Arts			4,500			4,067	-10%
Physical Education			12,260			12,422	1%
Related Services			3,050			2,958	-3%
Clinic			1,185			1,299	10%
Library			4,050			5,896	46%
Food Service			5,425			4,882	-10%
Support			4,070			5,564	37%
Net Total:			100,260			100,648	0%

SITE

The Wilson School site is located in the Western Rosslyn section of Arlington, Virginia. It is at the edge of a dense urban area, nestled between high-rise commercial office buildings and a low-rise residential neighborhood. The site is bound by Wilson Boulevard to the south, North Quinn Street to the west, 18th Street to the north, and Fire Station 10 / Rosslyn Highlands Park to the east. The site currently contains the existing 3-story Wilson School and a grass play field. The site will be cleared to make room for the new school and parking garage / athletic field.

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SITE PHOTOS
SURROUNDING CONTEXT



FROM WILSON BLVD AND QUINN ST



FROM WILSON BLVD AND PIERCE ST



FROM QUINN ST



FROM 18TH ST AND QUINN



ARLINGTON COUNTY, VA

The H-B Woodlawn & Stratford programs will be re-locating from their current facilities on Vacation Lane to the site of the existing Wilson School in Rosslyn.



ROSSLYN

The new school project is part of the Western Rosslyn Area Planning Study (WRAPS) and will be adjacent to Rosslyn Highlands Park and Fire Station #10.

SITE PHOTOS

PANORAMIC VIEWS FROM THE SITE



PANORAMIC VIEW FROM THE SITE LOOKING SOUTH



PANORAMIC VIEW FROM THE SITE LOOKING NORTH

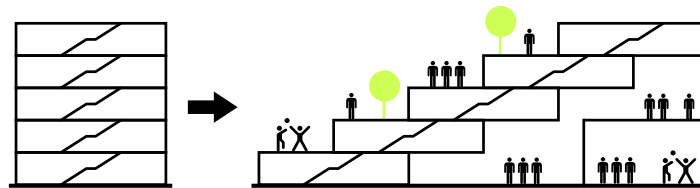
SITE PLAN
EXISTING CONDITIONS



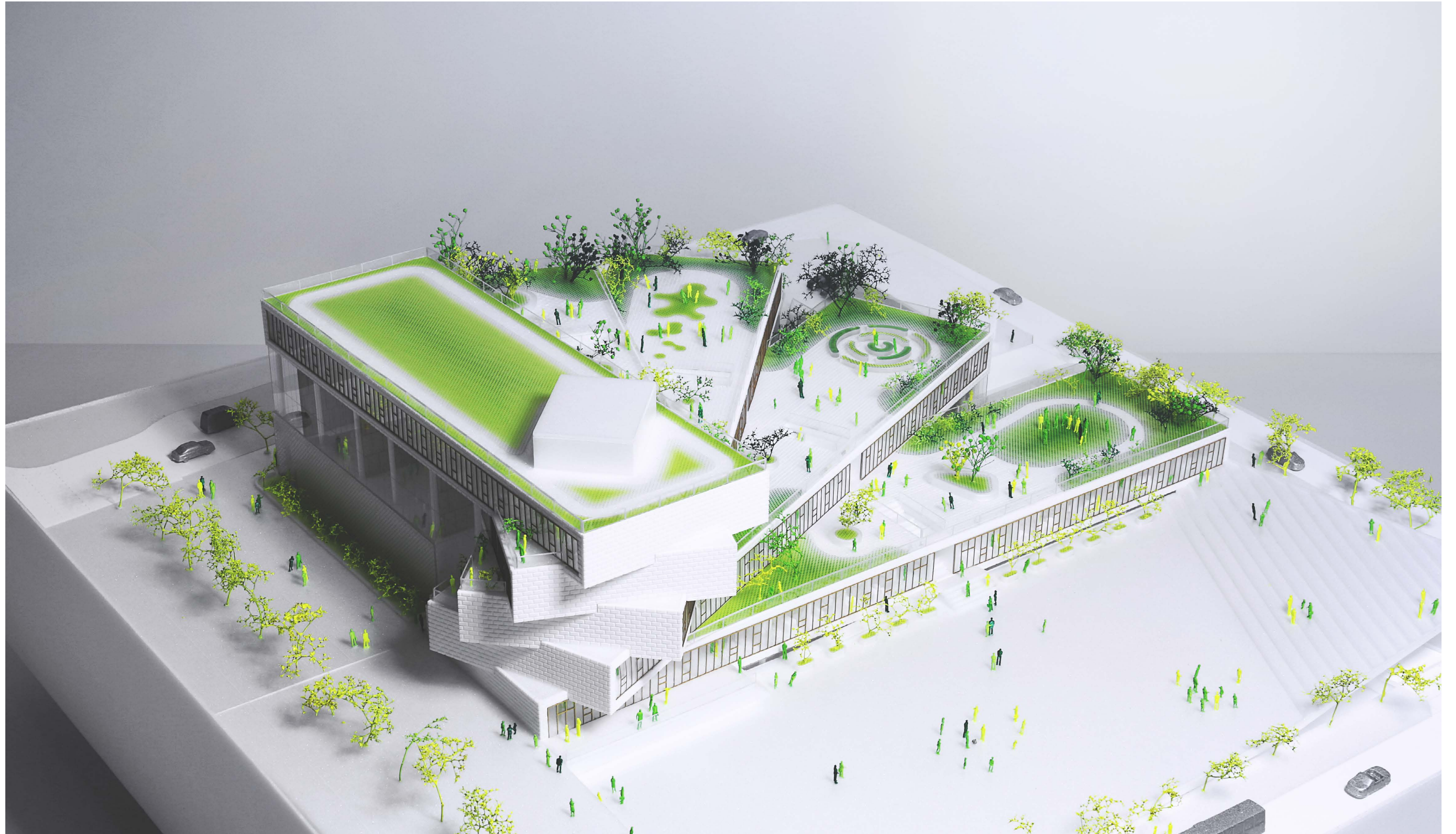
CONCEPT

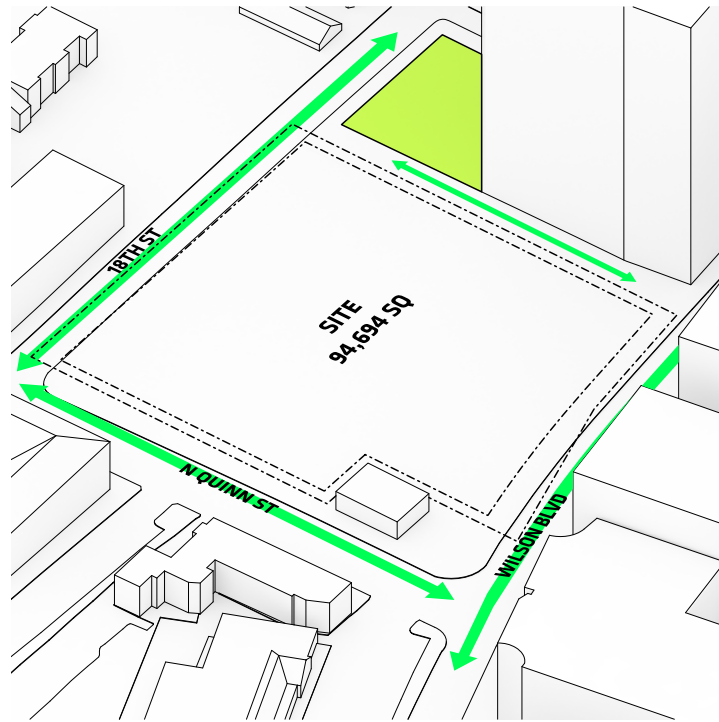
The design works to create a sense of community within a vertical school. A cascading central stair runs through each of the classroom levels to provide quick connections between floor levels. A large, open lobby provides a common gathering space and visual connections to each of the upper levels.

Roof terraces provide access to the outdoors at each of the classroom levels and maximize the amount of open space on this small urban site.



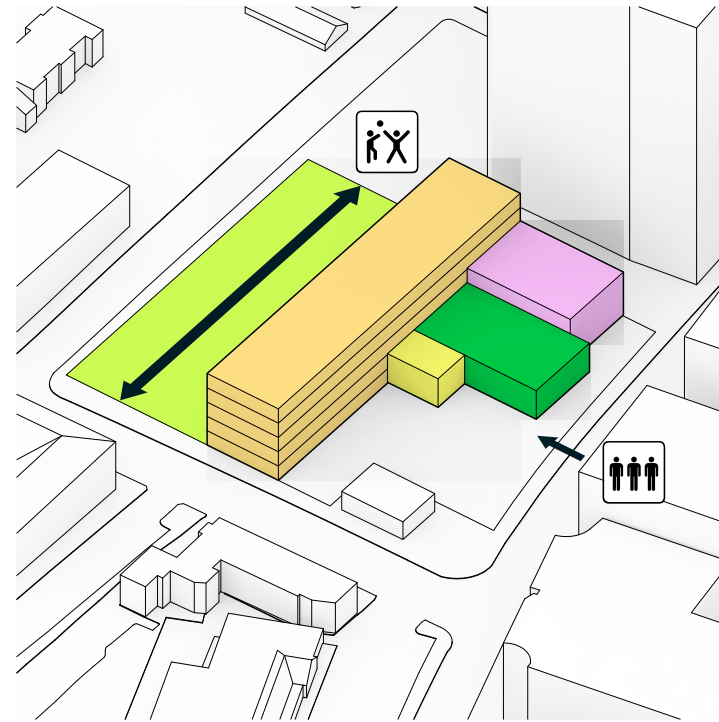
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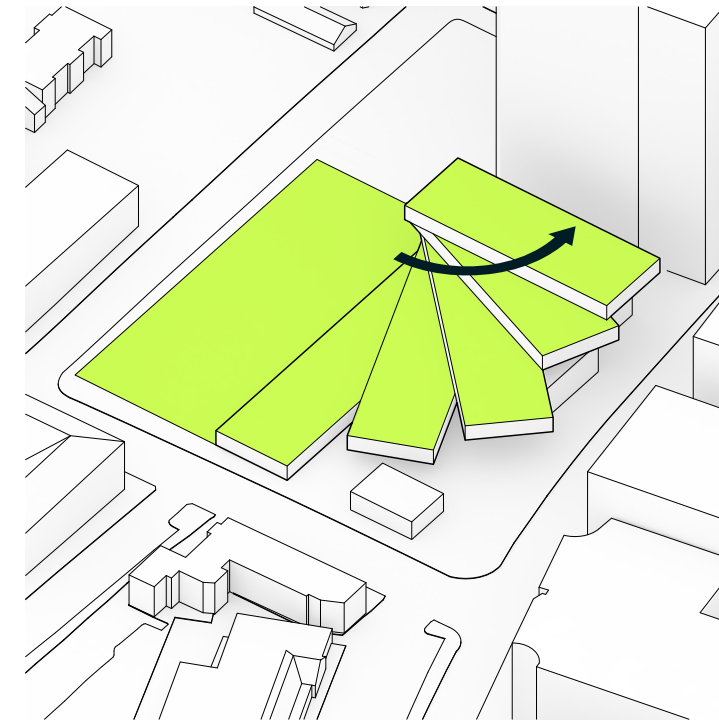
1. WILSON SCHOOL SITE

The compact urban site is bounded by roads on three sides with an existing 7-11 convenience store located on the busy corner of Wilson Blvd. and N. Quinn Street. Along 18th Street, it shares a common edge with Rosslyn Highlands Park.



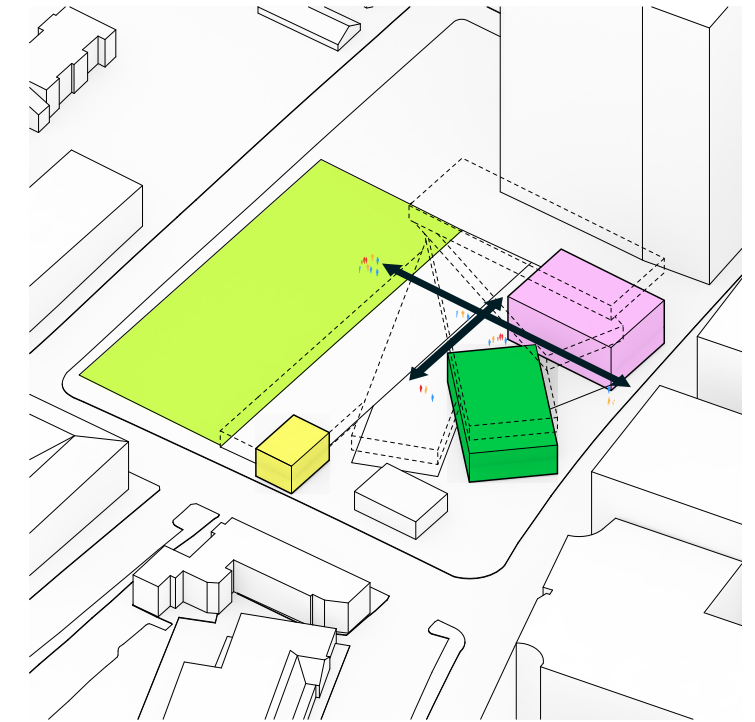
2. BASIC SITE OBJECTIVE

A vertical stack of classroom bars stretches across the center of the site, creating a protective barrier between the athletic field and the busy urban corridor of Wilson Blvd. Larger indoor spaces and community programs are placed on the Wilson and Quinn Street frontages.



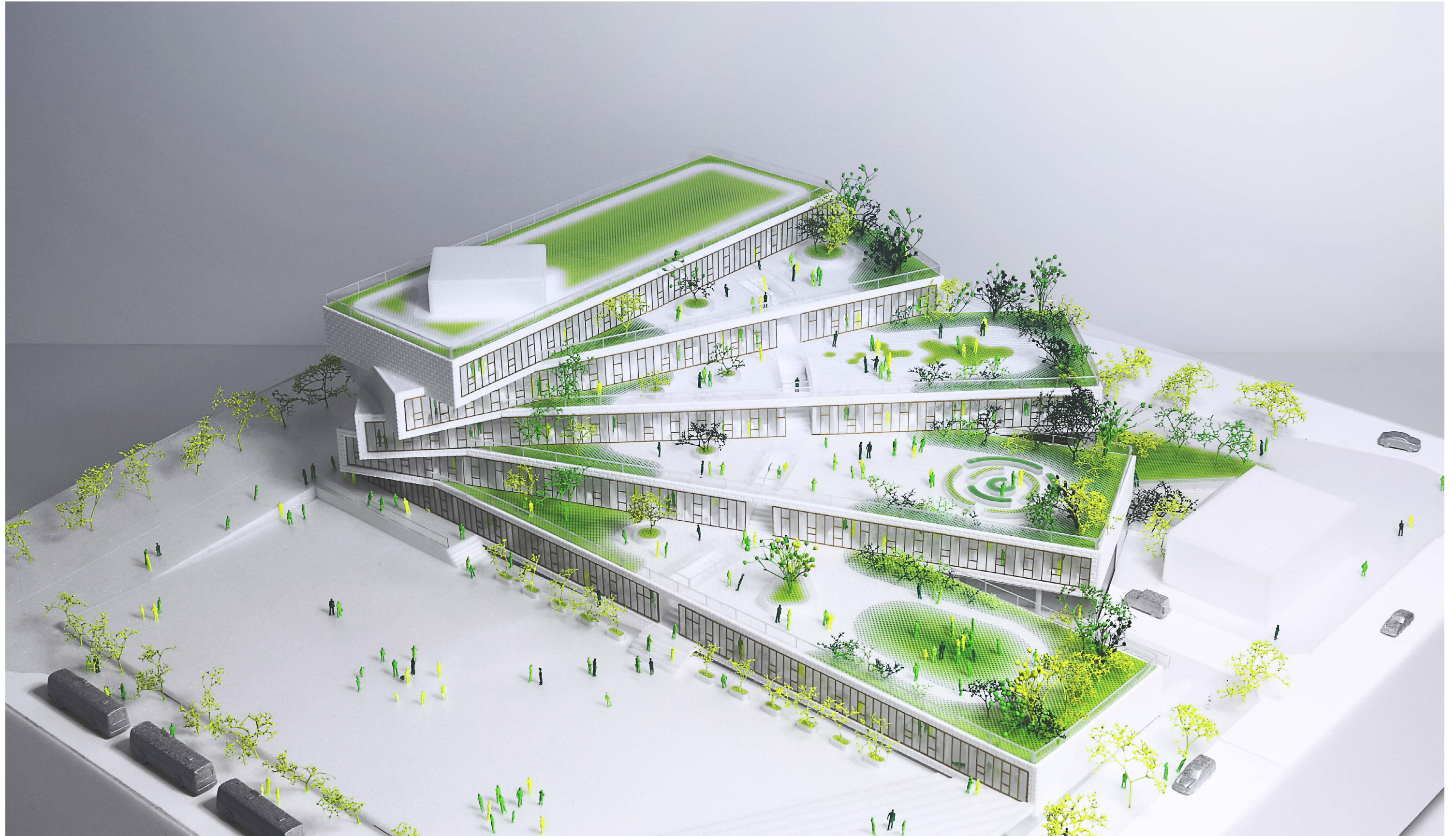
3. CREATION OF TERRACES

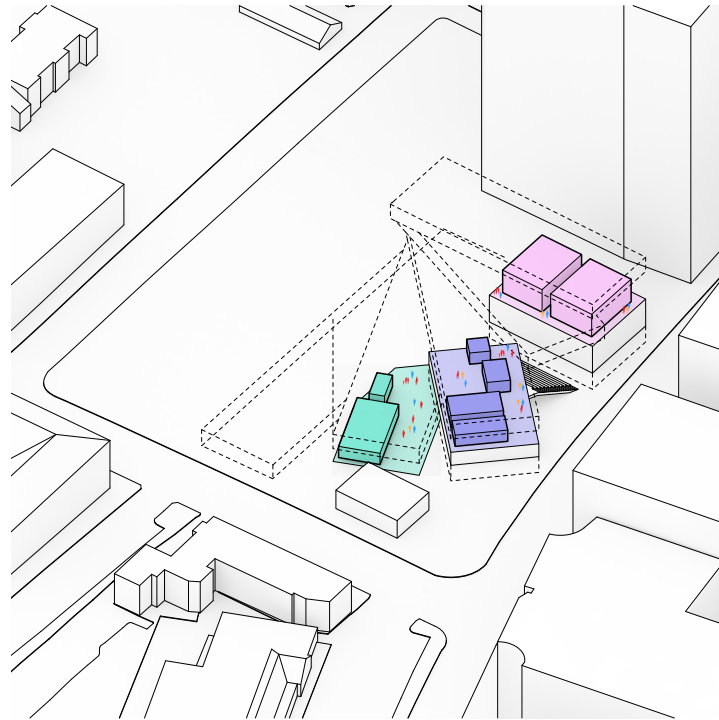
To create green space adjacent to the instructional spaces, the bars are rotated about a single hinge point. This creates cascading terraces leading from the instructional spaces of the school to the field.



4. PUBLIC SPACES TOWARDS WILSON

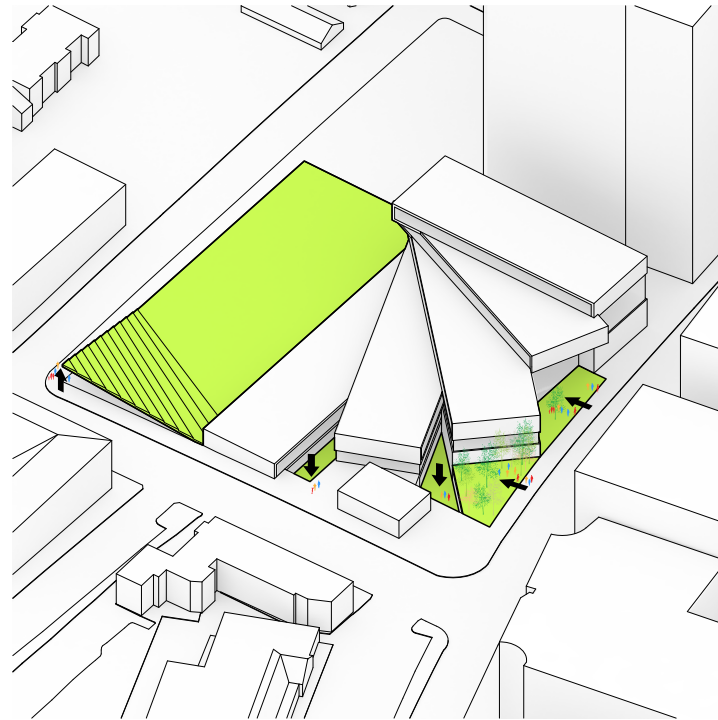
A generous lobby at the Wilson Blvd entry brings the public into the building and creates easy access to community-oriented program. The gymnasium and auditorium are both centrally-located off of this lobby.





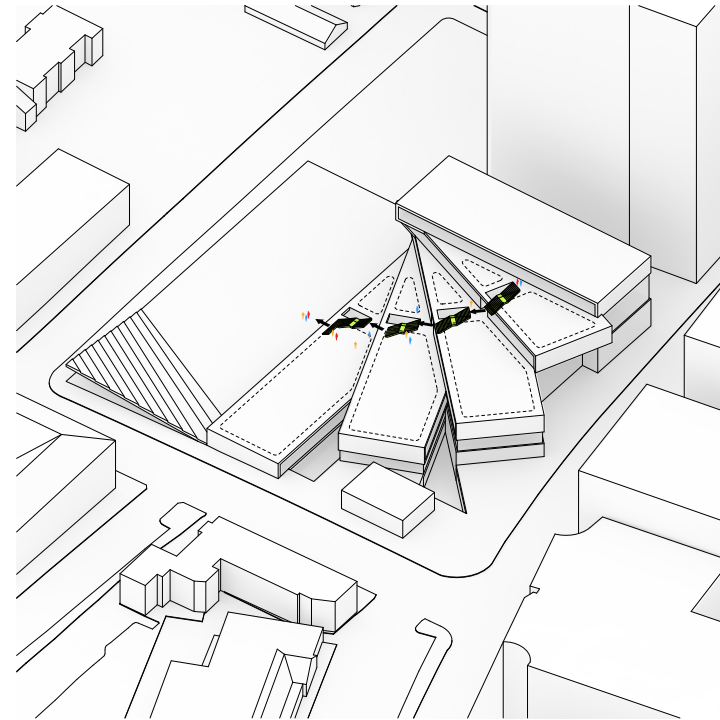
5. IN-BETWEEN SPACE

Larger communal spaces such as the cafeteria, library, and music rehearsal rooms are located with easy access from the central space. The library sits on top of the gym and the music rehearsal spaces sit on top of the theater. Each has a unique identity and is located to maximize functional adjacencies.



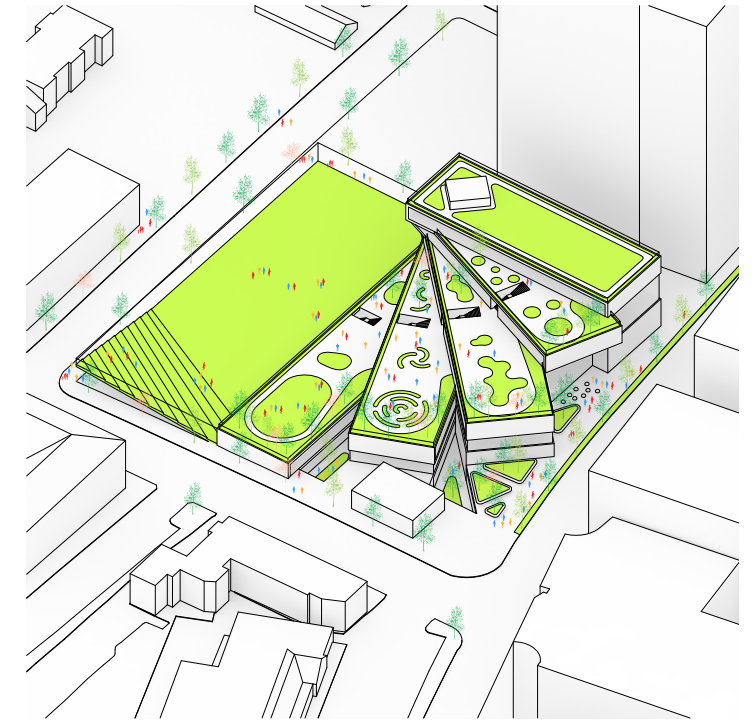
6. MANIPULATED GROUND PLANE

Slight manipulations to the ground plane create significant benefits for the circulation and daylight into the school. A covered entrance from 18th street is created by lifting up a corner of the athletic field, providing protection from the elements leading out to the bus-drop off area along 18th street. Two sunken courtyards bring ample daylight into the lower level of the school and provide quiet outdoor gathering spaces for supervised student access. The outdoor spaces in front of the building on Wilson Boulevard are programmed as small public parks, one near the entrance to the school and another facing the corner of Wilson & Quinn.



7. CASCADING STAIR CONNECTION

To create connections between the levels of the school, a cascading central stair cuts through the interior of the building, as well as between each of the terraces. This allows students to circulate outside and create a stronger connection between the neighborhood and the school.



8. URBAN TERRACED SPACE

Each of the terraces provide different and unique activities, corresponding to the adjacent floor by which they are accessed. These terraces give an opportunity for an urban school to have a 1-story feel that otherwise would not be possible.

