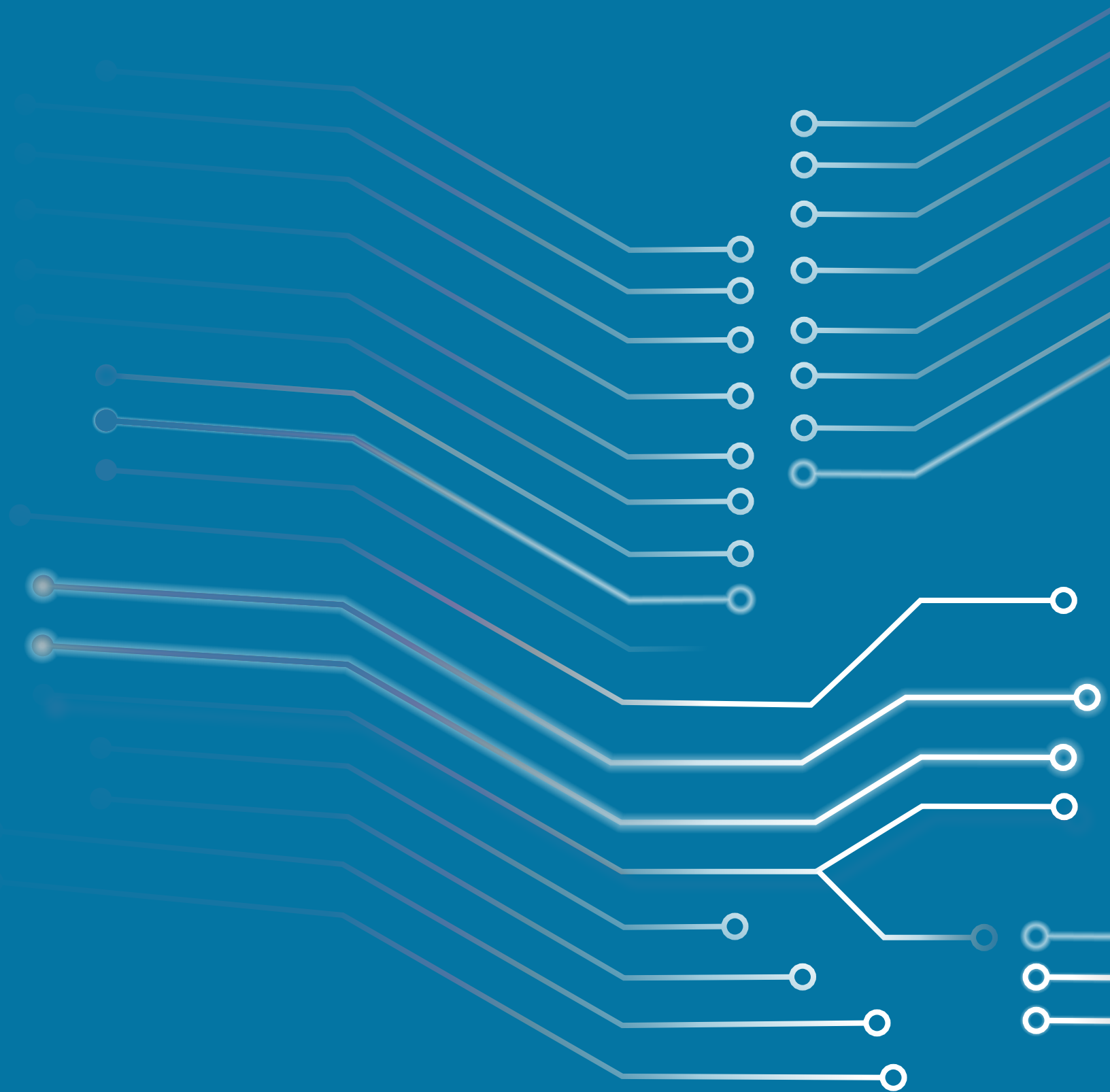


ARLINGTON PUBLIC SCHOOLS
ARLINGTON CAREER CENTER FEASIBILITY STUDY





ARLINGTON PUBLIC SCHOOLS

Dr. Patrick Murphy, Superintendent

Clarence Stukes, Assistant Superintendent, Facilities and Operations

Connie Skelton, Assistant Superintendent, Instruction

Meg Tuccillo, Interim Director, Facility Planning

Kris Martini, Director, Career, Technical, and Adult Education

Nancy Opsut, Principal, Career Center

Barbara Thompson, Principal, Arlington Mill

John Chadwick, Director, Design and Construction Services

Jennifer Xu, Project Manager, Design and Construction Services

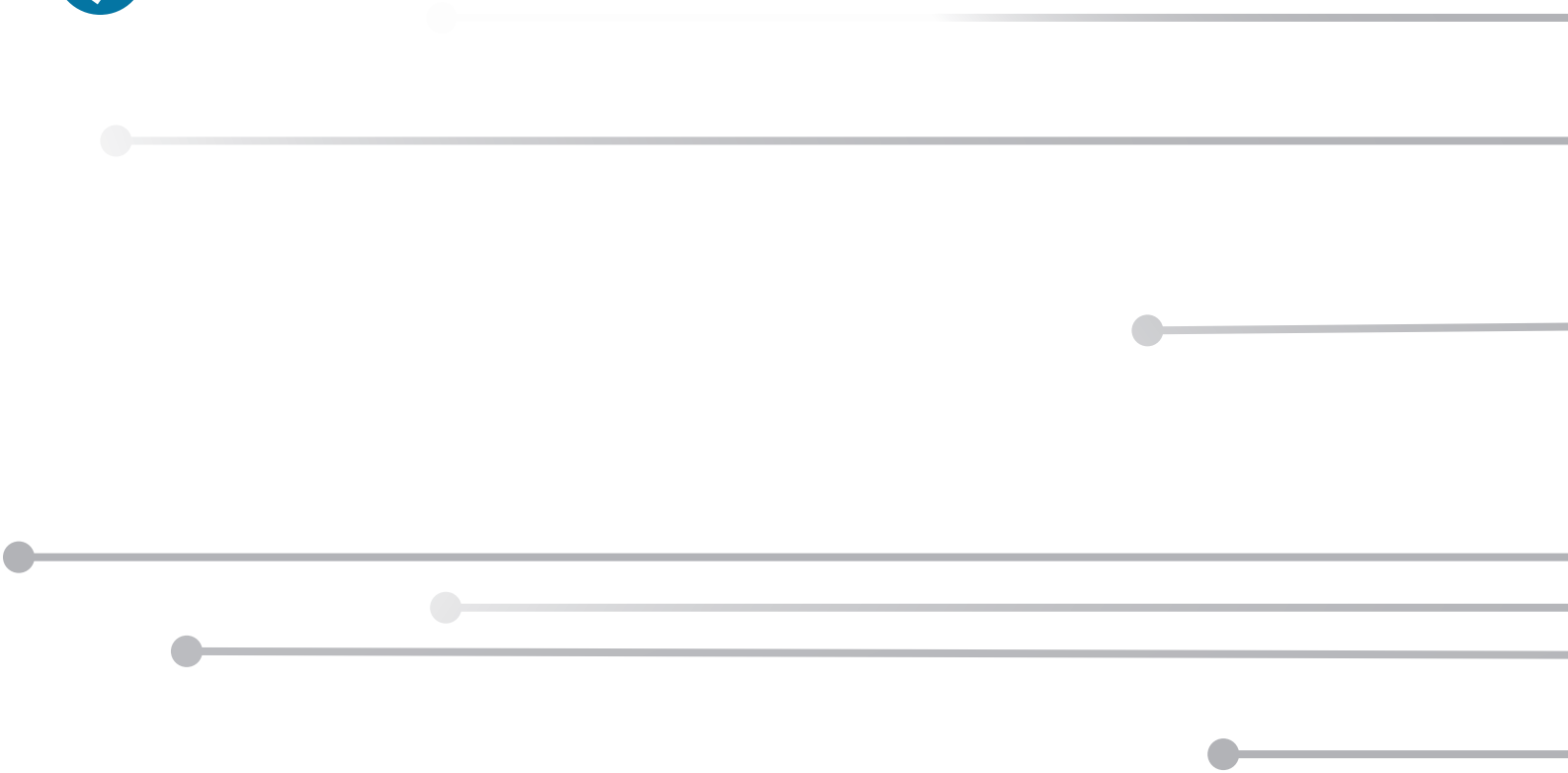


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ARLINGTON CAREER CENTER FEASIBILITY STUDY



EXECUTIVE SUMMARY

Contemporary urban planning strongly emphasizes a holistic approach to development in which land use and value are leveraged to create diverse, dense and community-friendly settings. This is particularly true in Arlington County, where the implementation of comprehensive planning initiatives has resulted in a distinctive and respected reputation among D.C. Metro localities. Throughout Arlington, expectations are high for the thoughtful integration of public and private spaces, traffic and pedestrian systems, and sustainable, cost-effective design strategies for capital construction. Such is the context in which the future of the Arlington Career Center (ACC) site is considered.

This study was undertaken by Arlington Public Schools (APS) to investigate the options and constraints associated with increasing the development potential of the ACC site, and to address the following concerns:

- Identify opportunities for retaining and expanding the Arlington Public Library, integrating the Arlington campus of Northern Virginia Community College, and optimizing utilization of the Patrick Henry site.
- Consolidate the Arlington Mill High School program into the Arlington Career Center by August 2013.
- Address existing parking deficiencies while creating more functional green spaces.
- Define facility requirements and provide concepts to create a capacity-generating Career and Technical Education high school at this site.
- Explore opportunities for creating value and generating revenue through increased site utilization, additional density and program components, and planning strategies.

Currently, the ACC occupies the majority of space in a facility that is shared with the Columbia Pike Branch of the Arlington Public Library. It is located on a parcel of land two blocks north of the intersection of South Walter Reed Drive and Columbia Pike. This 12.7 acre site also includes Patrick Henry Elementary School and the Fenwick Center, which houses the Arlington County Department of Health. Areas of the site not covered by buildings are occupied by a large parking lot and elementary school playfields. Collectively, neither the design of the structures nor the development of the site captures the potential afforded--or inspired--by Arlington County Planning and Zoning regulations.

Creating a more thorough understanding of the possibilities at the ACC site is crucial to APS for a number of reasons. First, enrollment growth is expected to continue; projections are for roughly 8,400 students to enter the school system in the next four years, while only 5,700 students currently graduate. Additional student seats for all grade levels are required. Next, space within existing APS facilities is needed to serve the Arlington Mill High School. This program -- serving over-age/under-credited students in Arlington County -- is currently offered in space that is shared with, and leased from, the Northern Virginia Community College Arlington Campus. Consolidating this program on the ACC site will save APS significant operational costs. Also, the existing ACC facility is structurally sound and has undergone recent window and HVAC replacement; and, worthy of further investment to continue its useful service life. However, without the strategic benefit of a master plan to guide such development, future improvements might occur randomly and fall short of fully capturing all opportunities. Similarly, the value of this real property asset demands a long-range plan that leverages its development potential against the long-term needs of APS.

The development concepts presented herein reflect the ideas and insight of representatives from Arlington Public Schools' instructional and facilities departments. Such collaboration was instrumental in identifying the profound opportunity afforded by the development of the ACC site, to take advantage of instructional synergies and create a truly unique, K-14 campus. The primary components of the proposed plan include:

- Expansion of the ACC to create a 800-1000-pupil CTE High School
- Accommodation of Arlington Mill High School
- Construction of 800-pupil Middle School
- Construction of 650 pupil Elementary School
- Provision for Northern Virginia Community College Arlington Campus
- Incorporation of 30,000 square feet of space for business incubation
- Expansion of the Arlington Public Library
- Construction of 500-space underground parking structure

Implementation strategies for the proposed plan are informed by APS' need and priority, a long-term vision for realizing the development potential of the ACC site, the importance of minimizing disruption to school operations, and maximizing return on public investment.



ARLINGTON CAREER CENTER FEASIBILITY STUDY



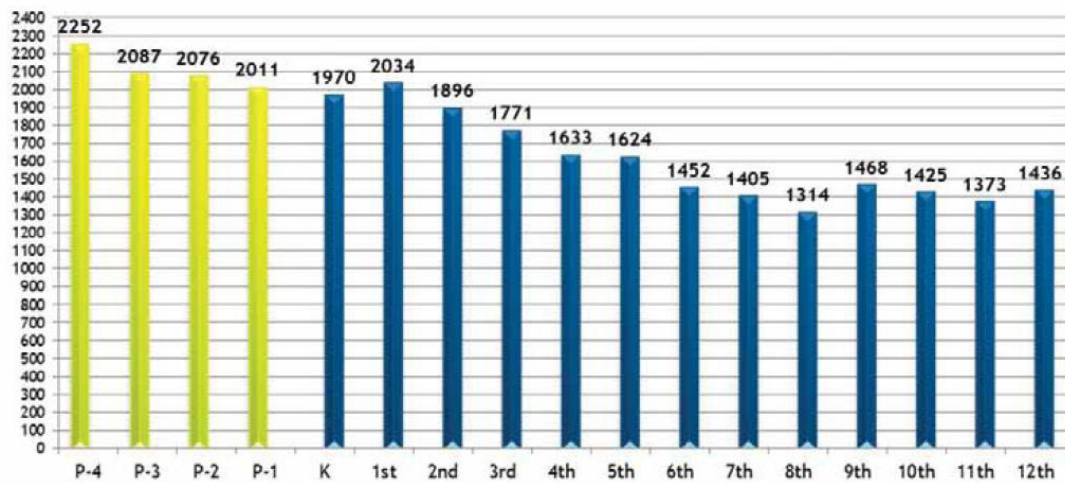
BACKGROUND

The Arlington Career Center (ACC) offers CTE-focused courses to both workforce- and college-bound students from across the County. ACC programs are organized into one of four Career Clusters: Health and Human Services, Trade and Industrial, Business and Communication, and Government and Education. Typically, CTE students spend a portion of their school day at the ACC, then return to their home school for the balance of their course requirements. Unfortunately, there tends to be a great deal of inefficiency associated with the current model of CTE program delivery because it requires significant additional time for student travel. Worse, every student earning an elective credit at the ACC leaves behind a vacant seat at their home school, which cannot be used to increase that school's capacity. Given the number of courses offered at the ACC, class sizes often vary widely throughout the day, further diminishing the school's operational efficiency.

In addition, the ACC accommodates a number of non-CTE courses and “legacy” functions. These are programs that have remained at this facility due primarily to the lack of available space elsewhere. Also, interior modifications throughout the years have resulted in the haphazard arrangement of corridors; poorly sized and/or configured classrooms; and an overall lack of cohesiveness in the learning environment.

Arlington Mill High School administers daytime and evening programs at the ACC, as well as in off-site space shared with Northern Virginia Community College. This, too, is an inefficient and costly approach to serving the student population.

Current & Projected Cohorts as of 2012



As the 5,700 students currently in high school graduate over the next four years, 8,400 new students will enter APS.

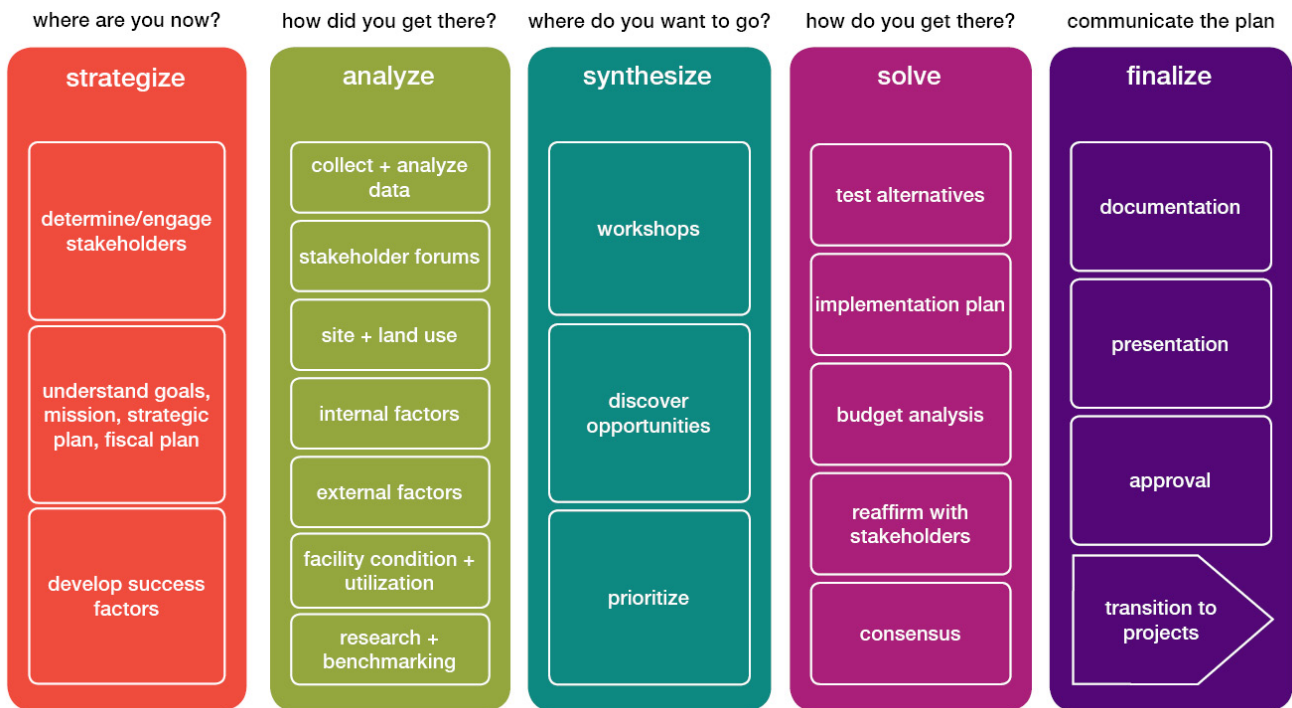
METHODOLOGY

The study team began by conducting surveys and interviews with the ACC and Arlington Mill High School principals, to confirm preliminary space utilization data developed by APS staff. Working with the study committee—comprised of representatives from ACC, Arlington Mill, Planning and Facilities, and CTE and Instructional leadership—the study team documented and illustrated how space is used for each period of the day. This demonstrated that sufficient space existed at the ACC to accommodate the Arlington Mill High School program without adversely impacting the current CTE program.

Elementary, Middle, and High School programs and estimates of building areas were then developed, including spaces needed to transform the ACC into a capacity-generating high school. Area allowances for Northern Virginia Community College and business incubation space were also established. Total parking requirements, assuming full implementation of the site master plan, were then calculated.

METHODOLOGY, CONTINUED

Concurrently, the study team researched zoning regulations applicable to the ACC site and presented graphic analyses of allowable site development scenarios. This exercise established consensus among the study team about a preferred development density. Focus was given to the total building area required to accommodate all desired programs, and strategies to mitigate the potential negative impact of future development on adjacent property owners.



planning flow



ASSUMPTIONS + PARAMETERS

A number of assumptions and planning parameters guided the work of this study.

First, it is understood that the future of CTE education in Arlington County will continue to transition from a traditional, vocational education program toward more high-tech/high-skill courses. Programs and pedagogy will continue to evolve as well, and CTE learning environments shall more closely reflect their private-sector counterparts--from research labs to collaborative work settings. The proposed plan for a capacity-generating CTE high school is envisioned to convey a character of “hands-on/minds-on” discovery, and serve as a model for 21st century learning.

Next, the master plan for the ACC site must reflect the long-range needs and priorities of APS. After discussion with APS representatives, the following development priorities were established:

1. Immediate consolidation of Arlington Mill High School at ACC
2. Construction of new Middle School, including 2-level underground parking
3. Expansion/creation of CTE High School, including integration of NVCC
4. Construction of Business Incubation Space
5. Construction of new Elementary School
6. Demolition of Fenwick Center / Construction of Campus Plaza

As indicated above, maximizing the development potential of the ACC site dictates that the vast majority of parking be provided in underground structures. Discussions among the study committee identified possible strategies for funding of, and/or revenue generation from, an underground parking structure near the area of the Columbia Pike corridor.

Finally, it is understood that development scenarios for the ACC site shall be tempered by the lower-density approach of the Form Based Code. Given the adjacency of the ACC site to residential areas, APS believes the more restrictive building heights, setbacks and lot coverage allowances of the Form Based Code represent a more appropriate response to neighborhood development, while still attaining an increase in site density that is adequate for the intended purpose.





ARLINGTON CAREER CENTER FEASIBILITY STUDY

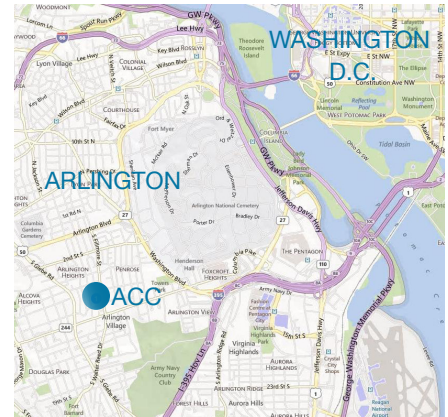


SITE

The Arlington Career Center (ACC) is located at 816 Walter Reed Drive, adjacent to the Columbia Pike corridor between the Columbia Heights and Arlington Heights neighborhoods. The Career Center shares its facility with the Columbia Pike Library, and its parcel with the Fenwick Center which is used by the Department of Human Services. The scope of this study includes the parcel to the north as well, also owned by APS, which is the site of Patrick Henry Elementary School. The two parcels combined are 12.7 acres, and occupy a large city block. Please refer to the Analysis chapter of this report for more detailed zoning information.

SITE ANALYSIS

1. Situated between commercial development, multi-family housing, and single-family home neighborhoods, the site (combined parcels) addresses different conditions at each edge. The ‘front’ of the site is considered to face Walter Reed Drive, a wide and busy city street which offers the parcels good public visibility and access. Thus, the amount of public traffic on the north and west residential sides is minimized. The southern edge is currently largely in shadow, cast from a multi-story office building across the street. Adjacent to the office building is an open parking structure (4 floors including roof parking).
2. The geometry of site (combined parcels) forms a parallelogram with its long axis oriented northward. Currently occupied by low 1 and 2 story buildings, the

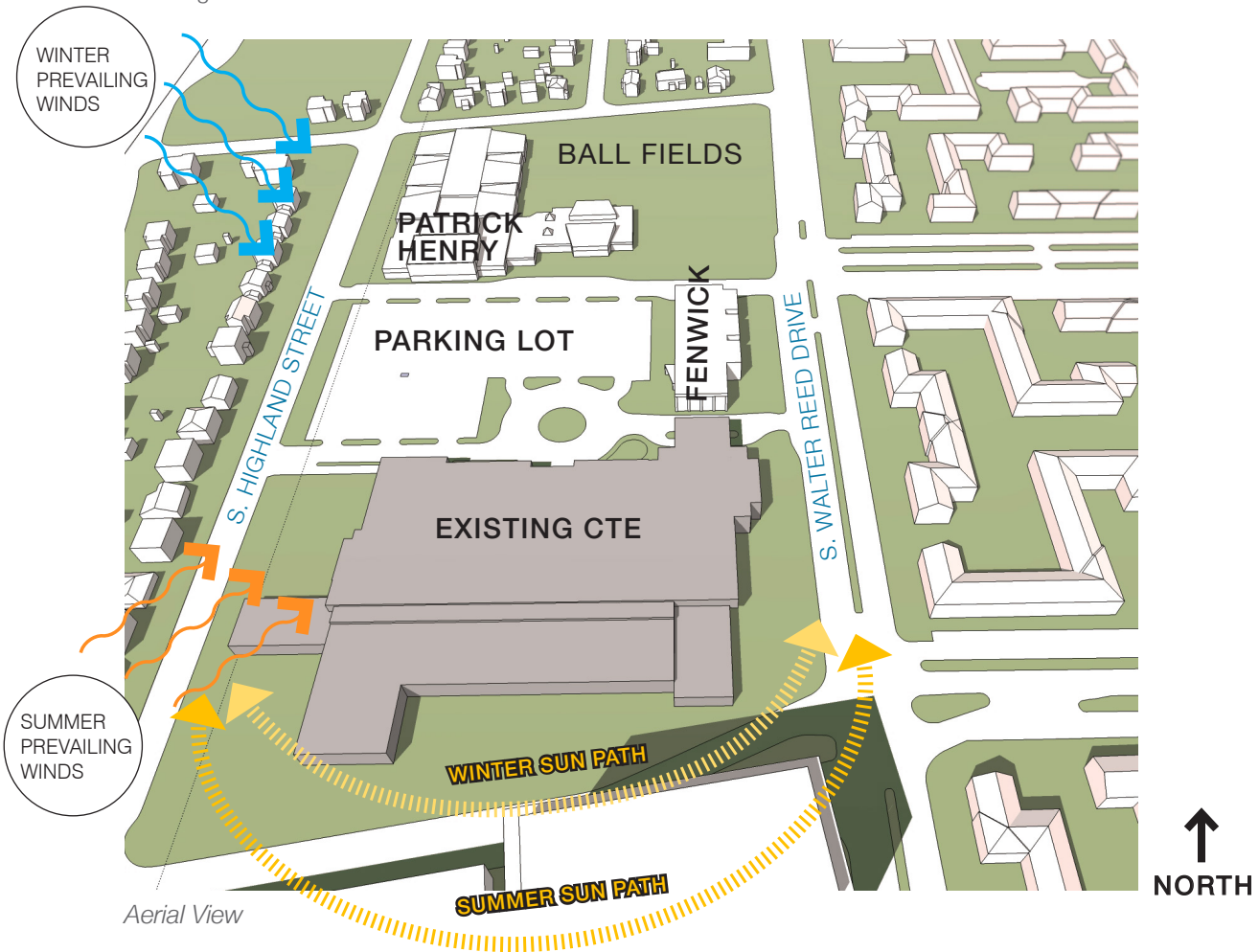


Existing Aerial Photo

SITE ANALYSIS, CONTINUED

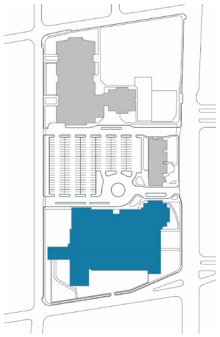
site development is not dense, with approximate 75% of the site left to open space. About 1/2 of the open space is used for surface parking, service drives, black-top play areas, and outdoor Career Tech service and instructional needs.

3. Of the three buildings on site, currently only the main entrance of the Fenwick Center faces Walter Reed Drive. The entrance for the library is under a porte-cochère on the north-east corner of the ACC. This entrance faces northward, and along with the Fenwick Center's porte-cochère (which has been closed-in), is intended to serve as a portal for vehicular access and passenger drop-off. The primary entrances for both the Career Center and Patrick Henry Elementary School face inward toward the parking lot.
4. The site is accessible by car, bicycle, or on foot, as well as being well served by public transit. Surrounding streets have pedestrian sidewalks on both sides of the street, and crosswalks are marked either by paint or a change in material at all corners and at midpoints along the long edges of the site. For cyclists, bicycle lanes are wide and clearly marked on both sides of Walter Reed Drive. A robust network of Arlington Rapid Transit (ART) and Metrobus routes provide connections to and from all directions, including nearby Metrorail stations and transfer points at Ballston, Virginia Square, Clarendon, Pentagon City, Pentagon, and Crystal City. Bus routes serving the area include ART 41, 45, 74, 77 and Metrobus routes 4, 10, 16, 22, 23 – among others.





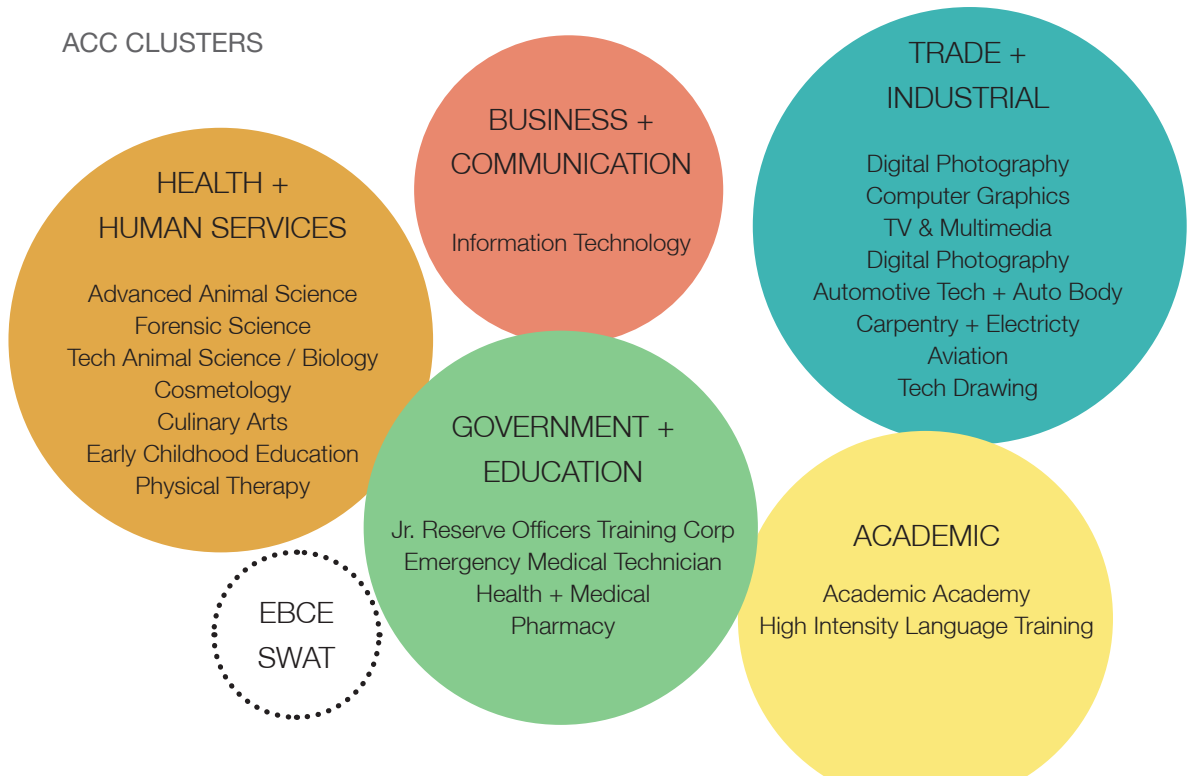
ARLINGTON CAREER CENTER



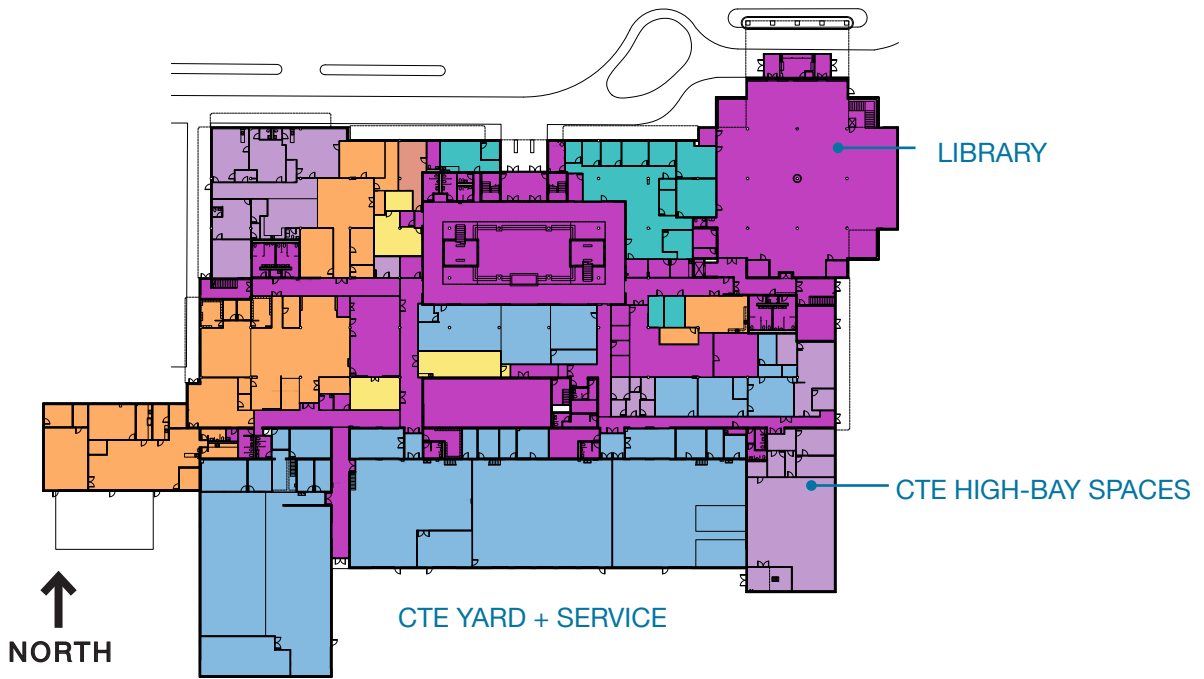
Site Key Map

The Arlington Career Center (ACC) serves a range of students from elementary school to adult through courses offered during the school year, summer enrichment courses, and evening and weekend classes. The programs of study concentrate on vocational and technical subjects with academic enrichment included. During the school day, the ACC serves as a partial day program in career and technical education for approximately 500 high school students. The high school offers classes in 4 main areas – called “Clusters”-- with additional academic support and other programs such as Experienced Based Career Education (EBCE) and Support Work and Transition Program (SWAT). The facility also houses other APS programs and office space not directly associated with the ACC. The public library serves as a resource for the school.

ACC CLUSTERS



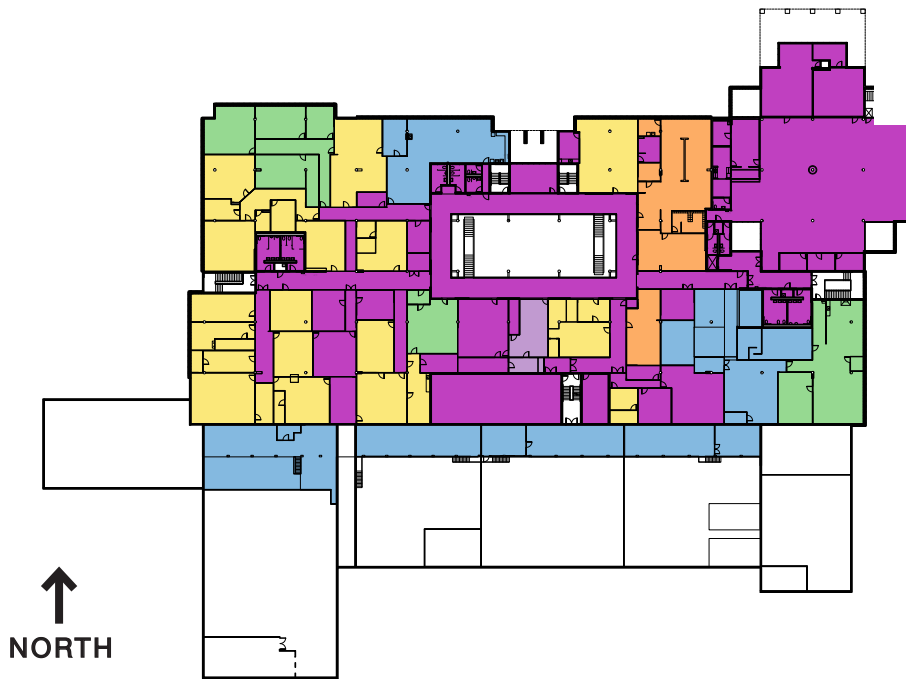
Student with Tech Electronics



FIRST FLOOR PLAN

LEGEND

- CLUSTER II - INDUSTRY + ENGINEERING
- CLUSTER III - HEALTH + HUMAN SERVICES
- CLUSTER IV - EDUCATION + GOVERNMENT
- ACADEMY
- "RENTERS"
- ADMIN/ SHARED

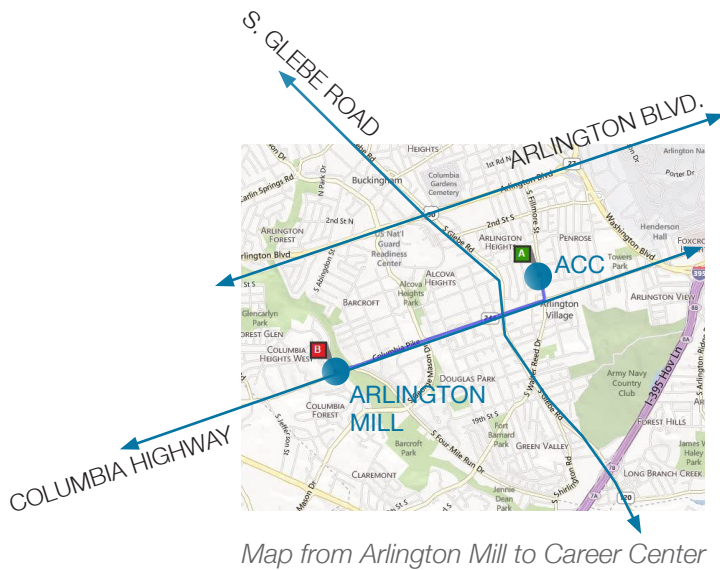


SECOND FLOOR PLAN



ARLINGTON MILL HIGH SCHOOL

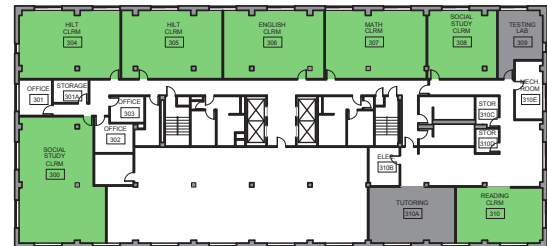
Arlington Mill High School, currently located at 4600 North Fairfax Drive, provides continuing education for students 16 years old to adulthood, with the goal of earning full high school diplomas. Of particular note is the school's strong emphasis on meeting the needs of English language learners through the High Intensity Language Training (HILT), and the High Intensity Language Training Graduates (HILTEX) program for advanced English language learners. The school offers career and technical classes both during the day and at night – as well as participating with the program at the ACC. Currently leasing three floors in an office building, the school also shares instructional space with Northern Virginia Community College “Arlington Center” (housed in the same building). Arlington Mill has approximately 200 students.



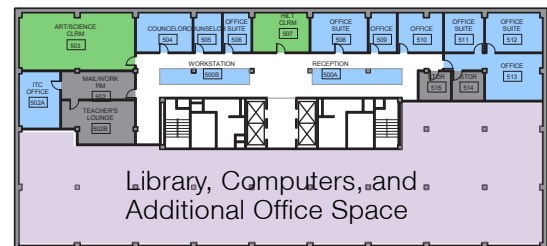
LEASED SPACE FOR ARLINGTON MILL
(Courtesy of Arlington Public Schools)



Second Floor Plan - NOVA



Third Floor Plan - NOVA

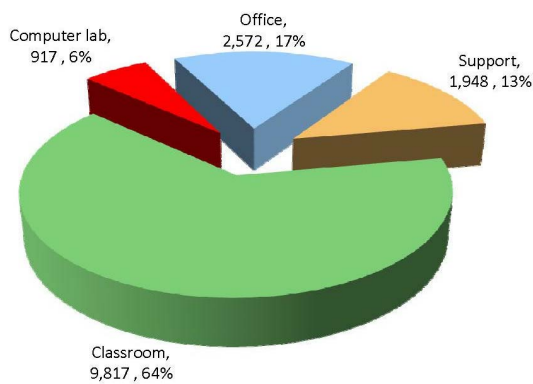
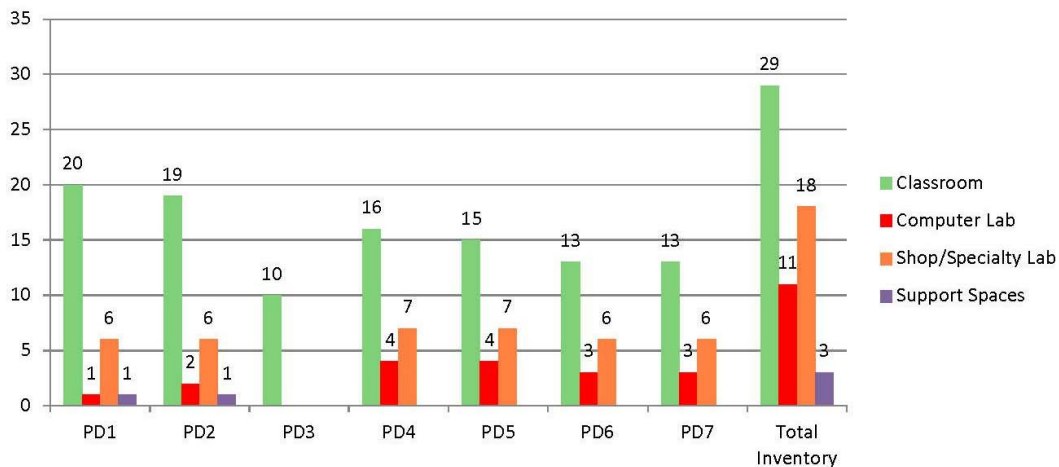


Fifth Floor Plan

ARLINGTON MILL SPACE INVENTORY
(Courtesy of Arlington Public Schools)

	PD1	PD2	PD3	PD4	PD5	PD6	PD7	Total Inventory
	8:00-8:50	8:55-9:45	9:50-10:40	10:45-11:35	11:40-12:30	1:25-2:15	2:20-3:10	
Students/participants per room	498	499	110	465	452	396	395	
Classroom	18	18	11	17	17	18	18	
Classroom	20	19	10	16	15	13	13	29
Computer Lab	1	2	0	4	4	3	3	11
Shop/Specialty Lab	6	6	0	7	7	6	6	18
Support Spaces	1	1						3
Occupied rooms	28	28	10	27	26	22	22	61
Unoccupied rooms	33	33	51	34	35	39	39	
Total inventory	61	61	61	61	61	61	61	

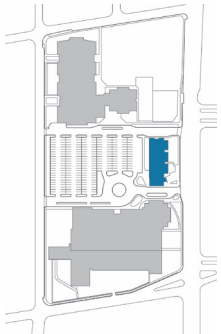
Support spaces: dining room, swing classroom, video conference room.



CLASSROOM	9,817 SF
COMPUTER	917 SF
OFFICE	2,572 SF
SUPPORT	1,948 SF
Total	15,254 SF

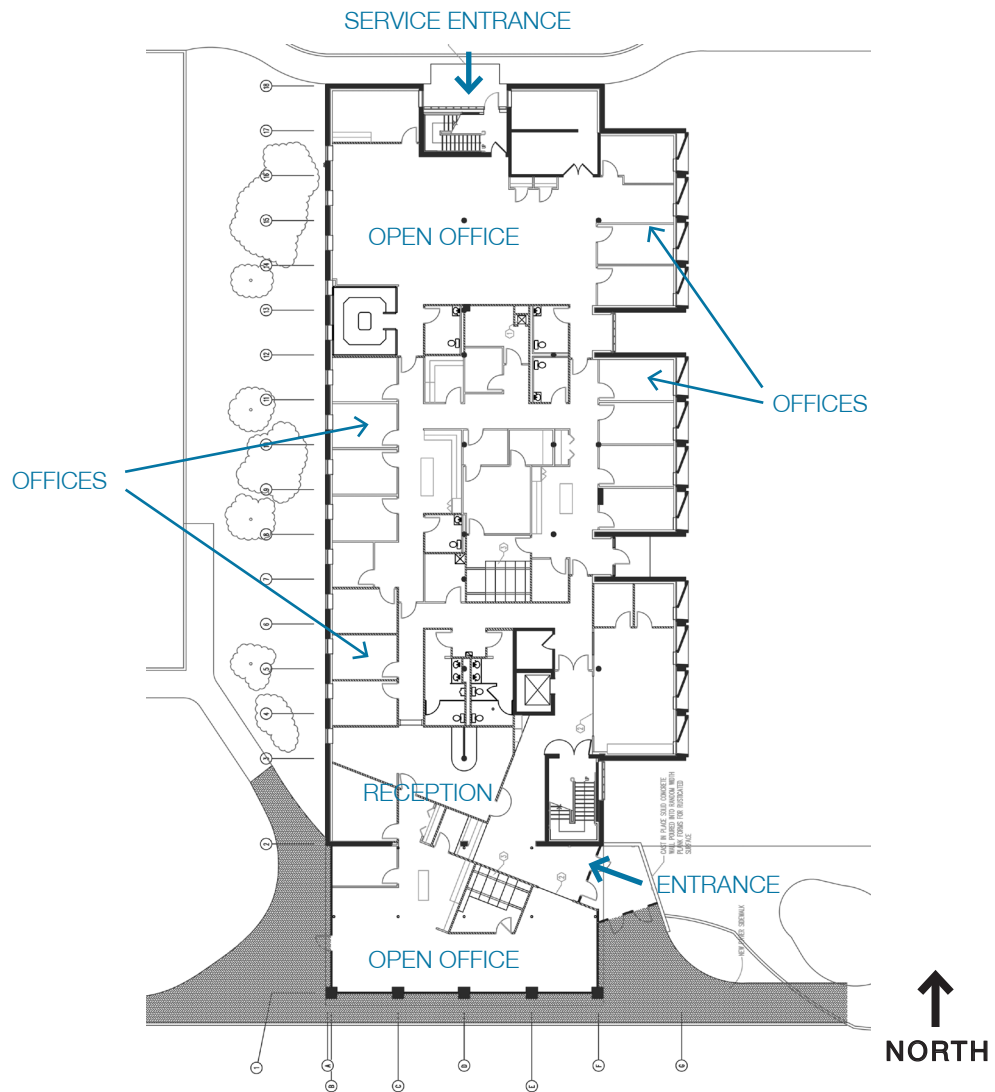


FENWICK CENTER

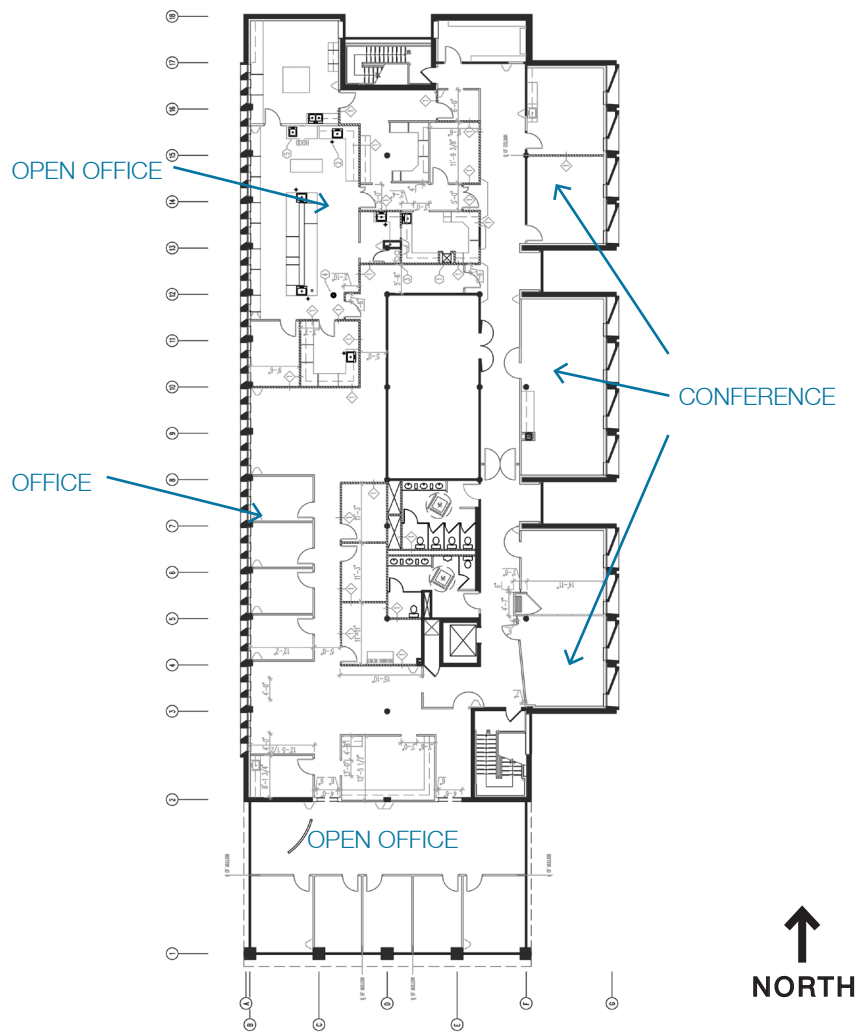


Site Key Map

The smallest building on site, the Fenwick Center is used by the Department of Human Services for office space, exam and consultation rooms, and medical support spaces. The floor plate is well suited for small office and clinical space, with rooms generally on the east and west edges of the building and support spaces like toilets and mechanical areas in the middle. It is not well suited, however, for instructional spaces.



Existing Fenwick Center - First Floor

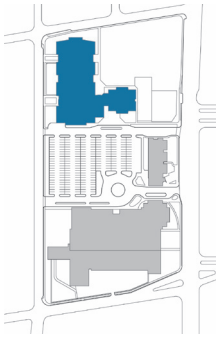


Existing Fenwick Center - Second Floor

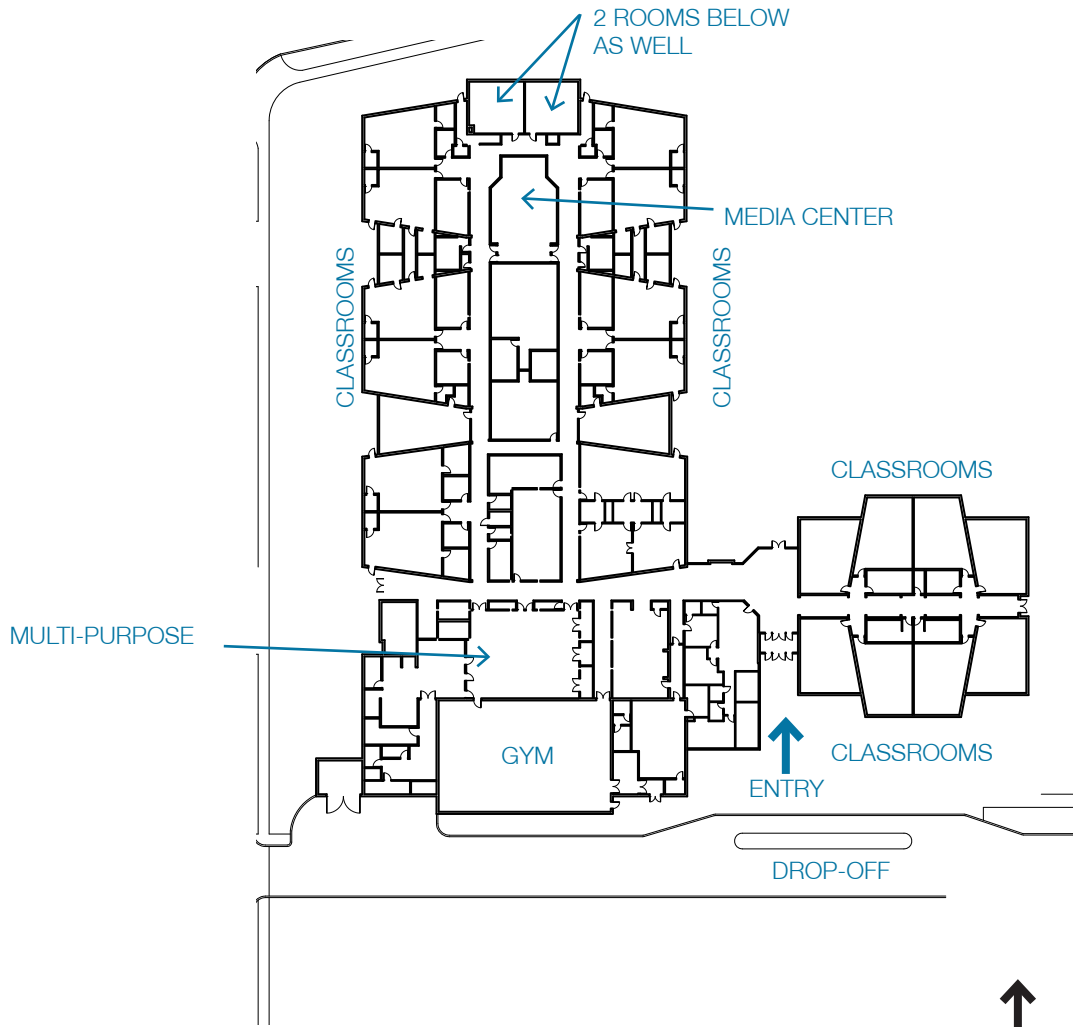


PATRICK HENRY ELEMENTARY SCHOOL

The elementary school serves pre-kindergarten students through 5th grade. The school is on one level, with the exception of the northern most classrooms, which are stacked (see plan below). The school is sited on the residential corner of the block with single family homes to the north and the west, while the play fields occupy the corner closest to Walter Reed Drive. The student body is approximately 430, and the capacity is roughly 460. A number of the core instructional spaces and gathering spaces appear to be undersized per the current APS Educational Specifications.



Site Key Map



Existing Patrick Henry Elementary School



entrance

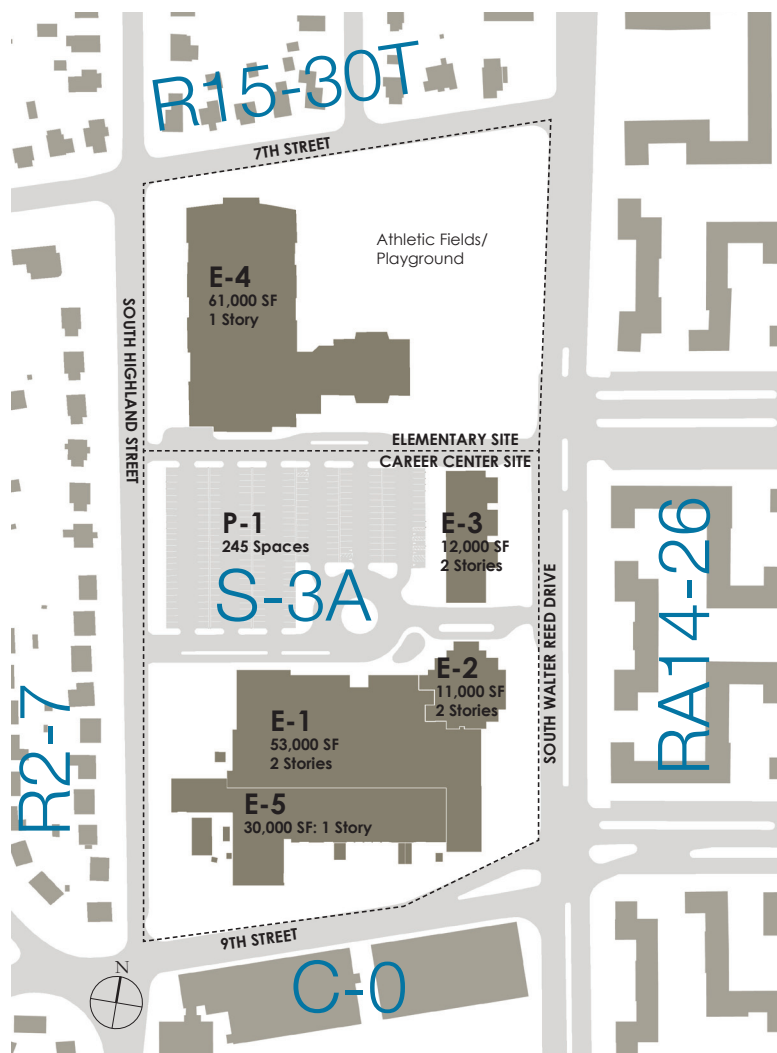


ARLINGTON CAREER CENTER FEASIBILITY STUDY



ZONING COMPLIANCE - EXISTING SITE + BUILDING DATA

The existing site is nestled among several residential zones and commercial zones. The site is zoned as "S-3A" - Special Districts, and the school use is an approved Conditional Use (ACZO Section 3, June 11, 2011).



Existing Site Organization



Total Site Area-	564,000 SF
Elementary Site-	228,000 SF
Career Center Site-	336,000 SF
Gross SF (All Buildings)-	248,000 SF
Elementary Site-	61,000 SF
Career Center Site-	187,000 SF
Total Building Footprint-	148,500 SF
Elementary Site-	61,000 SF
Career Center Site-	87,000 SF
FAR (Total Site)-	0.44
Open Space-	74%
Max Height-	35'
Setback-	25'+
Parking-	245 Spaces

Existing Buildings

E-1-	Use- High School Height- 2 Stories Footprint- 53,000 SF Floor Area- 100,000 SF
E-2-	Use- Public Library Height- 2 Stories Footprint- 11,500 SF Floor Area- 21,500 SF
E-3-	Use- Fenwick Building Height- 2 Stories Footprint- 12,000 SF Floor Area- 22,000 SF
E-4-	Use- Elementary School Height- 1 Story Footprint- 61,000 SF Floor Area- 61,000 SF
E-5-	Use- High School Height- 1 Story + Mezzanine Footprint- 30,000 SF Floor Area- 43,500 SF
P-1-	Parking- 245 Existing Spaces

Gross SF-	248,000 SF
High School-	143,500 SF
Public Library-	21,500 SF
Elementary-	61,000 SF
Fenwick Building-	22,000 SF
Total Required Parking-	179 Spaces
Total Existing Parking-	245 Spaces



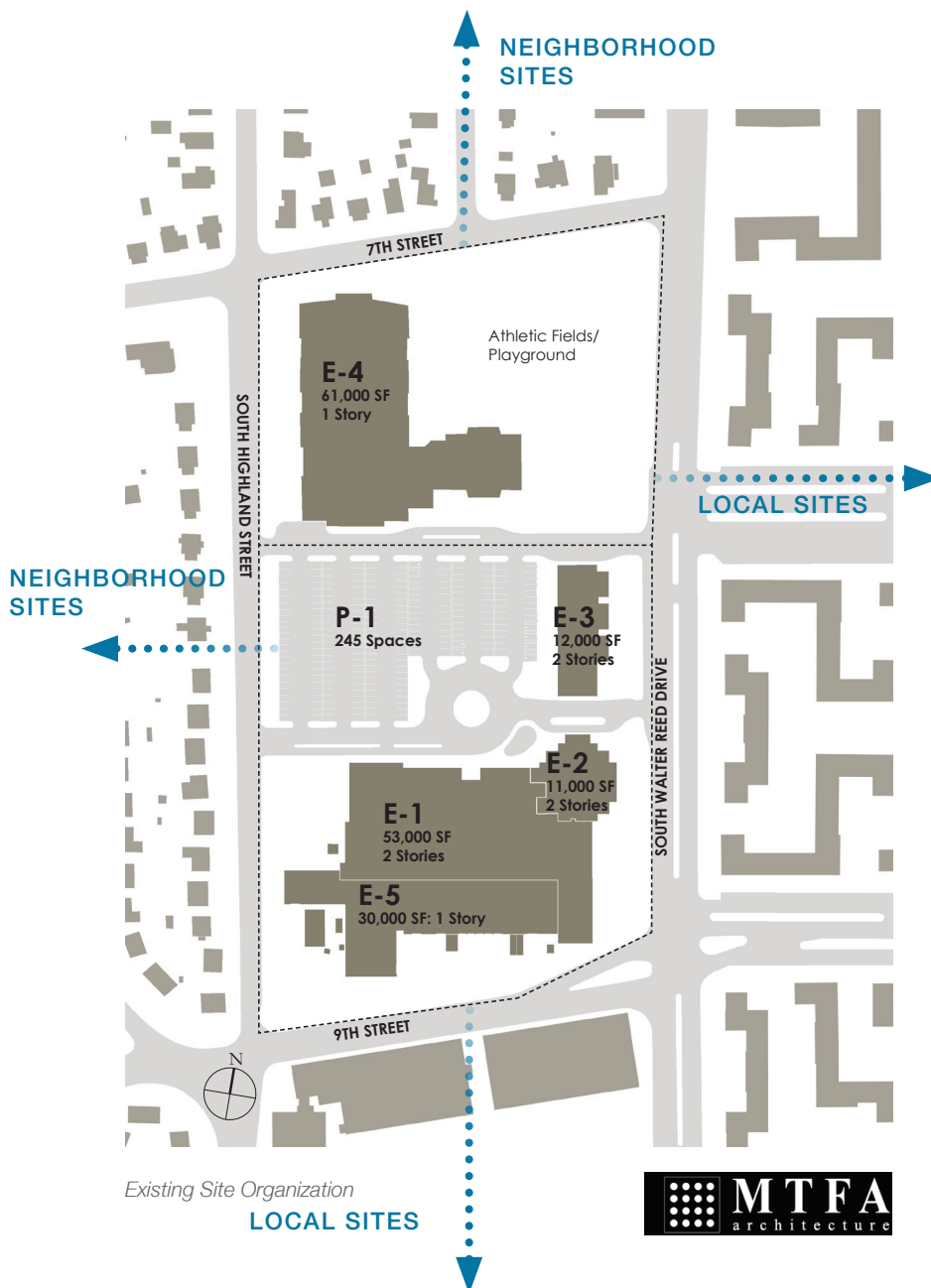


ZONING COMPLIANCE - PLANNING APPLICATIONS

The site falls into two different categories of the Form Based Code:

- Local Sites -- applies to the East and South street frontages
- Neighborhood Sites -- applies to the West and North street frontages

The Land Use and Housing Study had no specific recommendations for this site. The study was reviewed and influenced planning decisions.



Data from MTFA Architecture

ARLINGTON COUNTY ZONING REQUIREMENTS

Zone-	S-3A- Special Districts
Use-	Civic Uses: Including Education
Height Limit-	45 FT or as allowed by special use permit. (75 FT for sites of 19 acres or greater)
FAR-	No Limit Specified
Open Space-	No Minimum Specified
Setback-	No Minimum Specified
Parking-	

Parking requirements differ depending on which metric is applied:

- 'Rule-of-Thumb' being utilized by APS (in anticipation of changes to the County ordinance) which seeks to minimize surface parking and promote alternative transportation, cycling, and pedestrian traffic.
- the Form Based Code employs a calculation per square foot
- the current Zoning Ordinance is the most stringent and cumulatively calculates all gathering spaces at capacity.

assumptions:

- High School: 1,000 Students / 237,000 SF
- Middle School: 800 Students / 140,000 SF
- Elementary School: 650 Students / 100,000 SF
- Fenwick Center remains operational throughout development of site, thus contributing to parking count

PARKING SPACES PER 'RULE-OF -THUMB':

Existing Buildings

Public Library: 22 (1/1000 SF)*
Fenwick Center: 22 (1/1000 SF)*

Estimated New Construction

High School: 133 (1 per 6 Students)
Middle School: 133 (1 per 6 Students)
Elem. School: 108(1 per 6 Students)
Business Incubator: 30 (1/1000 SF)*

TOTAL : 448 PARKING SPACES

PARKING SPACES PER FORM BASED CODE:

Existing Buildings

Public Library: 22 (1/1000 SF)
Fenwick Center: 22 (1/1000 SF)

Estimated New Construction

High School: 270 (1/1000 SF)
Middle School: 140 (1/1000 SF)
Elem. School: 100 (1/1000 SF)
Business Incubator: 30 (1/1000 SF)

TOTAL : 584 PARKING SPACES

PARKING SPACES PER ZONING ORDINANCE:

Existing Buildings

Public Library: 43 (1/500 SF)
Fenwick Center: 38 (1/580 SF)

Estimated New Construction

High School: 80 (1/10 Students)
High School Gym: 180 (1/50 SF)
High School Dining: 120 (1/50 SF)
High School Media: See Public Library
High School Black Box: 60 (1/50 SF)

Middle School: 45 (1/20 Students)
Middle School Gym: 160 (1/50 SF)
Middle School Dining: 100 (1/50 SF)
Middle School Media: 90 (1/50 SF)
Middle School Aud.: 90 (1/50 SF)

Elem. School - 33 (1/20 Students)
Elem. School Gym: 100 (1/50 SF)
Elem. School Multipurp.: 90 (1/50 SF)
Elem. School Media: 90 (1/50 SF)

Business Incubator - 52 (1/580 SF)

TOTAL : 1,371 PARKING SPACES

* form based code formula used for non-educational programs

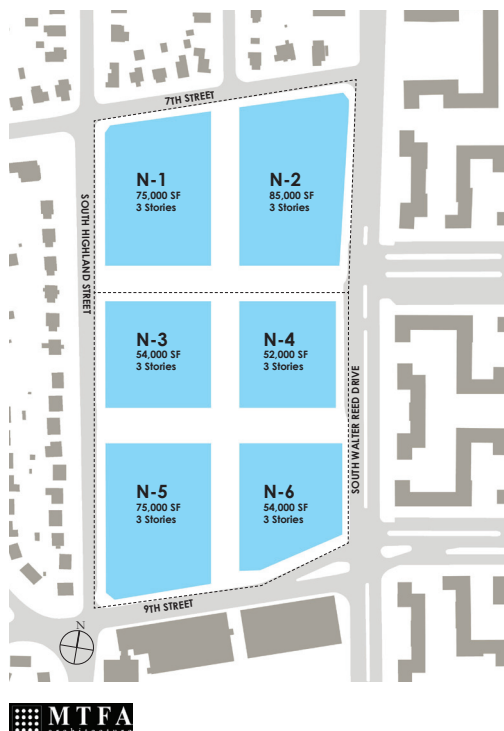




DEVELOPMENT DENSITY OPTIONS

Development approaches on this page are from a previous study by MTF Architecture. The development parameters for this study remain applicable, thus images are illustrative of the effects different development densities have on current planning goals. The development should adhere to the following principles:

- create a safe urban campus with clarity of organization, intuitive wayfinding, and clear sense of place and community
- preserve and promote open space and green space as a public amenity
- contribute to the continuity of an increasingly urbanized Arlington streetscape
- be respectful and responsible to the residential neighbors
- anticipate circulation patterns in neighboring residential streets and busy corridors
- maximize the potential of buildable space by Arlington Public Schools for educational needs
- promote easy and safe access for multiple modes of transportation



HIGH DENSITY OPTION

Based on S-3A Zoning and 30% Open Space. This option calculates a high density for the site in full compliance with S-3A assuming 30% open space on site. 30% is the minimum required open space under the strictest category of the Form Based Code. This would include 9 large three-story buildings covering 70% of the buildable area of the site assuming a 12' setback around the entire site.

OUTPUT:

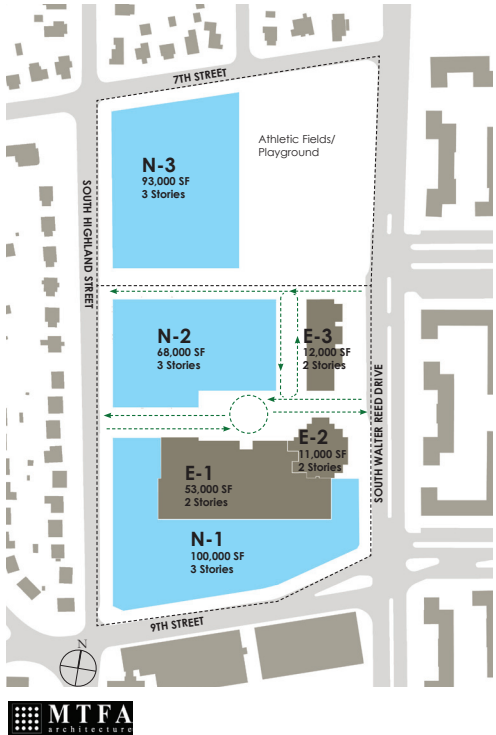
Buildable Area - 527,500 SF
 Gross Footprint - 395,000 SF
 Open Space - 30%
 FAR - 2.1
 Height - 45', Three stories

MEDIUM DENSITY OPTION

Based on S-3A Zoning and preserving some existing buildings on site. This option proposes the medium density level for the site in full compliance with S-3A and preserving the majority of the existing buildings. This would include three, three-story buildings located on site to minimize the demolition of existing structures. In this option the inefficient Patrick Henry Elementary building is demolished and replaced with a larger middle school building.

OUTPUT:

- Buildable Area - 527,500 SF
- Gross Footprint - 337,000 SF
- Open Space - 40%
- FAR - 1.64
- Height - 45', Three stories

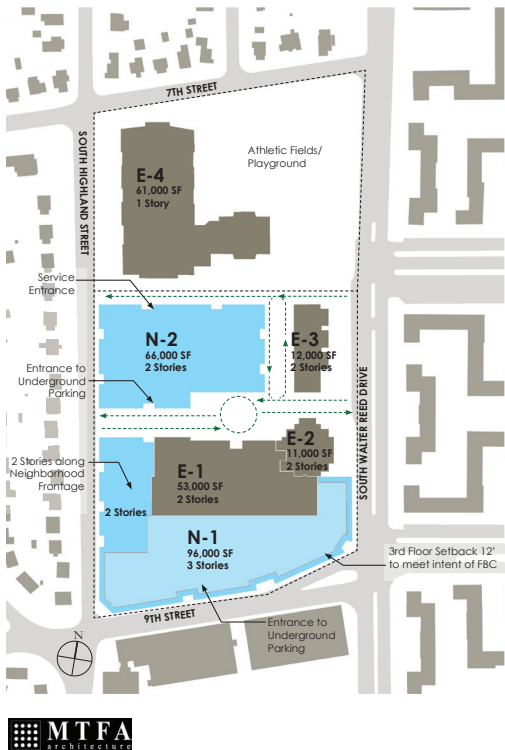


LOW DENSITY OPTION

Form Based Code and preserving most existing buildings on site. This option proposes a slightly lower density level for the site while minimizing the demolition of existing structures as well as meeting the purpose and intent of the Form Based Code. Several requirements in the FBC are not met because they are not compatible with an education building.

OUTPUT:

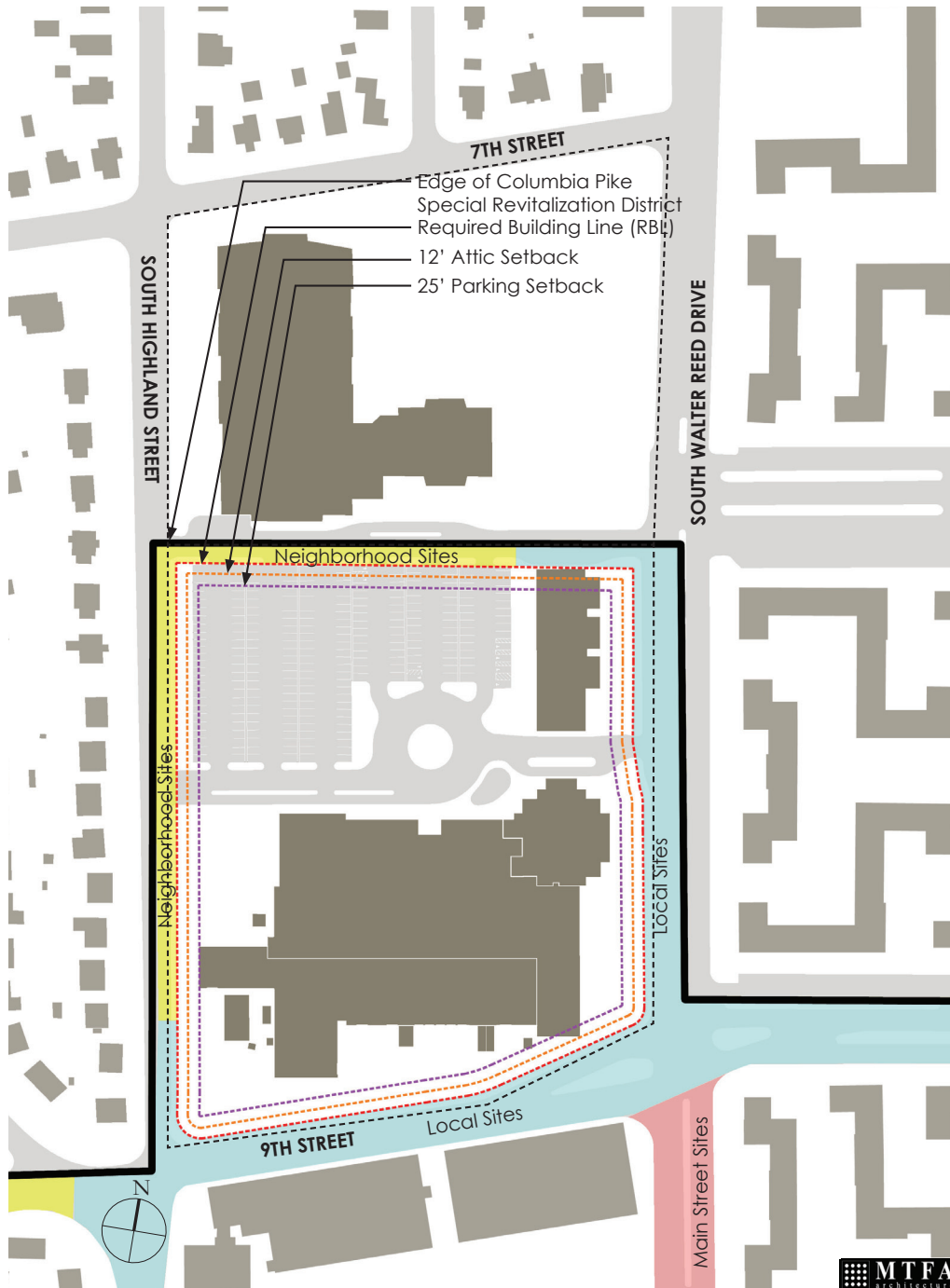
- Buildable Area - 527,500 SF
- Gross Footprint - 299,000 SF
- Open Space - 47%
- FAR - 1.05
- Height - 45', Three stories





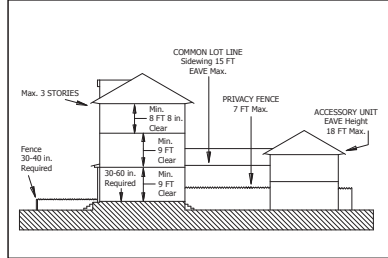
FORM BASED CODE: LOCAL SITES + NEIGHBORHOOD SITES

Civic buildings are exempt from portions of the Form Based Codes (FBC) but must be shown to accomplish the purpose and intent of the code using alternative means supported by a public review process. The northern portion of the site containing Patrick Henry Elementary School does not fall within the area regulated by the FBC. The southern portion of the site relates to two categories of the FBC: “Local Sites” and “Neighborhood Sites.”

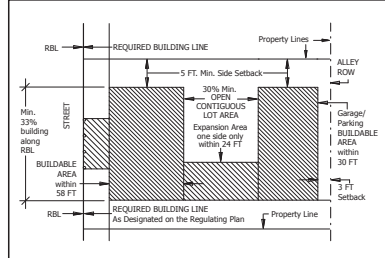


E. BUILDING ENVELOPE STANDARDS: NEIGHBORHOOD SITES

1. Height Specifications



2. Siting Specifications



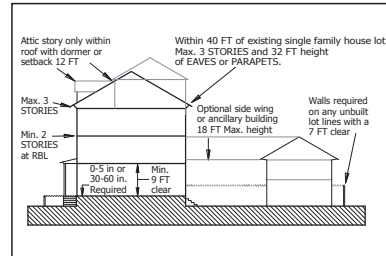
NEIGHBORHOOD SITES

Applies to most of S Highland St. and 8th St.

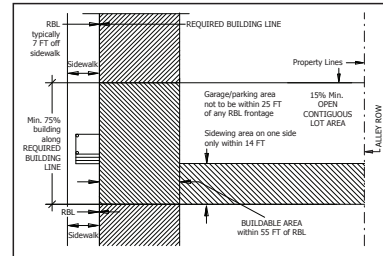
- Frontage-**
 - Minimum 33% of Required Building Line must be built-to
 - Minimum 5' side lot setback
 - 30-40" Fence required along frontage
 - Front porch required along frontage, minimum 33% of building width
- Open Space-**
 - 30% Minimum open contiguous lot area
- Footprint-**
 - 30,000SF Maximum, special exception needed for larger footprints
- Height-**
 - 3 Stories Maximum
 - Ground Story- 14' Max
 - 2nd and 3rd Stories- 10' Max (2)
 - Attic- Not Permitted
 - Total- 34'**
- Parking-**
 - 1 Space/1000SF Minimum shared parking spaces
 - No minimum for private parking spaces

D. BUILDING ENVELOPE STANDARDS: LOCAL SITES

1. Height Specifications



2. Siting Specifications



LOCAL SITES

Applies to Walter Reed and 9th St, extending around adjacent corners

- Frontage**
 - Minimum 75% of Required Building Line must be built-to
 - 16-32' required lot/dwelling unit width
 - Maximum 150' of continuous frontage or 7 buildings whichever is greater
 - Minimum 10' between continuous frontage areas
- Open Space-**
 - 15% Minimum open contiguous lot area
- Footprint-**
 - 30,000SF Maximum, special exception needed for larger footprints
- Height-**
 - 3 Stories + Attic Story
 - Ground Story- 14' Max
 - 2nd and 3rd Stories- 12' Max (2)
 - Attic- 12' Max + Must have 12' Setback
 - Total- 50' Including Attic**
- Parking-**
 - 1 Space/1000SF Minimum shared parking spaces
 - No minimum for private parking spaces
 - 25' Minimum setback from RBL or underground



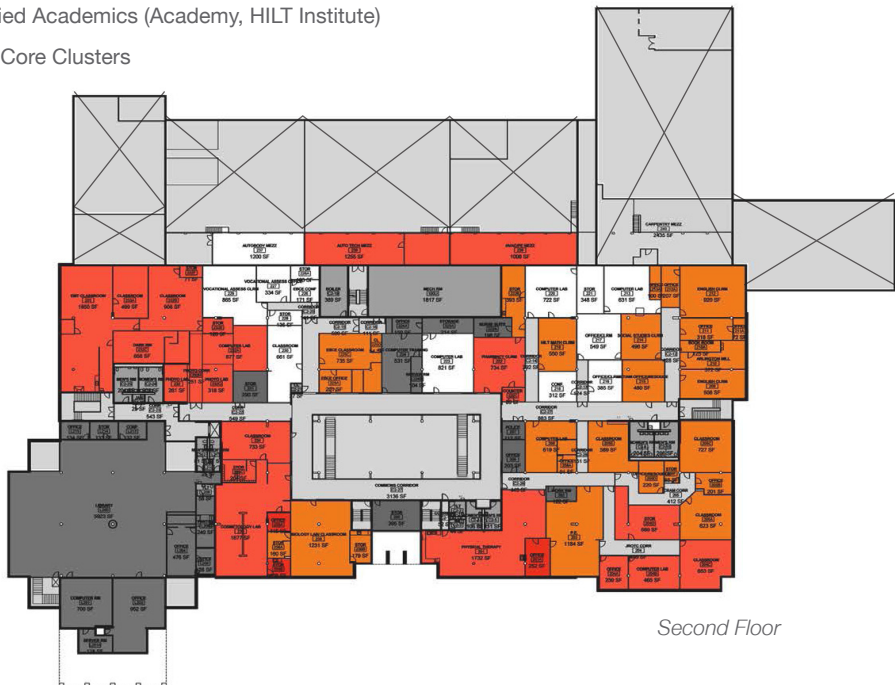
ACC SPACE UTILIZATION OF CORE INSTRUCTIONAL AREAS

The existing ACC building houses multiple programs in addition to its career and technical training educational spaces and administration/support space. The following pages show how the building is used for educational purposes throughout the day, broken down by period. *Spaces indicated in white are educational areas unused for instruction during that period.*

PERIOD 1/2



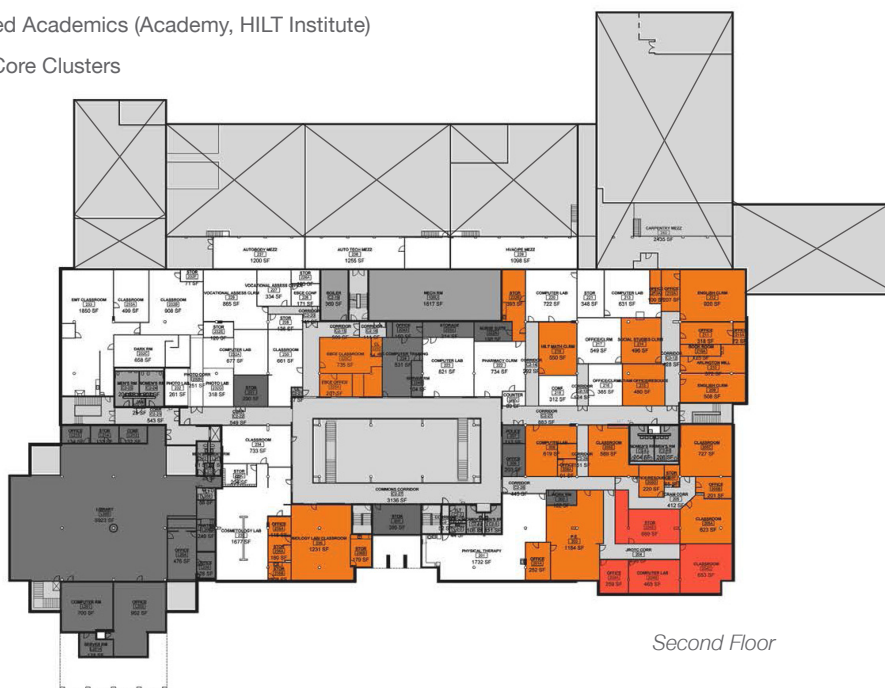
- Applied Academics (Academy, HILT Institute)
- CTE Core Clusters



PERIOD 3



- Applied Academics (Academy, HILT Institute)
- CTE Core Clusters





PERIOD 4/5



First Floor

- Applied Academics (Academy, HILT Institute)
- CTE Core Clusters



Second Floor

PERIOD 6/7



- Applied Academics (Academy, HILT Institute)
- CTE Core Clusters

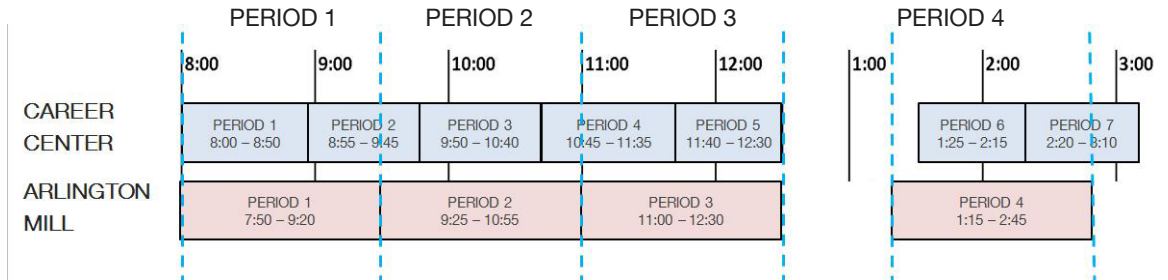




CONSOLIDATION OF ARLINGTON MILL HIGH SCHOOL

This study includes an approach to temporarily housing Arlington Mill High School into the ACC, until such time that its program can be fully coordinated with an expanded, full-day Arlington Career Center High School. The following analysis illustrates that, with minor alignment in schedules, the ACC has instructional spaces available throughout the course of the day to fit Arlington Mill’s classroom needs. See the “Summary and Recommendations” chapter for specific recommendations for Arlington Mill’s.

OVERLAPPING SCHEDULES



ARLINGTON MILL SPACE NEEDS PER PERIOD

	Period 1	Period 2	Period 3	Period 4
	7:50-9:20	7:50-9:20	7:50-9:20	7:50-9:20
Students	99	182	149	53
per room	11	15	12	11
Classroom	8	12	11	5
Computer Lab	1	0	1	0
Occupied Rooms	9	12	12	5

PERIOD 1/2

Needed: 9
Available: 10



PERIOD 3

Needed: 12
Available: 17



PERIOD 4/5

Needed: 12
Available: 12



PERIOD 6/7

Needed: 5
Available: 11





ARLINGTON CAREER CENTER FEASIBILITY STUDY



PLANNING PARAMETERS

OVERARCHING GOALS

- create a vibrant and capacity generating group of learning communities for Pre-Kindergarted through higher education (community college) -- also known as “Pre-K though 14”
- leverage synchronicities and opportunities embedded in a campus that represents a true cross-section of the local community. This includes people of different cultures, ages, backgrounds, skills, and knowledge sets.
- make strong off-campus connections to businesses both for outreach and to support the school's programs
- create affordable alternative(s) for quality and engaging education, especially as students transition to higher education

SITE SPECIFIC GOALS

- create a safe urban campus with clarity of organization, intuitive wayfinding, and clear sense of place and community
- preserve and promote open space and green space as a public amenity
- contribute to the continuity of an increasingly urbanized Arlington streetscape
- be respectful and responsible to the residential neighbors
- anticipate circulation patterns in neighboring residential streets and busy commuter corridors
- maximize the potential of buildable space by Arlington Public Schools for educational needs
- promote easy and safe access for mutliple modes of transportation

PROGRAM COMPONENT ASSUMPTIONS

- envision a dynamic high school/higher education center that will become a school of choice for those seeking post-graduation career paths and for college-bound students
- create a middle school community that capitilizes on its adjacency to the high school, while supporting developmentally-appropriate social network for pre-teens and young teens.
- create exciting and engaging elementary school environment that will spark curiosity in young minds

PHASED DEVELOPMENT PARAMETERS + ASSUMPTIONS

- in order to maximize green and open space in the urban environment, required site parking will be below grade
- according to enrollment projections, a middle school will be the most urgent need
- the existing Patrick Henry Elementary School should remain fully operational while other portions of the site are under construction
- the ACC program should remain operational as much as possible, and career and technical training should remain available
- concentrate most dense development on more urban and commercial ends of site, and ‘taper’ development down towards residential areas

HIGH SCHOOL PROGRAM

including Arlington Mill, Northern Virginia Community College, and the Business Incubator

Space	SF
Core Instructional (32)	24,000
Science (8)	12,000
Arts & Music Art Studio, Digital Media, Band Room, Choir, Practice Rooms, Black Box, Misc. Storage	15,700
Multi-Use Labs (4)	6,000
CTE (26) High-Bay Labs, Classrooms, Labs, Misc. Storage, Support Areas	28,200
Arlington Mill	8,000
NoVa Community College	10,000
Business Incubator	30,000
Admin Main Office, Guidance, Student Services, Clinic, Teacher Planning	23,000
Athletics Gym, Fitness, Dance/Aerobics, Storage, Locker Rooms, Offices, Support	19,200
Dining	6,000
Food Service Cooking, Serving, Support	5,000
Information Resources * Digital Commons	4,500
Building Support/Services Mechanical, Receiving, Toilets	10,000
Subtotal	201,600
x 10% Planning Contingency	20,160
Subtotal NSF	221,760
x 0.4 Grossing Factor	8,870
TOTAL	230,630

* does not include 22,000 SF of public library



MIDDLE SCHOOL PROGRAM

Space	SF
Core Instructional (27)	20,250
Science (9)	8,700
Arts & Music Art Lab, Dark Room, Kiln Room, Computer Graphics Lab, Storage	9,700
Auditorium / Drama	6,450
CTE + Tech	6,000
Admin Main Office, Guidance, Student Services, Clinic, Teacher Planning	9,500
Physical Education Gym, Health Classroom, Storage, Locker Rooms, Offices, Support	15,000
Dining	9,860
Food Service Cooking, Serving, Support	4,000
Media Center	6,400
Electives (5)	3,600
Special Education + Support (9)	4,500
Subtotal	103,960
x 0.4 Grossing Factor (includes circulation, toilets, mech, support)	41,584
TOTAL	145,544

ELEMENTARY SCHOOL PROGRAM

Space	SF
Core Instructional (28)	25,200
Special Education	5,775
Arts & Music Art Lab, Kiln Room, Vocal Music, Instrumental Music, Storage	5,600
Admin Main Office, Guidance, Student Services, Clinic, Teacher Planning	4,500
Physical Education Gym, Storage, Toilet Rooms, Offices	7,500
Dining	4,500
Food Service Cooking, Serving, Support	2,300
Media Center	4,900
Additional Instruction	3,180
Subtotal	63,455
x 0.5 Grossing Factor (includes circulation, toilets, mech, support)	26,192
TOTAL	95,182

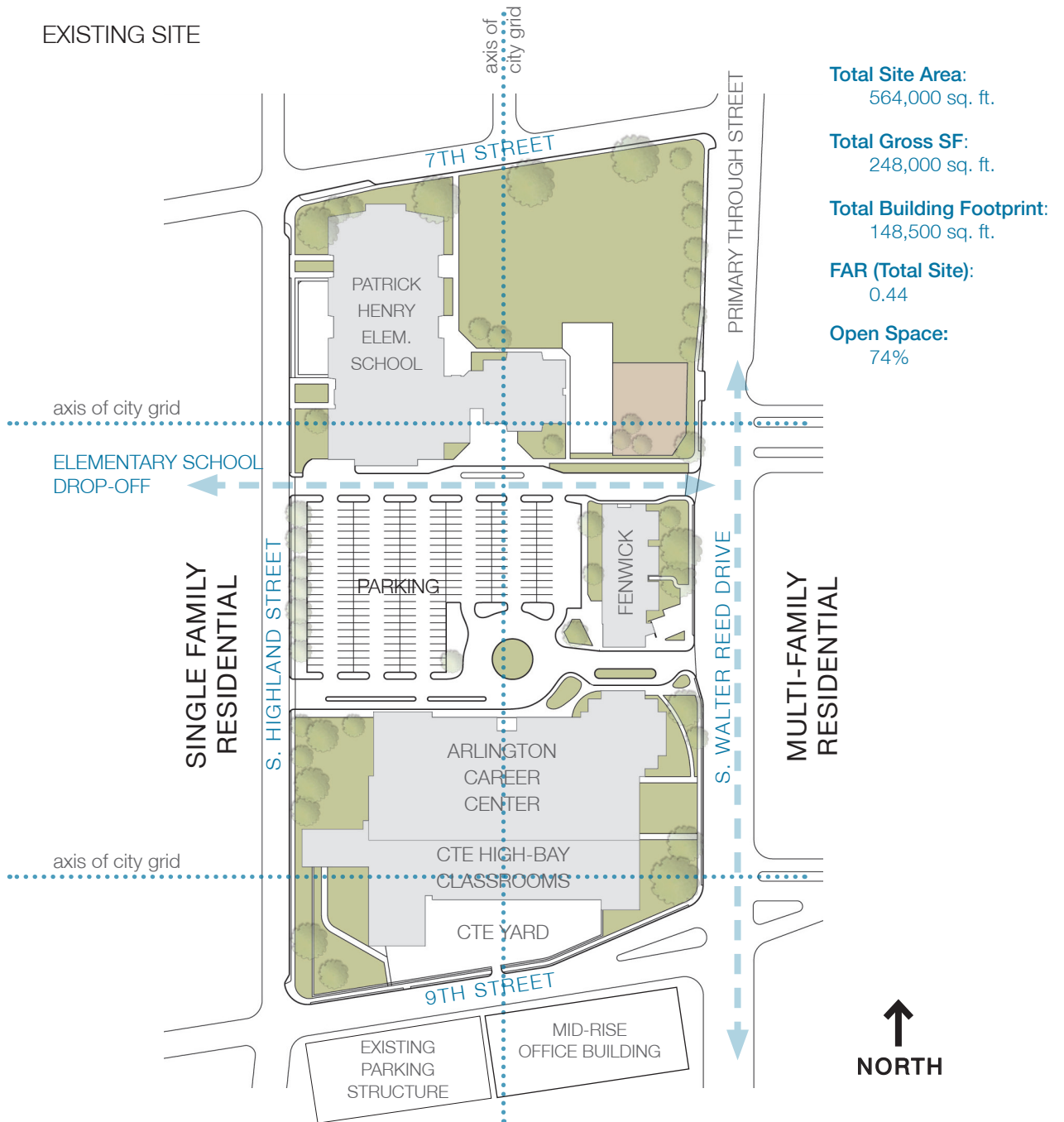




SITE DEVELOPMENT

Development follows the parameter discussed in the previous pages. The fully developed plan (shown to the right) shows the final build-out. The intermediate phases are discussed in the following pages.

EXISTING SITE



FULLY DEVELOPED PLAN

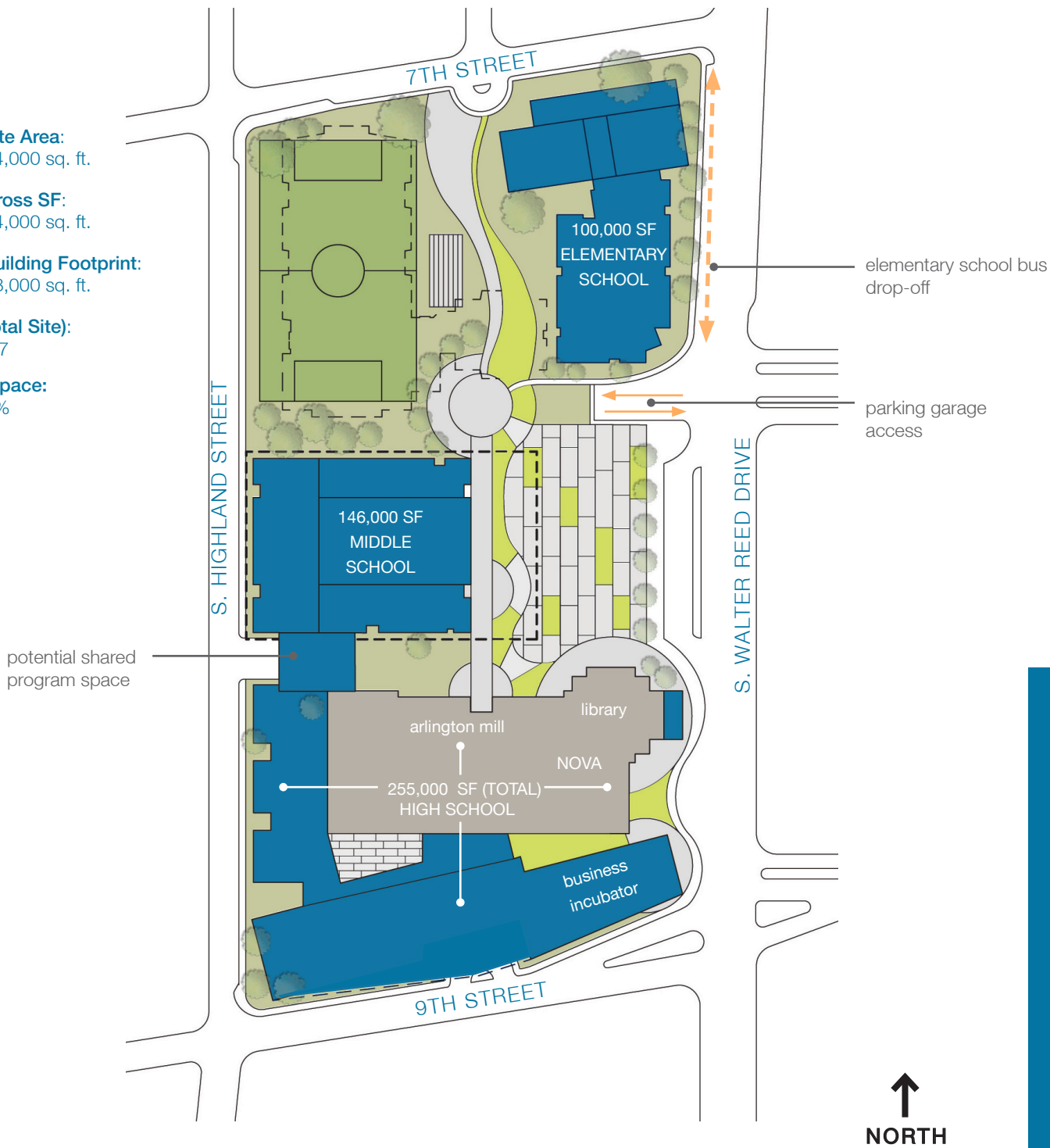
Total Site Area:
564,000 sq. ft.

Total Gross SF:
494,000 sq. ft.

Total Building Footprint:
228,000 sq. ft.

FAR (Total Site):
0.87

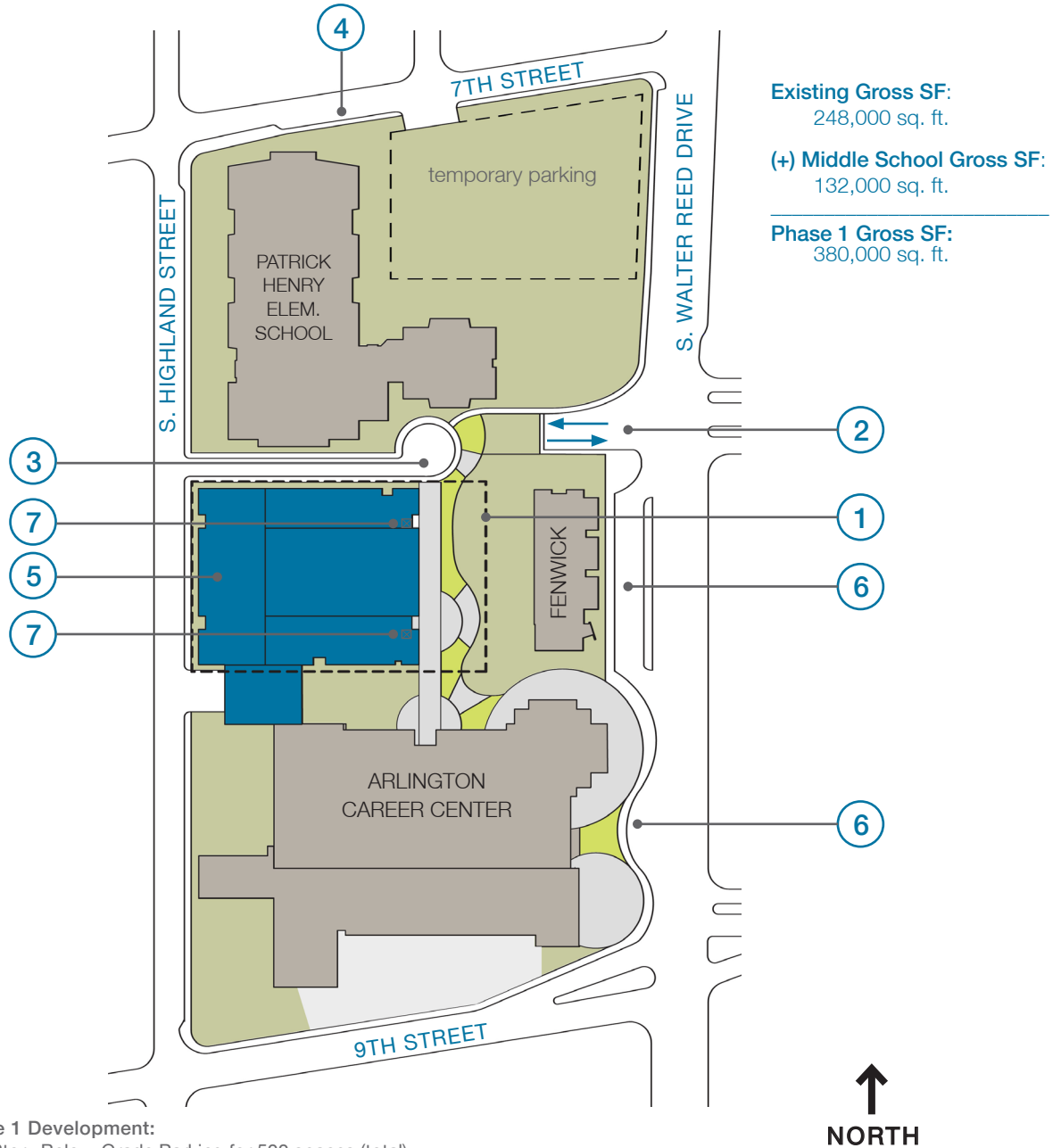
Open Space:
58%





PHASE 1

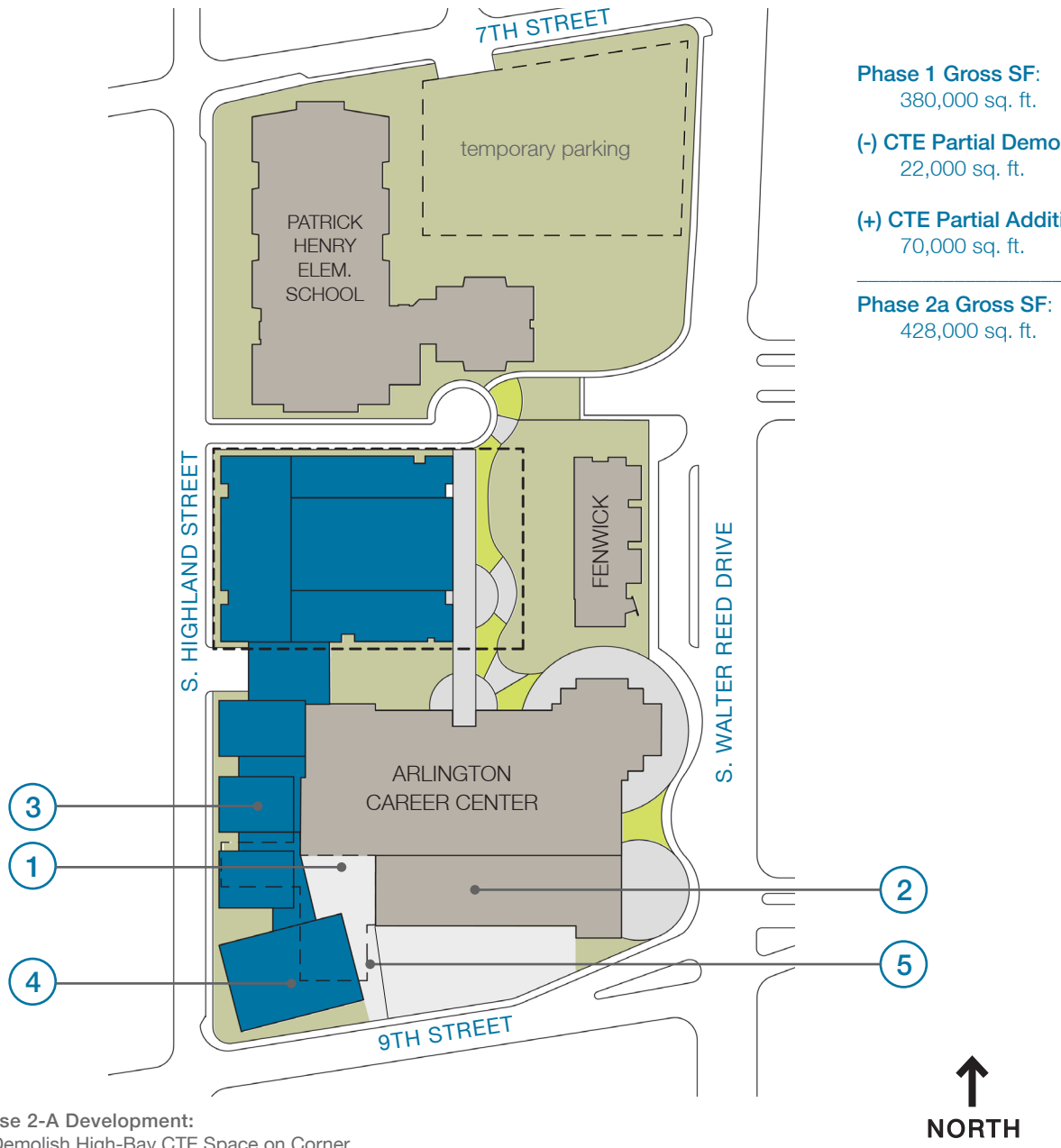
In the first phase, the existing parking lot will be cleared for excavation for the two-story, below-grade parking structure, with a new middle school above. Parking will be relocated, temporarily, to the ball field unless offsite parking can be negotiated.



- Phase 1 Development:**
1. 2 Story Below-Grade Parking for 500 spaces (total)
 2. Entrance + Exit to Below-Grade Parking
 3. Parent Drop-off Loop for Elementary School
 4. Bus Drop-off Lane for Elementary School
 5. New Middle School
 6. Drop-off Lane (Bus/Vehicles) for Middle School + High School
 7. Elevator + Stairs from Parking Levels. Controlled access into Middle School.

PHASE 2a

Phase 2-A involves the demolition of a portion of the existing CTE High-Bay space on the corner. During demolition and construction, CTE will be temporarily consolidated in existing building.



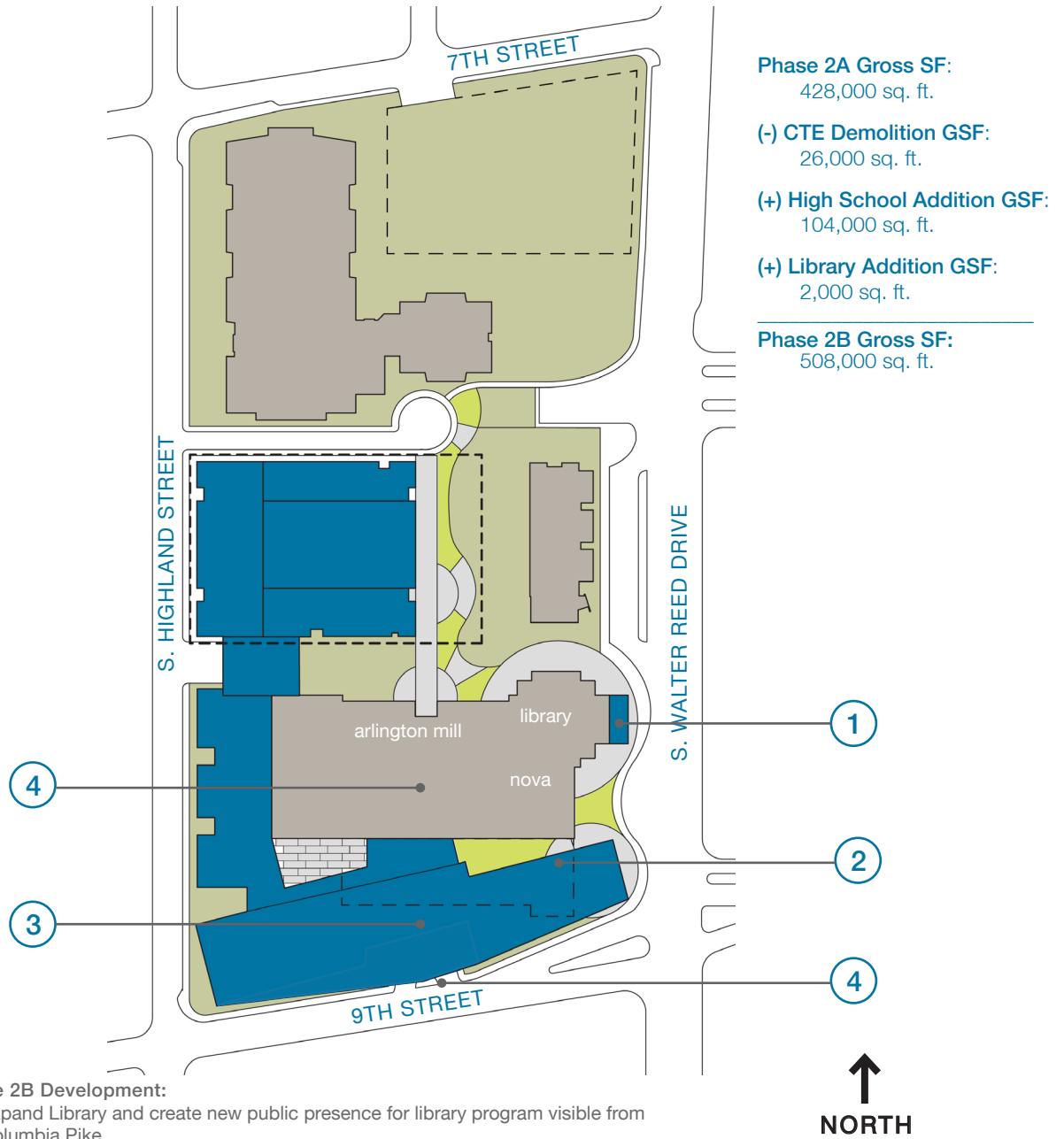
Phase 2-A Development:

1. Demolish High-Bay CTE Space on Corner
2. Temporarily consolidate CTE programs into existing building.
3. New CTE (lower level) + Music/Art (upper level) building for full day High School Program.
4. New Gymnasium for full day High School Program.
5. Service Drive



PHASE 2b

The remainder of the High School will be constructed, to include NoVa Community College, Arlington Mill High School, and the Business Incubator. Additionally, the public library will be extended east toward the street for better public visibility.

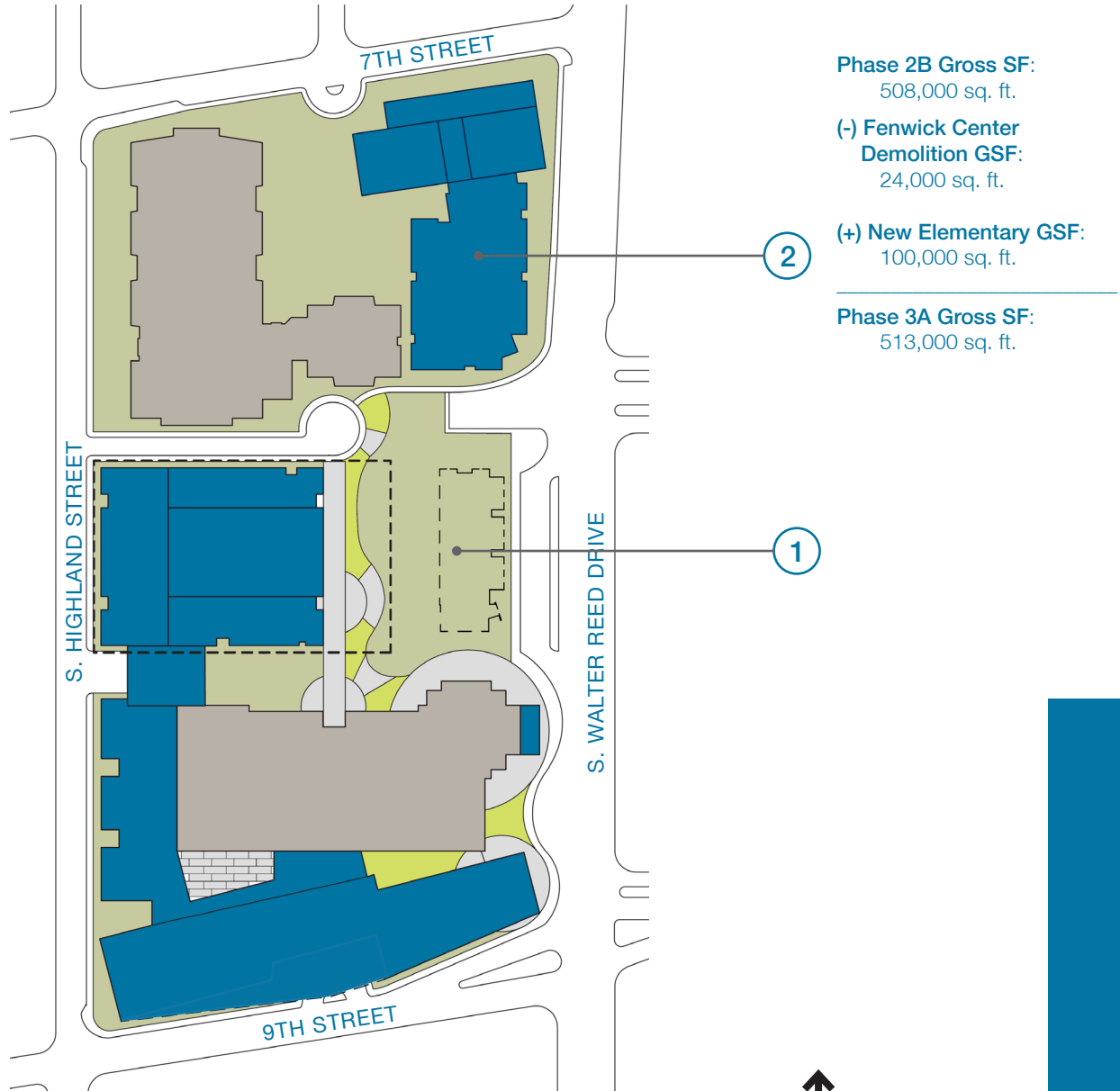


Phase 2B Development:

1. Expand Library and create new public presence for library program visible from Columbia Pike.
2. Demolish remaining CTE High Labs.
3. High School Addition to house dining, core instructional classrooms, and Business Incubation space.
4. Renovate existing Arlington Career Center - House NoVA Community College and Arlington Mill.
5. Additional Drop-off lane for High School, NOVA, and Business Incubator.

PHASE 3a

In Phase 3A, a new 650 seat elementary school is erected to replace the existing 460 seat Patrick Henry Elementary School, and the Fenwick Center is removed. The Fenwick Center site can be used temporarily as staging area for the elementary school project, or the below-grade parking can be extended to the east (adding an additional 100 spaces).



Phase 2B Gross SF:
508,000 sq. ft.

**(-) Fenwick Center
Demolition GSF:**
24,000 sq. ft.

(+) New Elementary GSF:
100,000 sq. ft.

Phase 3A Gross SF:
513,000 sq. ft.

Phase 3A Development:

1. Demolish Fenwick Center - use area as temporary additional outdoor play.
2. New Elementary School - increase capacity from 460 to 680 students.

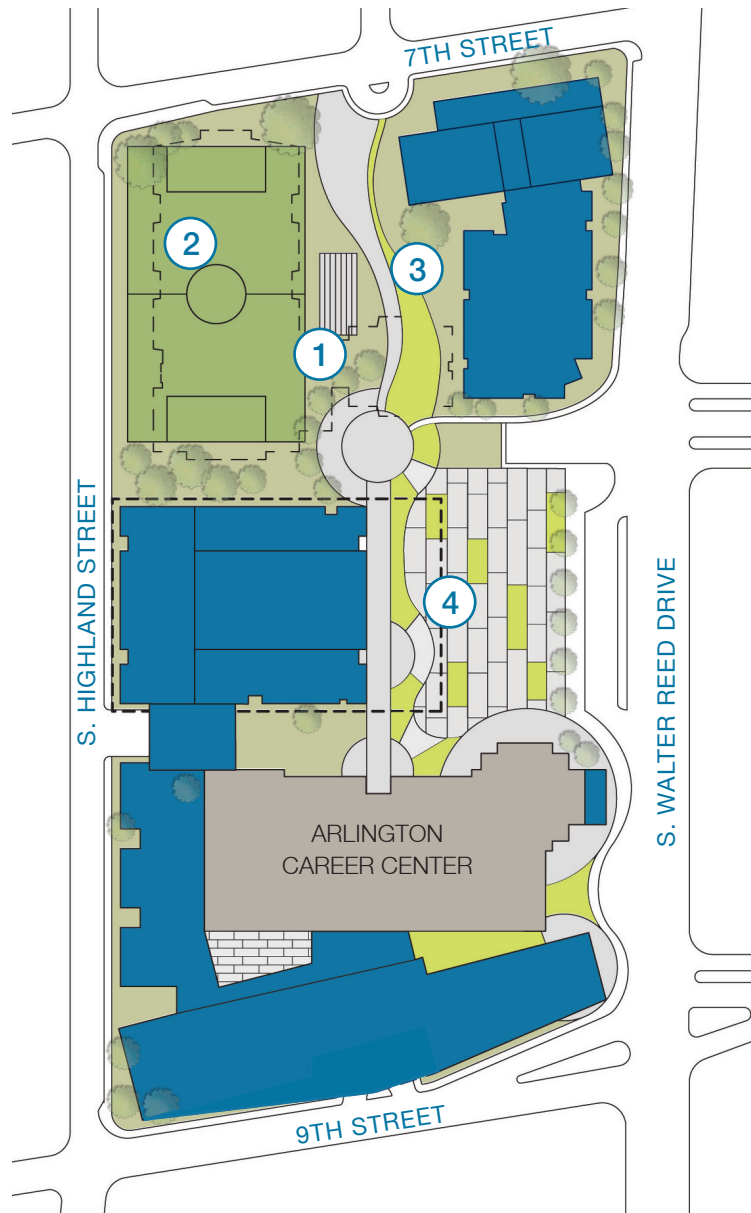
Option: Extend underground parking (both levels) - increase parking capacity by 100 spaces.





PHASE 3b

The final phase of development completes the site by removing the Patrick Henry Elementary School and creating the public “academic quad.”



Phase 3A Gross SF:
525,000 sq. ft.

**(-) Patrick Henry Elementary
Demolition GSF:**
61,000 sq. ft.

Phase 3B Gross SF:
464,000 sq. ft.

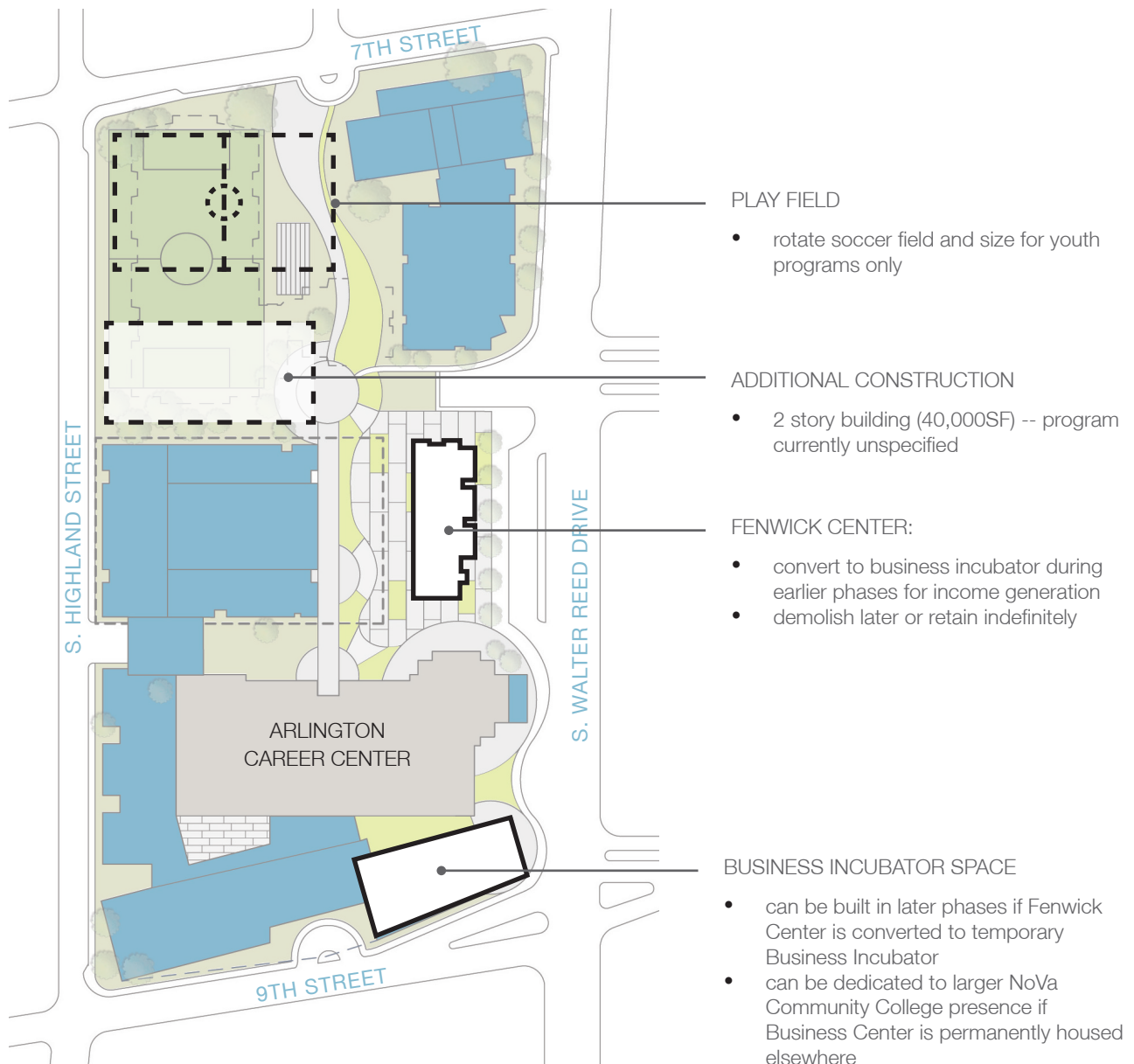
Phase 3B Development:

1. Demolish Patrick Henry Elementary School
2. New Play Fields.
3. New Elementary School Landscape Playground.
4. Complete “Academic Quad” Landscape.



ADDITIONAL PHASING + CONSTRUCTION OPTIONS

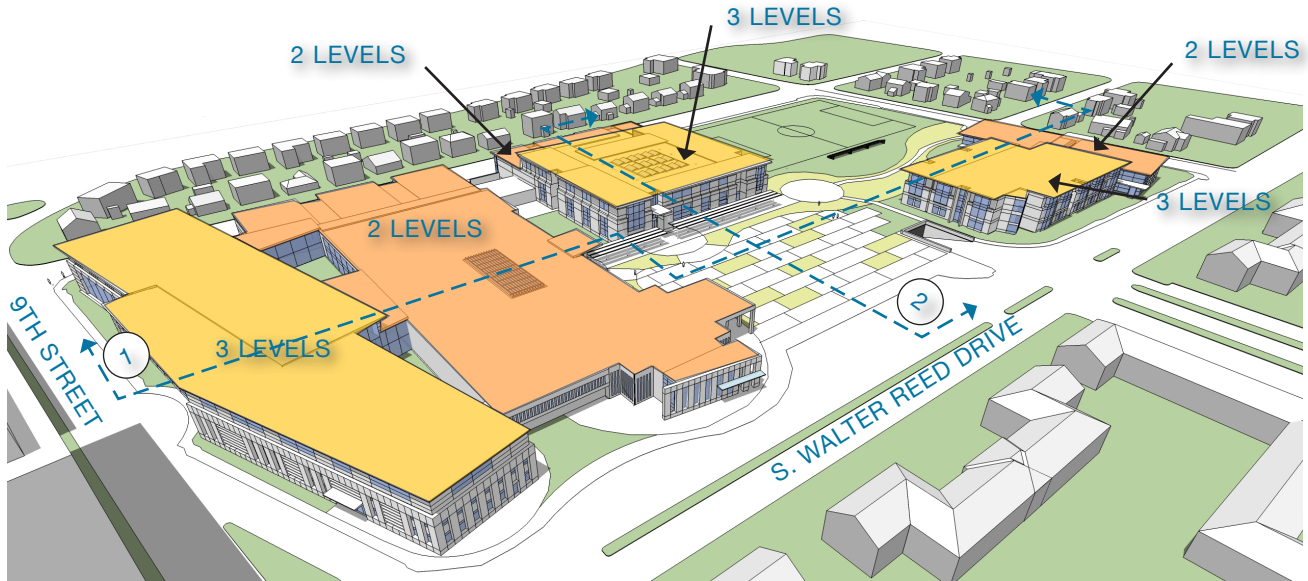
Depending on the ultimate planning priorities, there are various options that could modify or alter the path to final build-out.



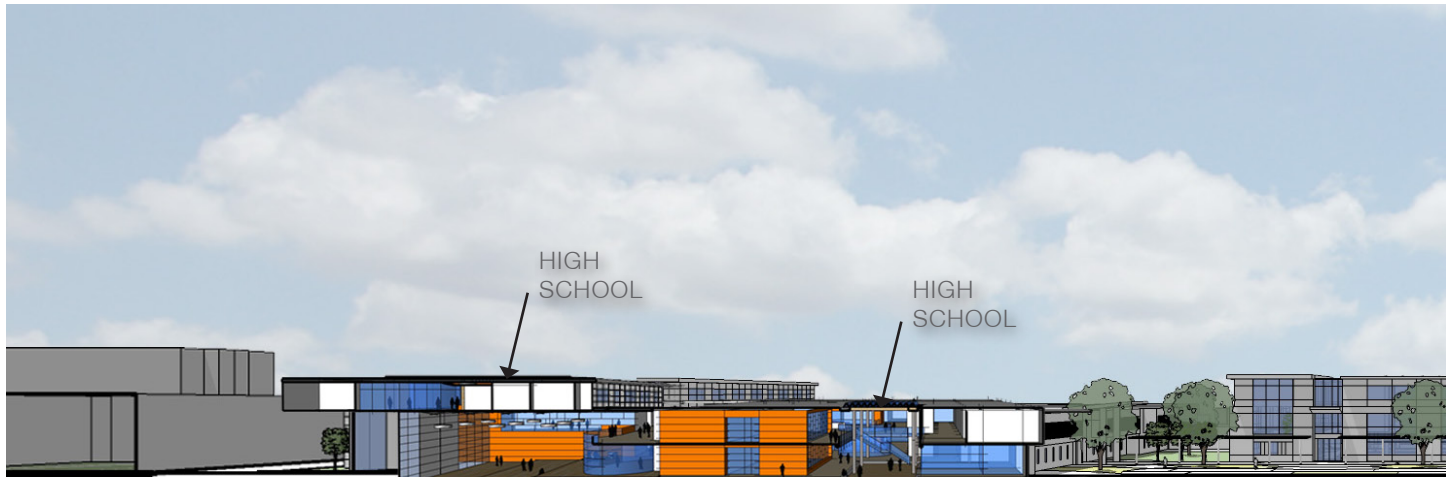


MASSING VIEWS

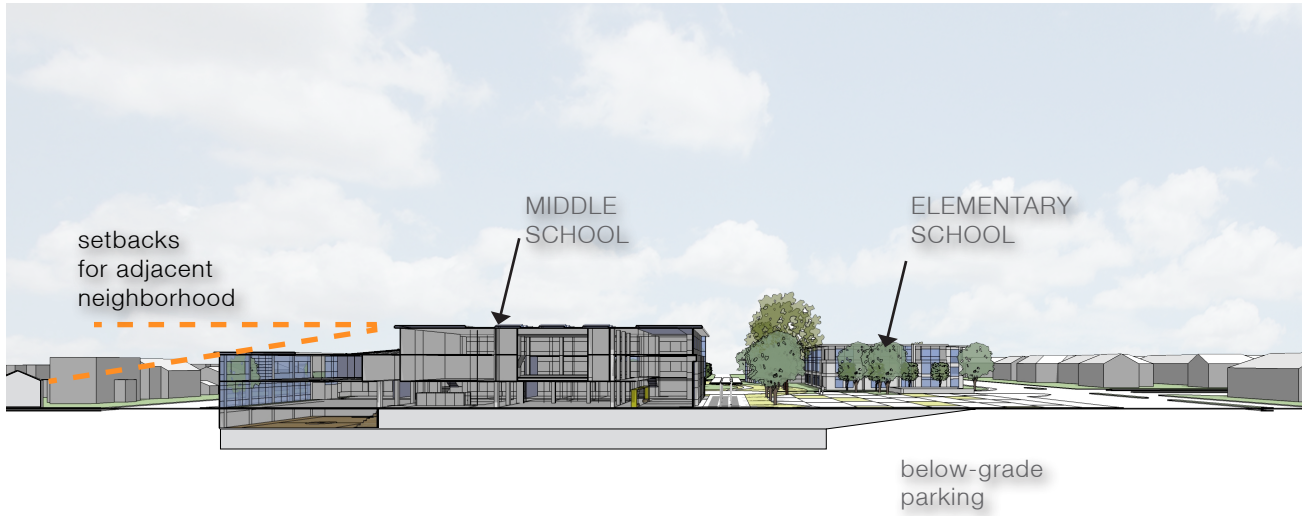
The following visualizations illustrate the massing strategies and spatial character.



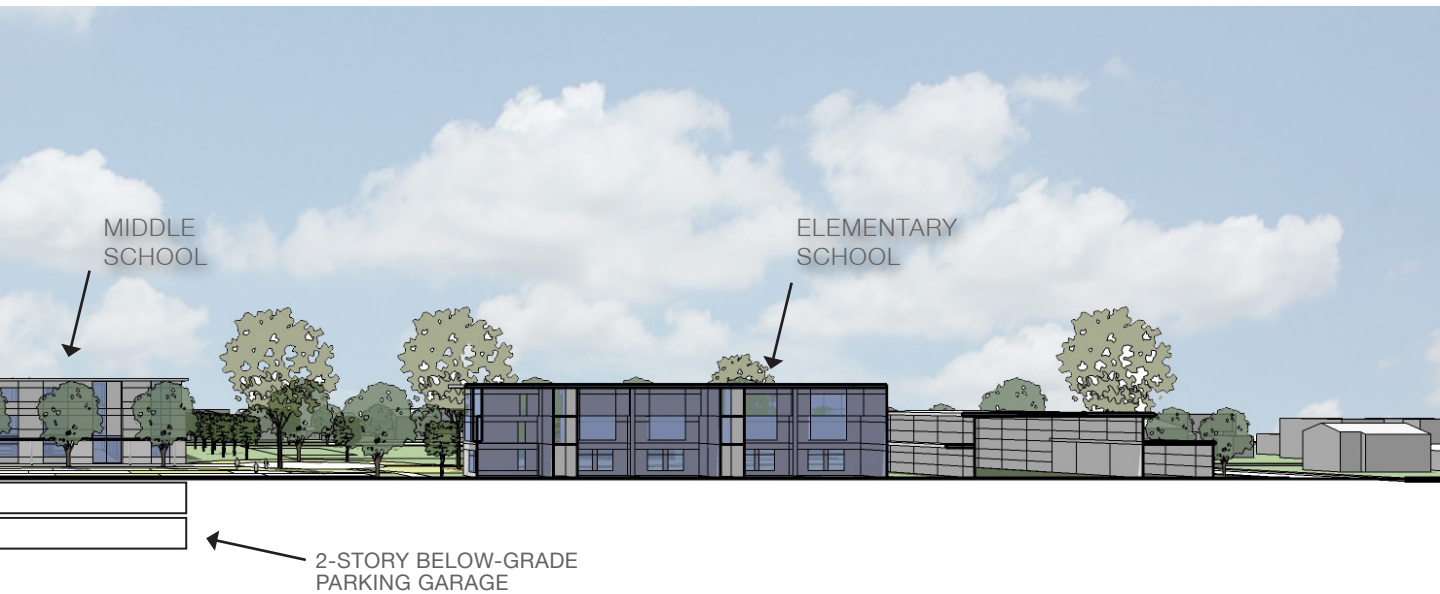
Aerial view from southeast corner

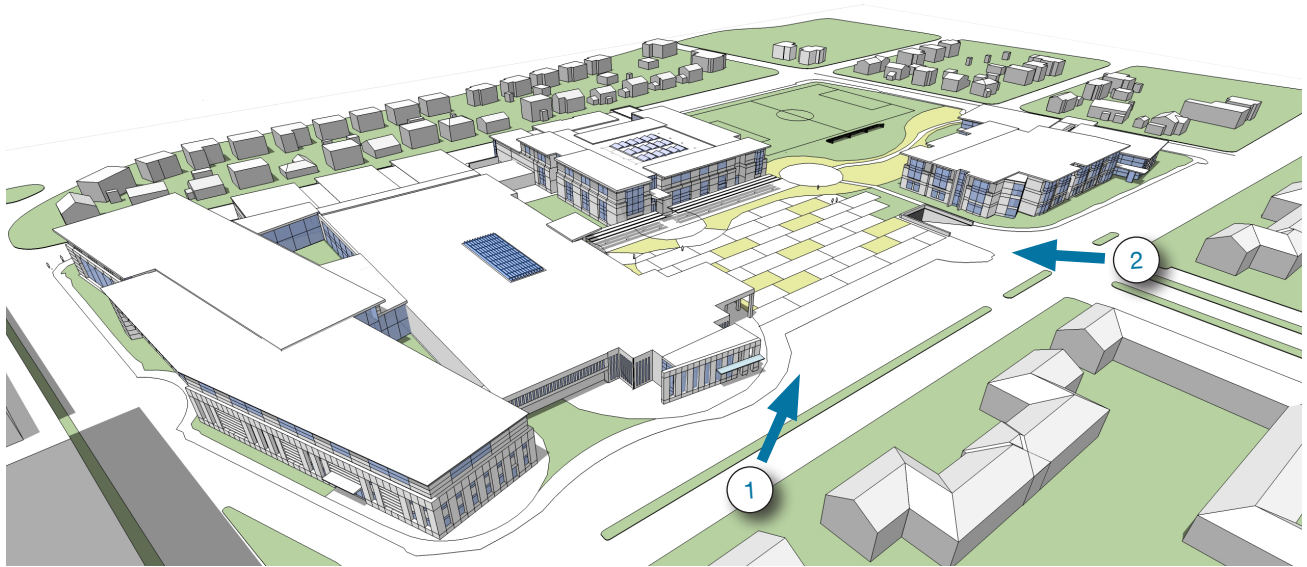


Section 1 - North / South through Elementary School, Academic Quadrangle, and High School



Section 2 - East / West through Middle School and Academic Quad





Aerial view from southeast corner

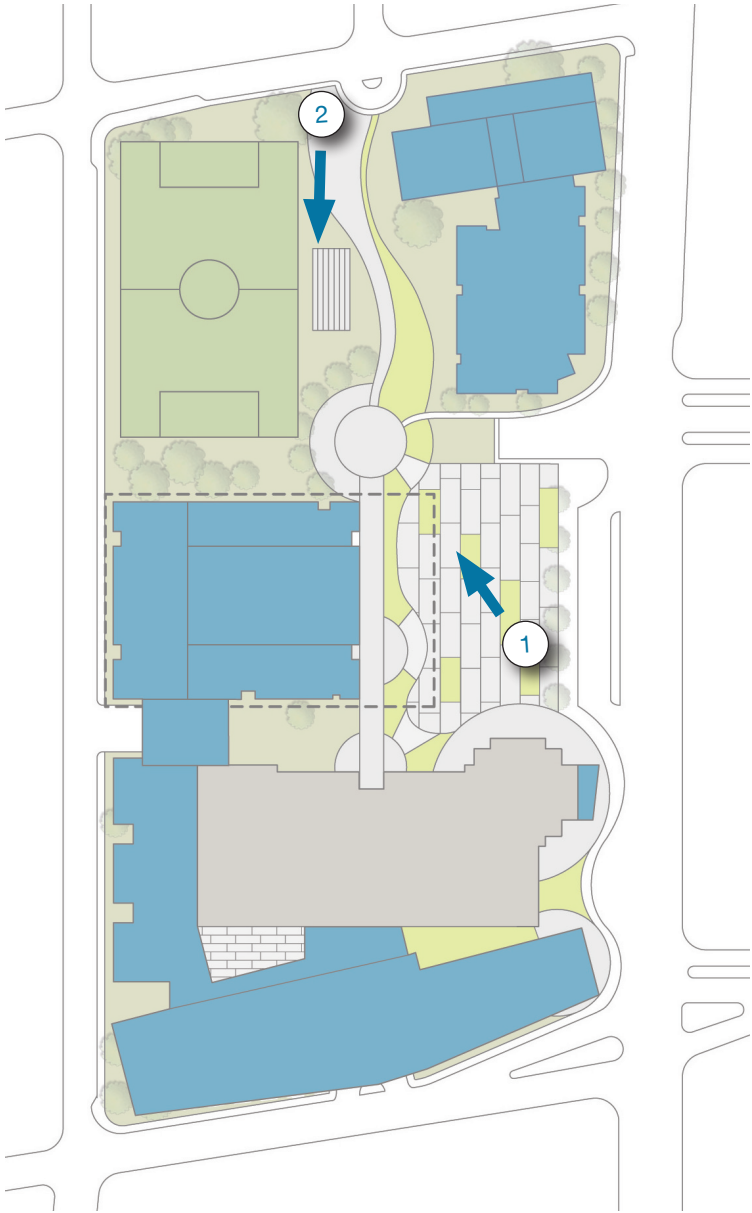


View 2 - Quad view from Walter Reed Drive



View 1 - Street view from northbound approach on Walter Reed Drive





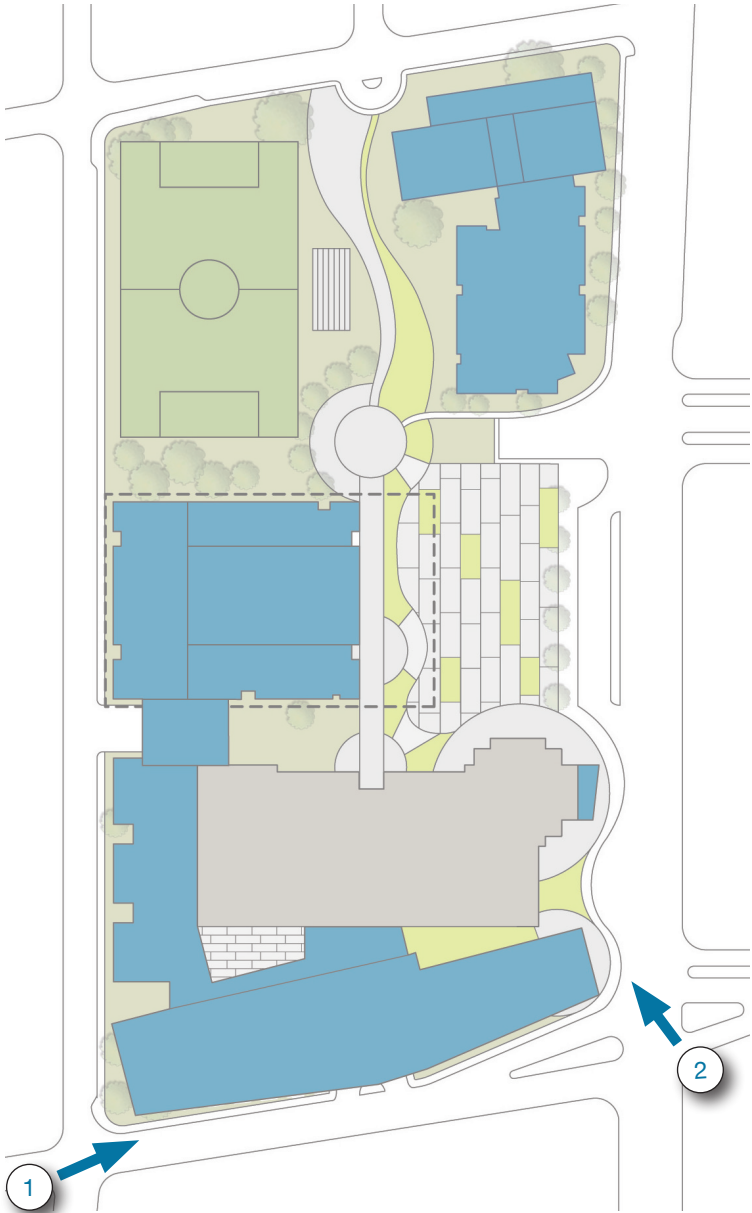
Site Plan



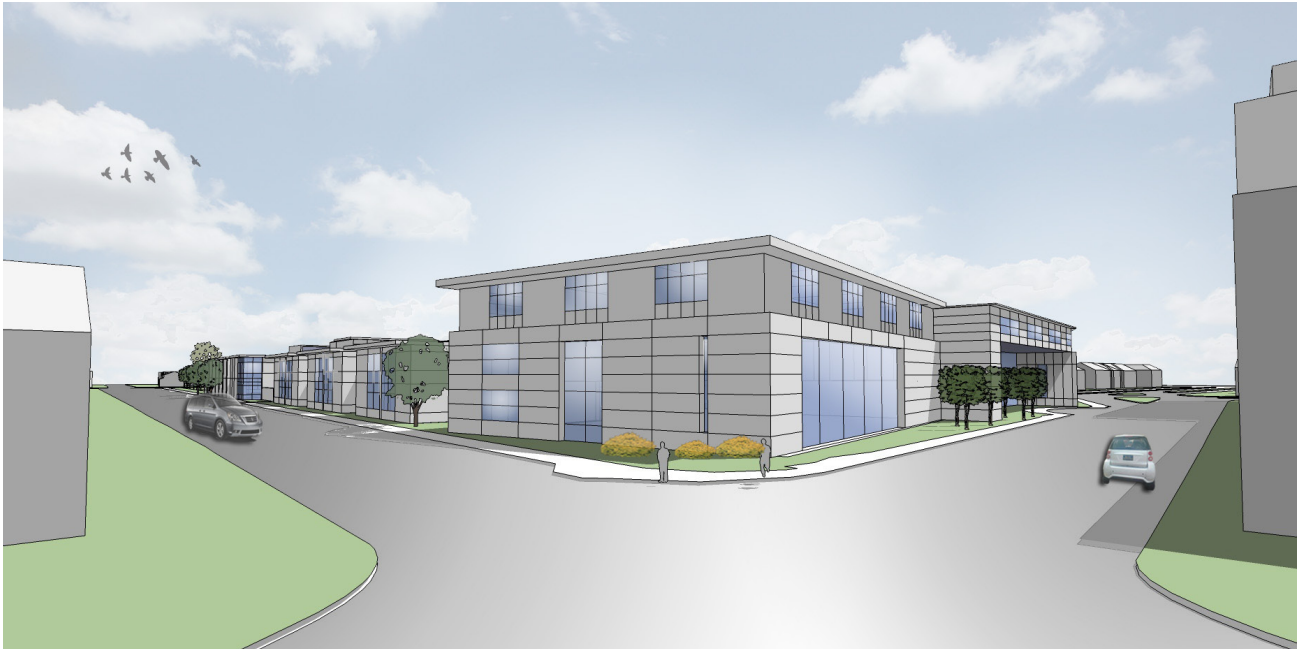
View 1 - Academic Quad from High School building



View 2 - Drop-off at Soccer Field



Site Plan



View 1 - Southwest corner at Highland and 9th



View 2 - Southeast corner at 9th and Walter Reed



ARLINGTON CAREER CENTER FEASIBILITY STUDY



SUMMARY + RECOMMENDATIONS

The Arlington Career Center site affords tremendous opportunity for APS and Arlington County to provide for the long-term facility needs of the school division and community, while advancing the principles of smart, sustainable, urban development. At the core of the proposed development strategy is the retention of the existing Arlington Career Center.

Rather than propose several development scenarios, the study committee and team coalesced around a preferred image of the future of the ACC site. Accordingly, what follows are the implementation strategies associated with the ACC master plan, based on the following established priorities:

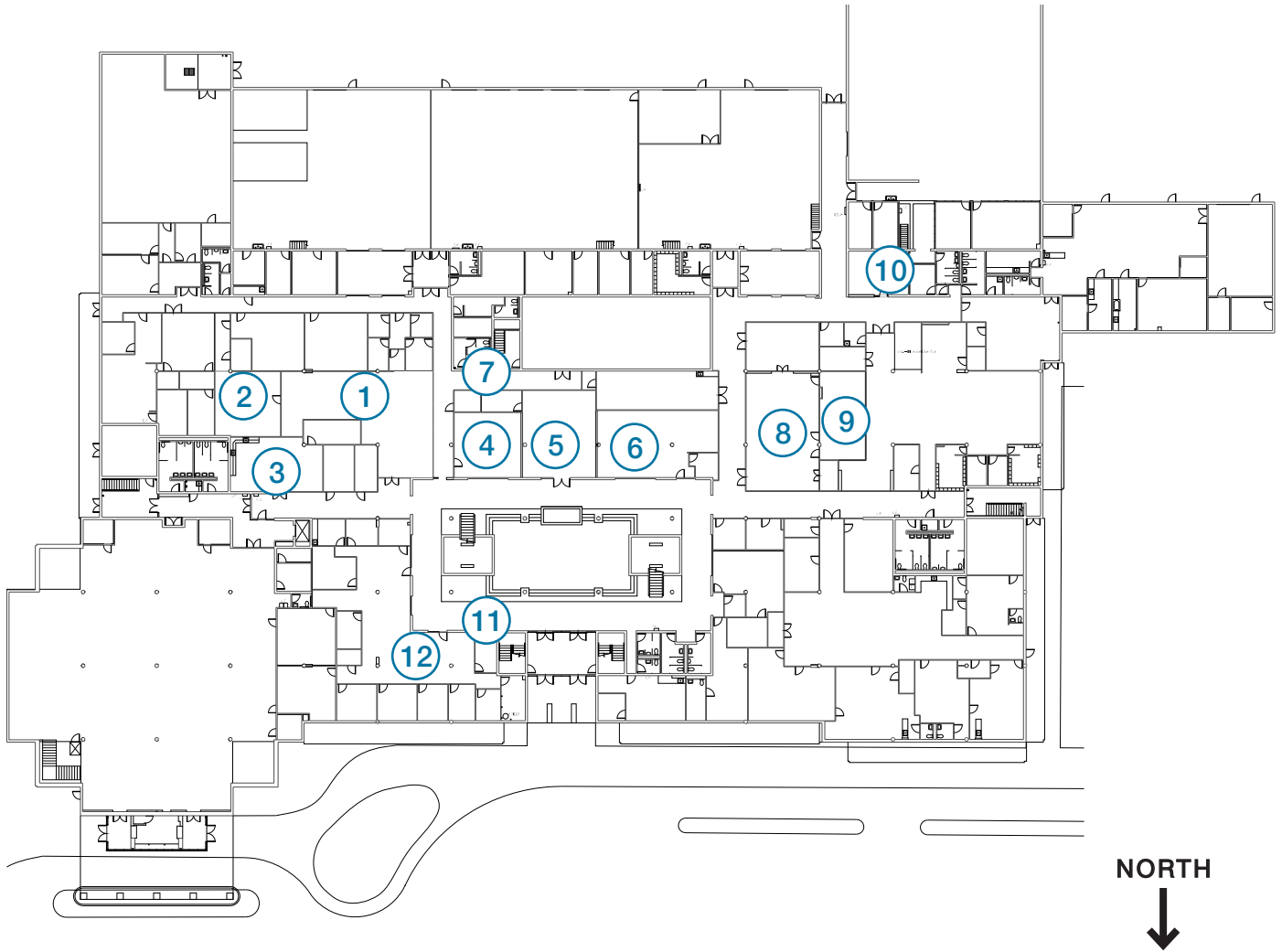
1. Immediate consolidation of Arlington Mill High School at ACC
2. Construction of new Middle School, including 2-level underground parking
3. Expansion/creation of CTE High School, including integration of NVCC
4. Construction of Business Incubator Space
5. Construction of new Elementary School
6. Demolition of Fenwick Center / Construction of Academic Quadrangle





MODIFICATIONS FOR ARLINGTON MILL HIGH SCHOOL

As discussed in the analysis, there is unused square footage in the ACC. Minor modifications to existing instructional spaces and some repartitioning will be required to accommodate the Arlington Mill core classrooms, science program, and administration.



First Floor Modifications:

1. New Arlington Mill Media Center
2. Close Door, Create New Corridor for Custodian Storage
3. Upgrade for Science, Forensics
4. New Gypsum partition for Aviation classroom.
5. New doors. Computer Lab.
6. New gypsum partition. Simulation Lab.
7. Office.
8. New Cafe. Upgrade finishes.
9. Serving Line / Partition
10. New door.
11. Pass-thru Customer Service window for attendance office.
12. Copier Machine Circuit, this area.

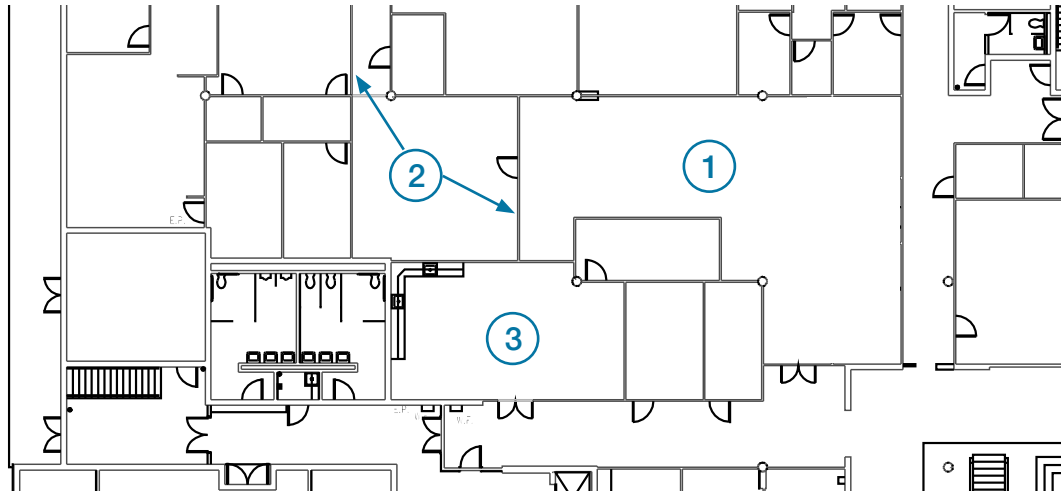


Second Floor Modifications:

1. New Partitions to create teacher workroom.
2. Demo/build new partitions. Classroom with sink, office.
3. Demo/build new partitions. Classroom.
4. Demo/build new partitions. Upgrade EMT classroom.
5. New Partition. Classroom
6. New Partition. Classroom
7. New Partition. Classroom
8. New Partition. Classroom
9. New Partition. Classroom
10. Demo/ New Finishes for Corridor.



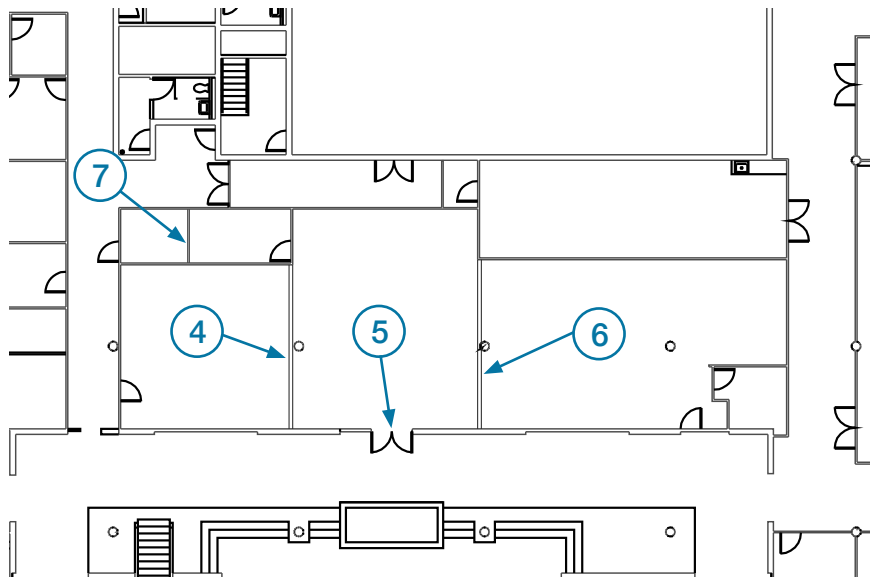
ARLINGTON MILL MODIFICATIONS - FIRST FLOOR



Partial First Floor Plan

First Floor Modifications:

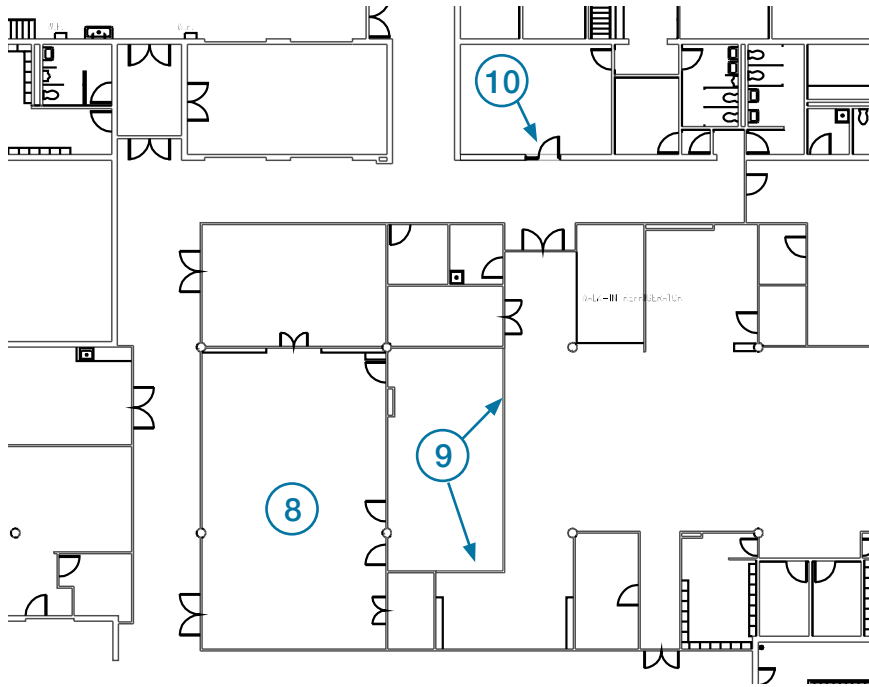
- 1. New Arlington Mill Media Center
- 2. Close Door, Create New Corridor for Custodian Storage
- 3. Upgrade for Science, Forensics



Partial First Floor Plan

First Floor Modifications:

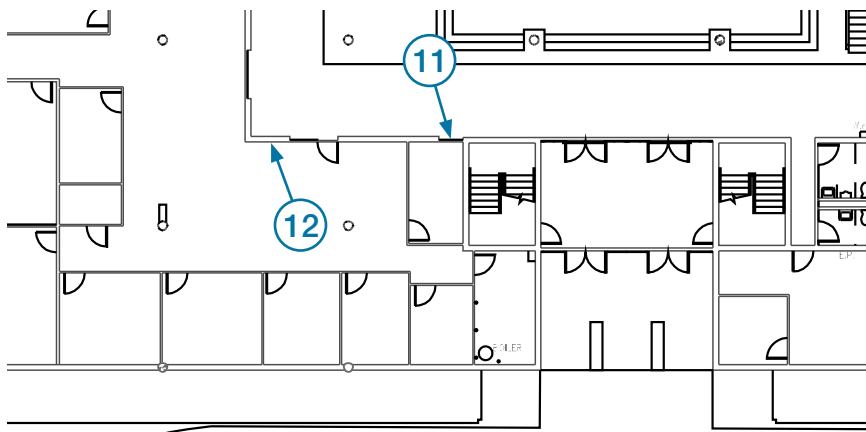
- 4. New Gypsum partition for Aviation classroom.
- 5. New doors. Computer Lab.
- 6. New gypsum partition. Simulation Lab.
- 7. Office.



Partial First Floor Plan

First Floor Modifications:

- 8. New Cafe. Upgrade finishes.
- 9. Serving Line / Partition
- 10. New door.



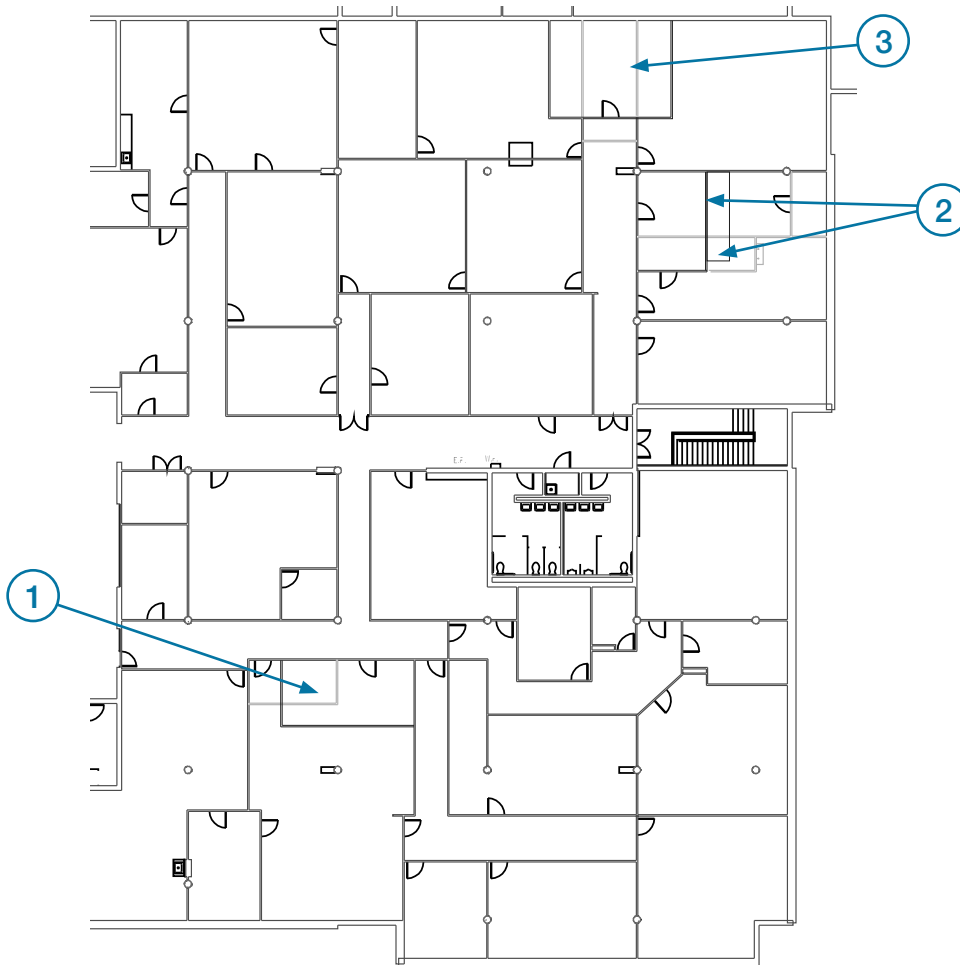
Partial First Floor Plan

First Floor Modifications:

- 11. Pass-thru Customer Service window for attendance office.
- 12. Copier Machine Circuit, this area.

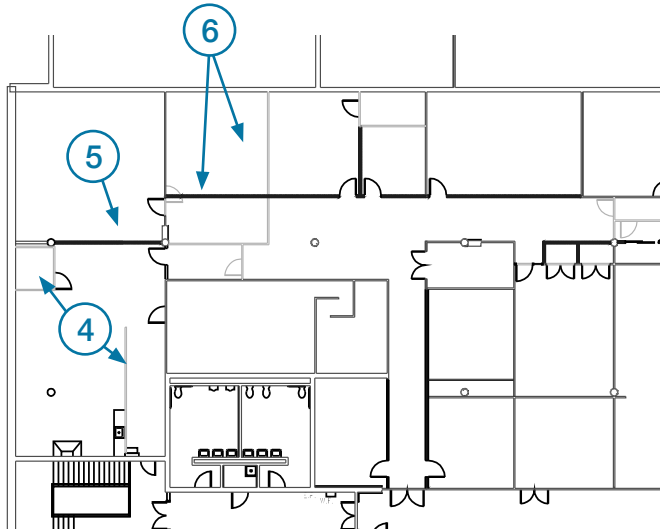


ARLINGTON MILL MODIFICATIONS - SECOND FLOOR



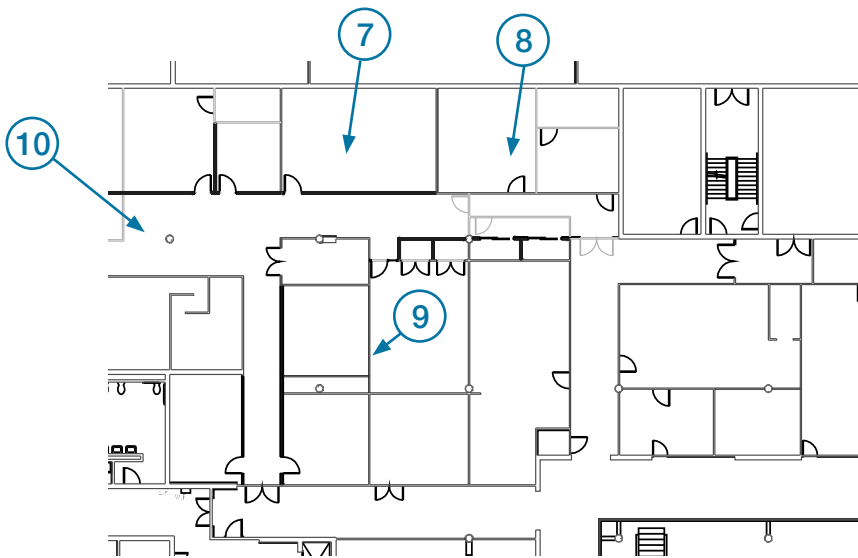
Second Floor Modifications:

1. Demo/build new partitions to create teacher workroom.
2. Demo/build new partitions for classroom with sink, office.
3. Demo/build new partitions for classroom.



Second Floor Modifications:

- 4. Demo/build new partitions. Upgrade EMT classroom.
- 5. New Partition. Classroom
- 6. Demo/build New Partition. Classroom



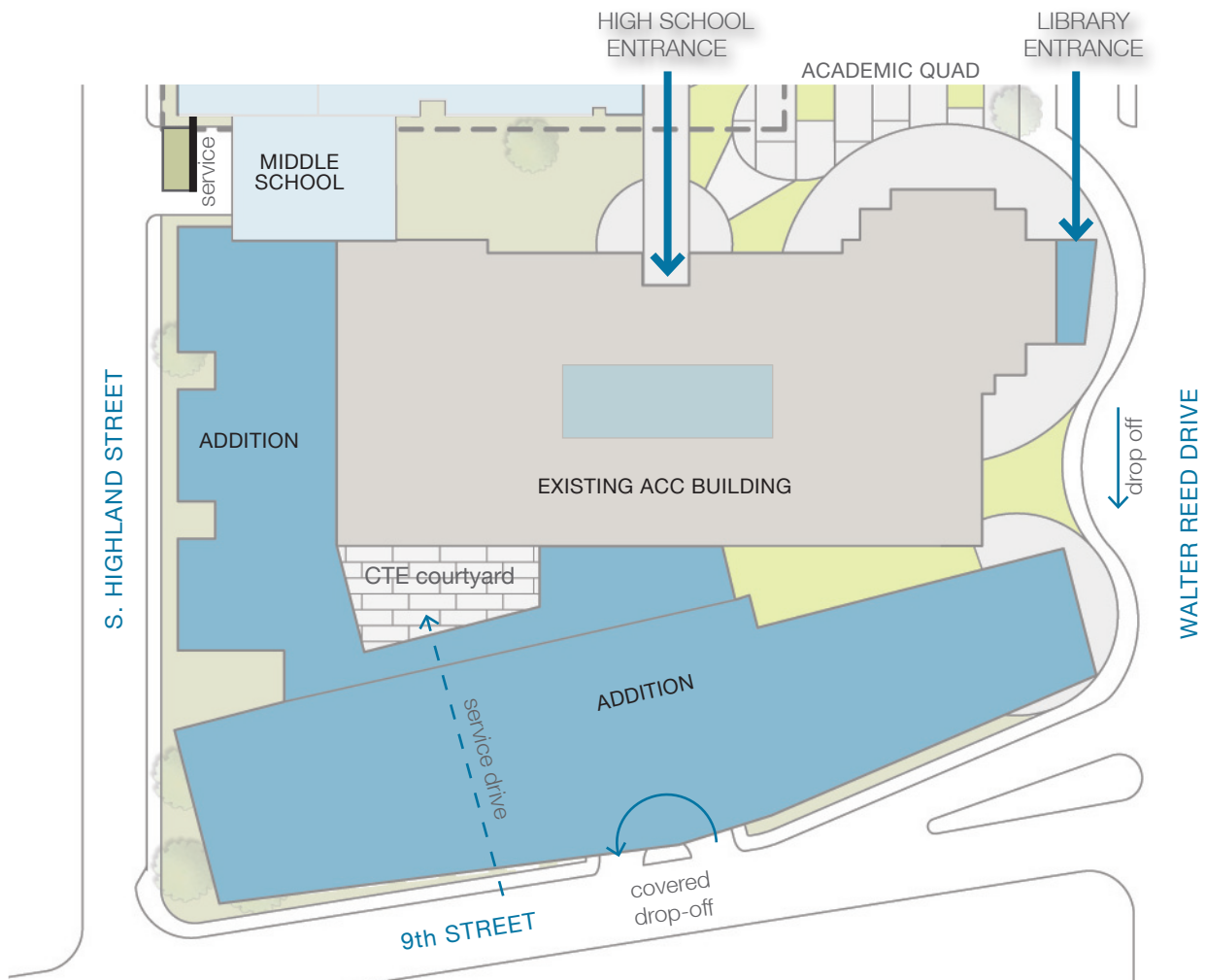
Second Floor Modifications:

- 7. New Partition. Classroom
- 8. New Partition. Classroom
- 9. New Partition. Classroom
- 10. Demo/ New Finishes for Corridor.



HIGH SCHOOL

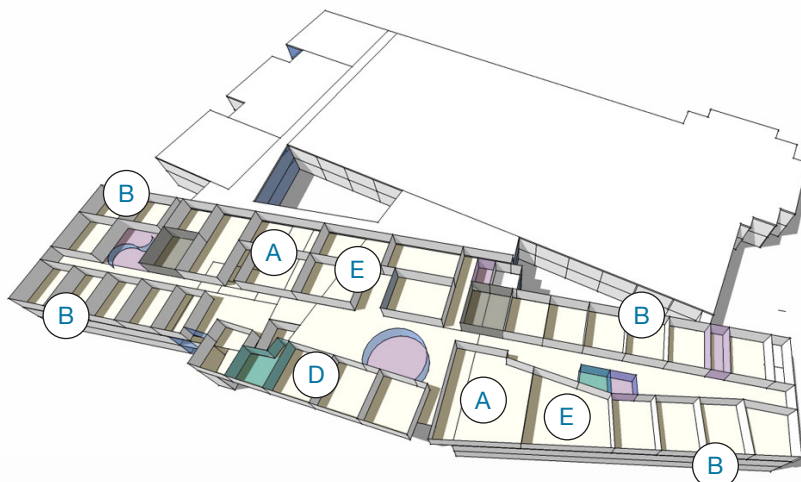
An engaging high school environment will promote and display knowledge and curiosity as an exciting, collaborative, and open-ended adventure, along with the rigor of hard work and focused study. In response, the architecture can create a visually connected experience, where learning is on display and group collaboration happens in the meeting spaces between rooms. The ACC building presents unique challenges because of its deep floor plate and lack of natural daylight to the heart of the building. The southern 3-story addition could stand-off of the existing building to maintain sunlight to the edge, while the center areas of the building would benefit from open, interconnected collaboration and commons spaces. Collaboration and gathering spaces are stitched together throughout the building in both horizontal and vertical arrangements, creating dynamic spaces which share their vibrancy with each other. Requiring that spaces be multi-functional also adds built-in flexibility. For example the culinary arts instructional area is next to the dining area, and an open forum sits on top of the culinary arts room, which looks down into the dining area. While the dining room can support the culinary arts program, the forum can serve as an informal food, lecture, or tasting area while also becoming a balcony should the dining room be used as a presentation space. These synchronicities help to break down the scale of a large building, allow natural light to be borrowed from one space to the next in a deep building, and eliminate the sense of traveling through long corridors.



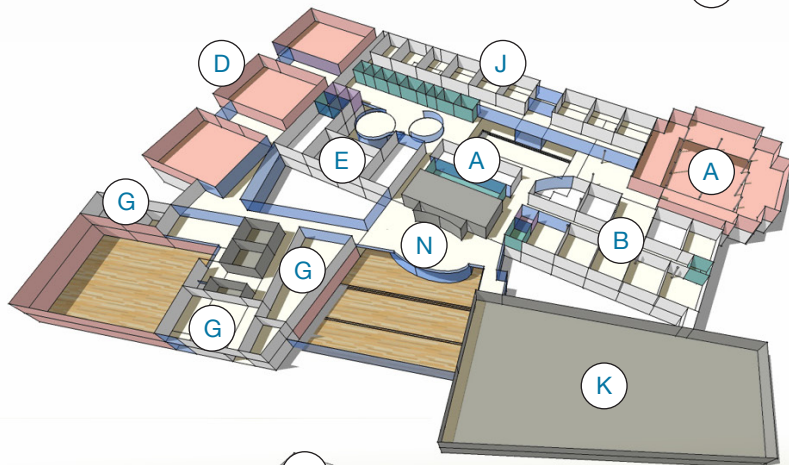
Site Plan

Legend

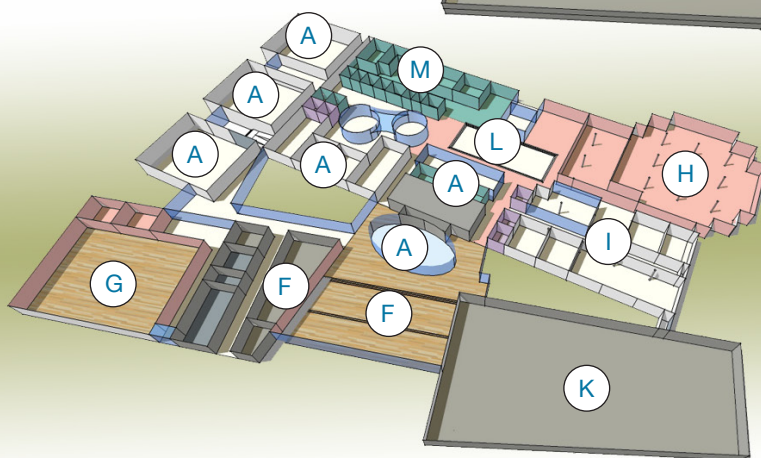
- A. Career Tech Lab / Studios
- B. Core Classrooms
- C. Collaborative / Breakout Areas
- D. Art / Music Studios
- E. Science Labs
- F. Dining / Food Service
- G. Physical Education
- H. Public Library
- I. NOVA Community College
- J. Arlington Mill
- K. Business Incubator
- L. Digital Commons
- M. Administration
- N. Forum



3rd Floor



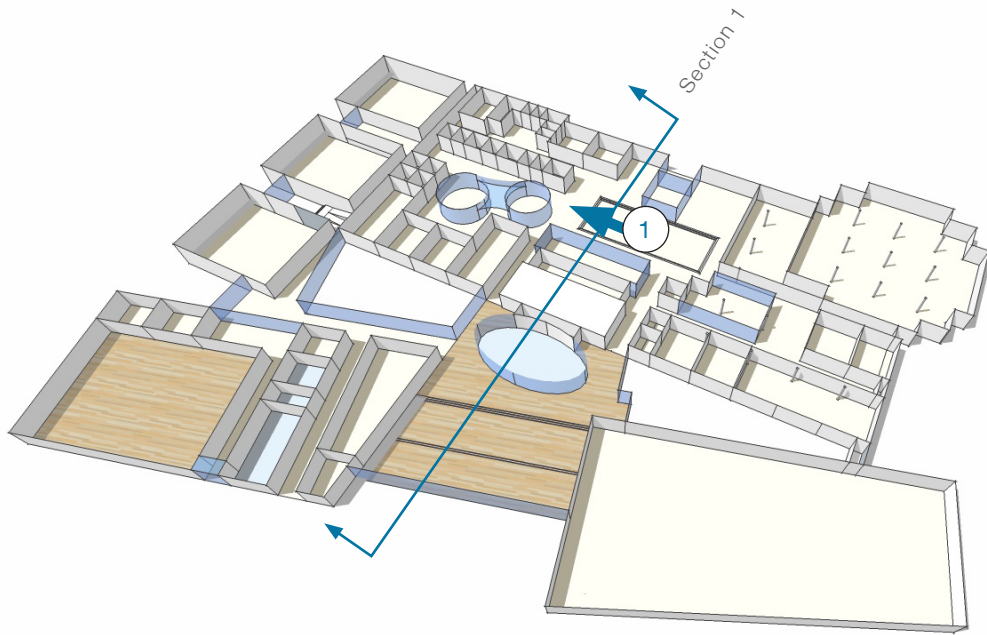
2nd Floor



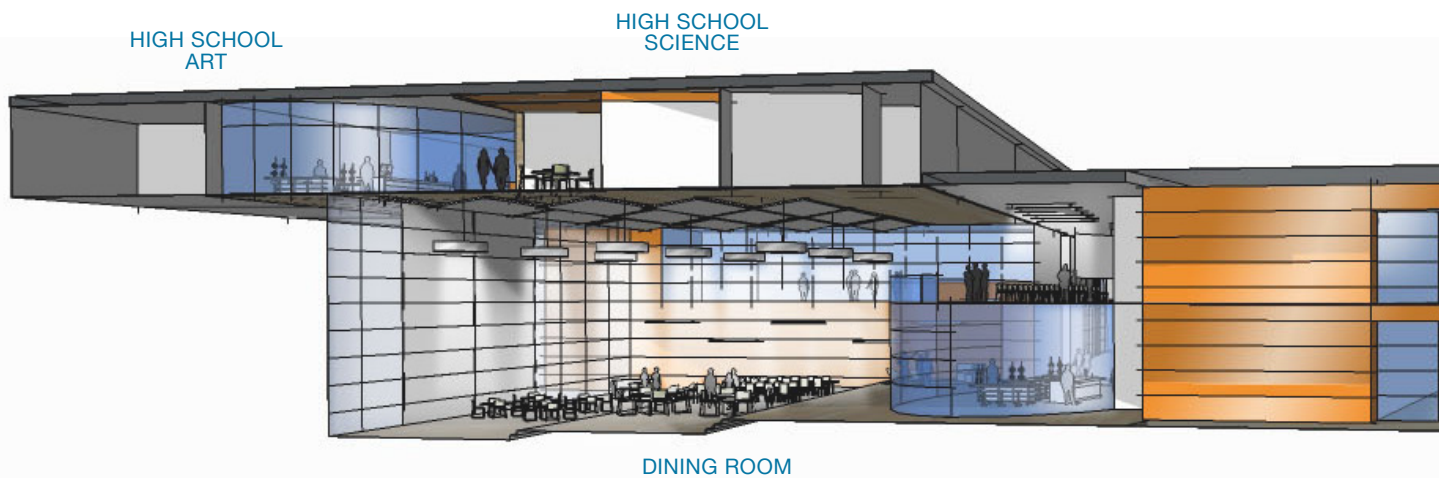
1st Floor



HIGH SCHOOL / ARLINGTON MILL / NOVA COMMUNITY COLLEGE / BUSINESS INCUBATOR

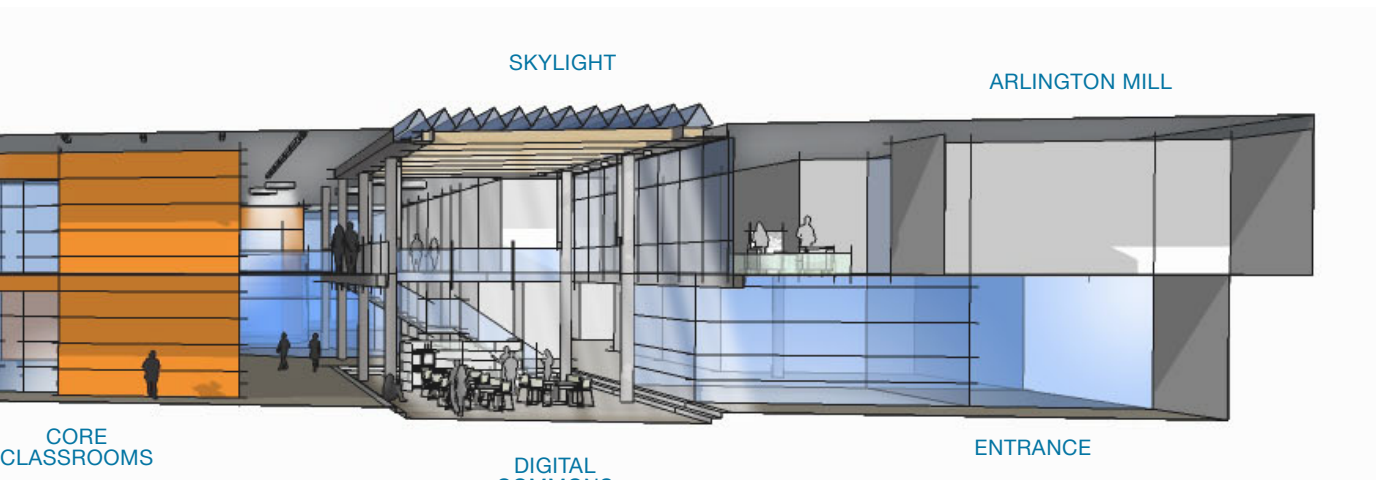


First Floor Plan Perspective

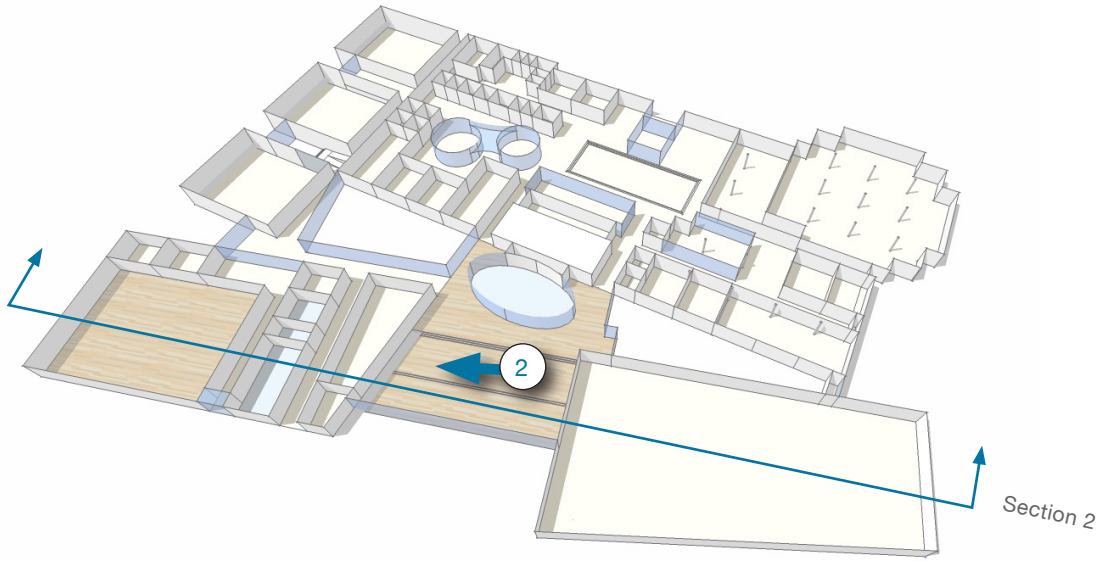




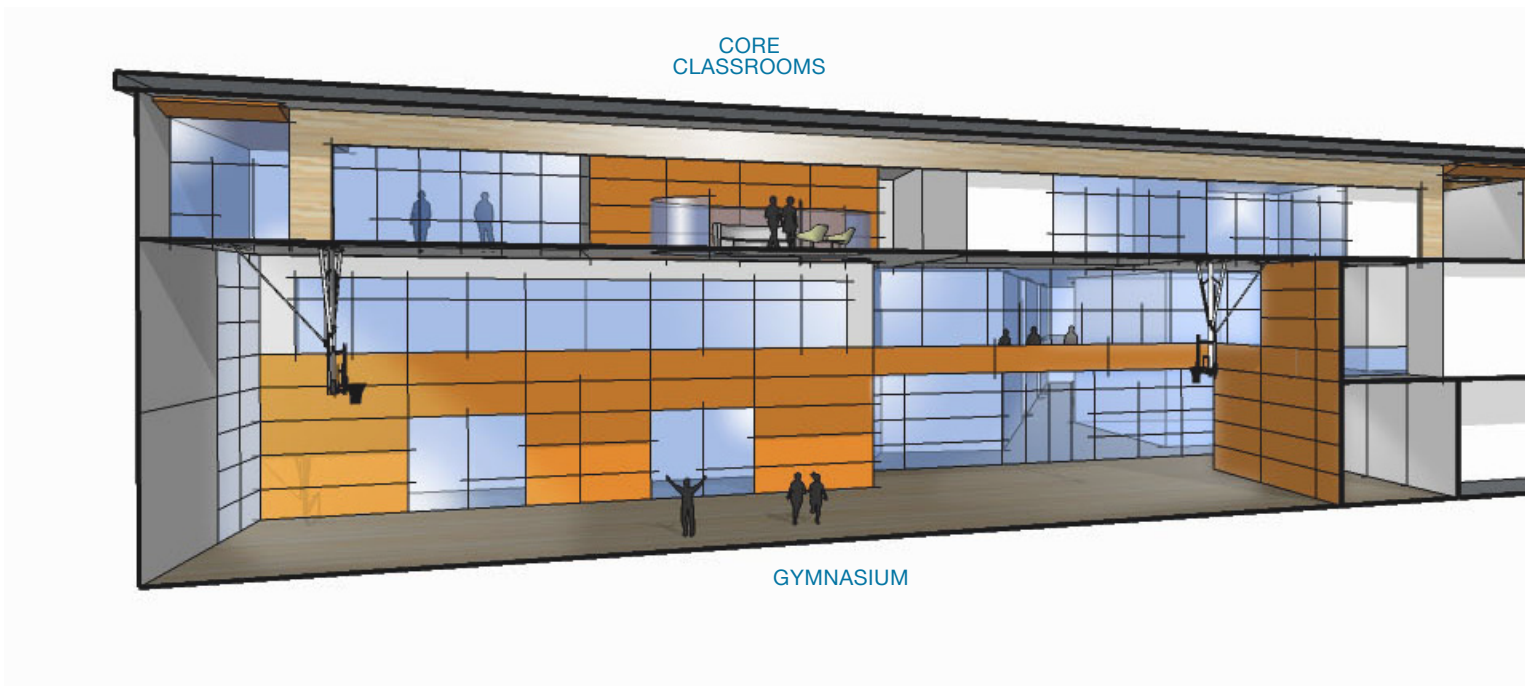
View 1 - High School Commons



Section 1 - High School

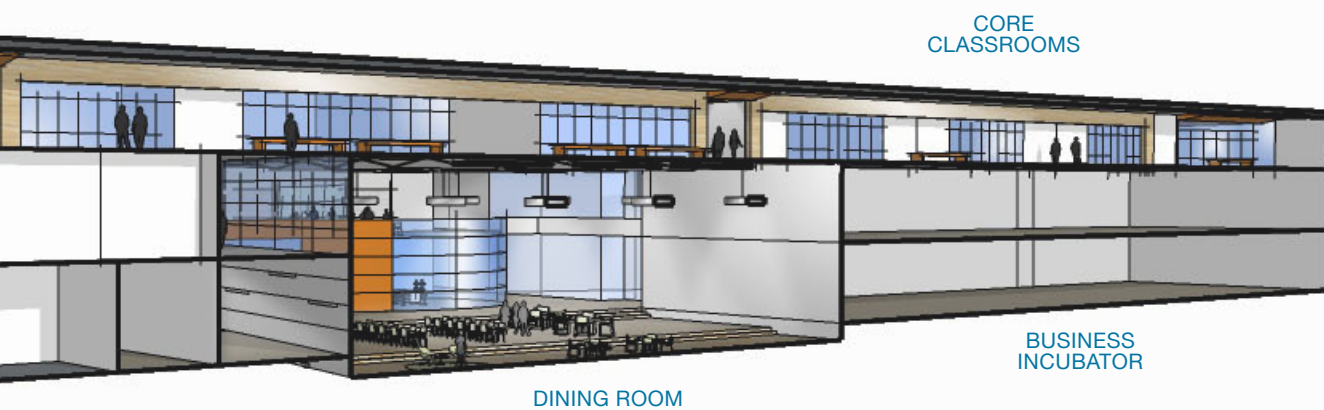


First Floor Plan Perspective





View 2 - High School Dining

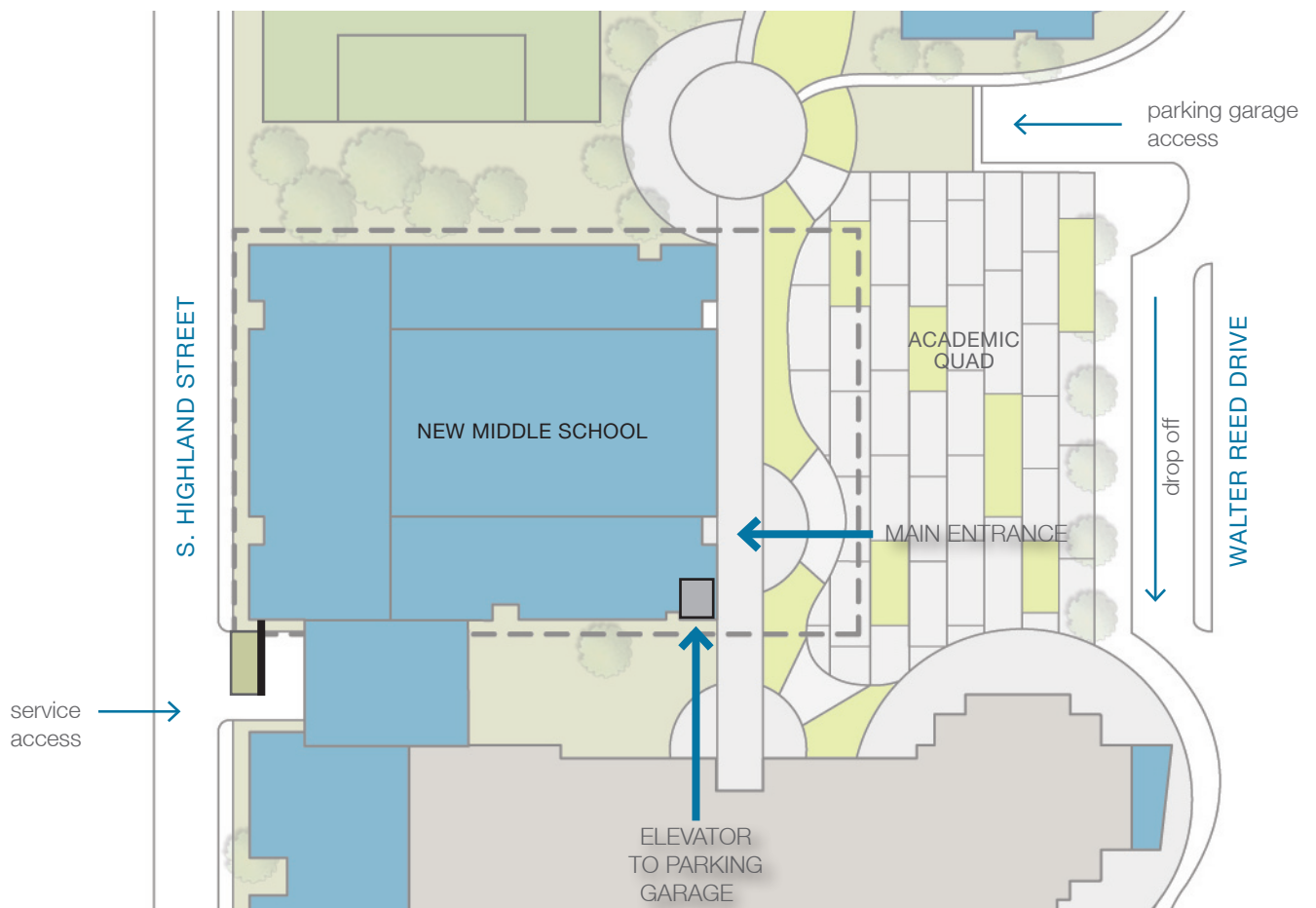


Section 2 - High School

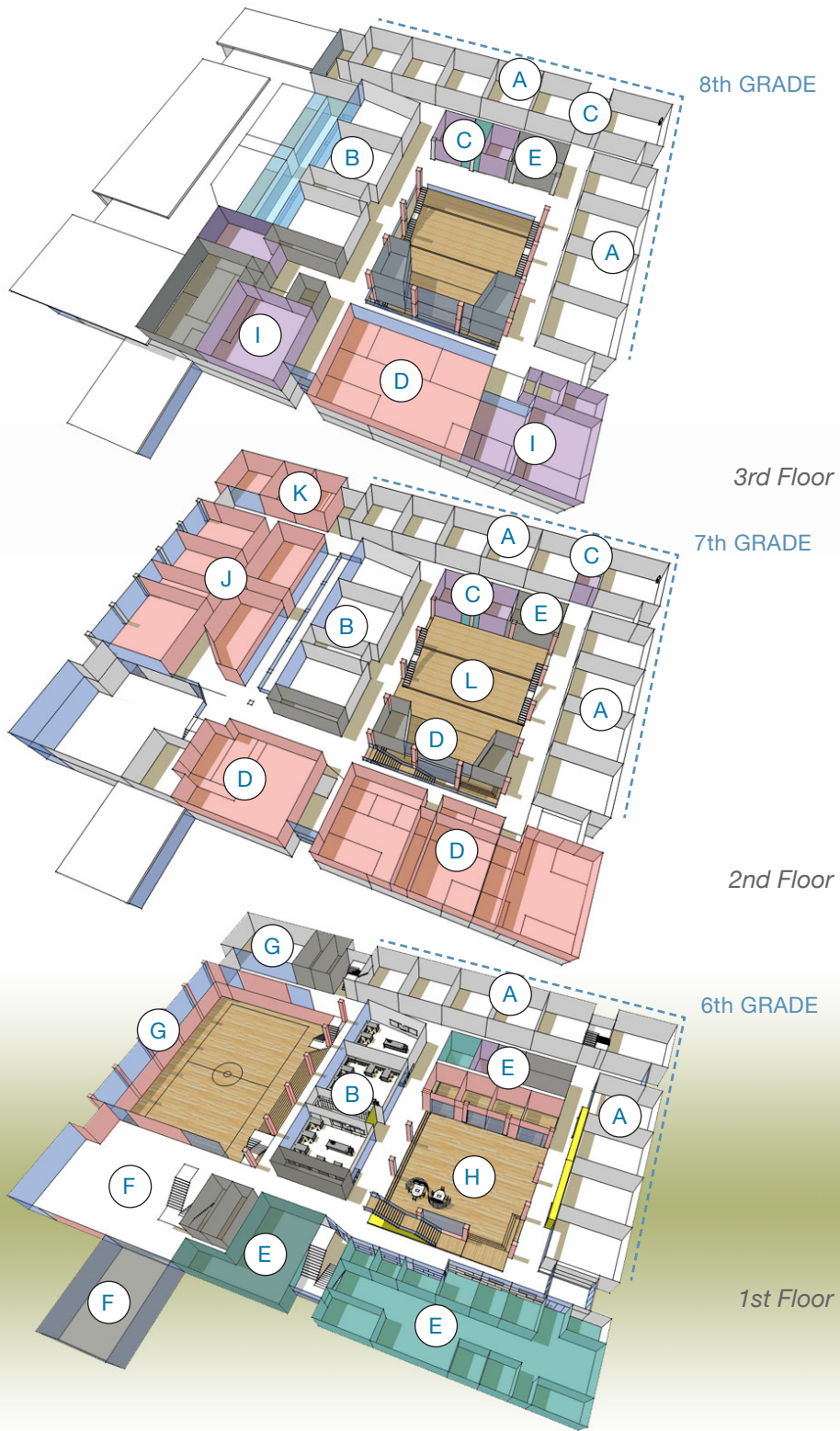


MIDDLE SCHOOL

For an inspiring middle school, the environment should cater to exploration, discovery, and applied learning. The proposed middle school is situated in a central location on the existing site. It rests above a two-story, below-grade parking structure, allowing for an open, academic quadrangle serving the entire campus. On the Highland Street side of the school, the building responds to the surrounding neighborhood by remaining within the two-story height limitation as prescribed by the Form Based Code. The three-story portion of the building houses sixth, seventh, and eighth grades as separate learning communities. The layout of the various programs within the middle school encourage break-out spaces for learning opportunities outside the classroom as well as allowing for increased natural daylighting.



Site Plan

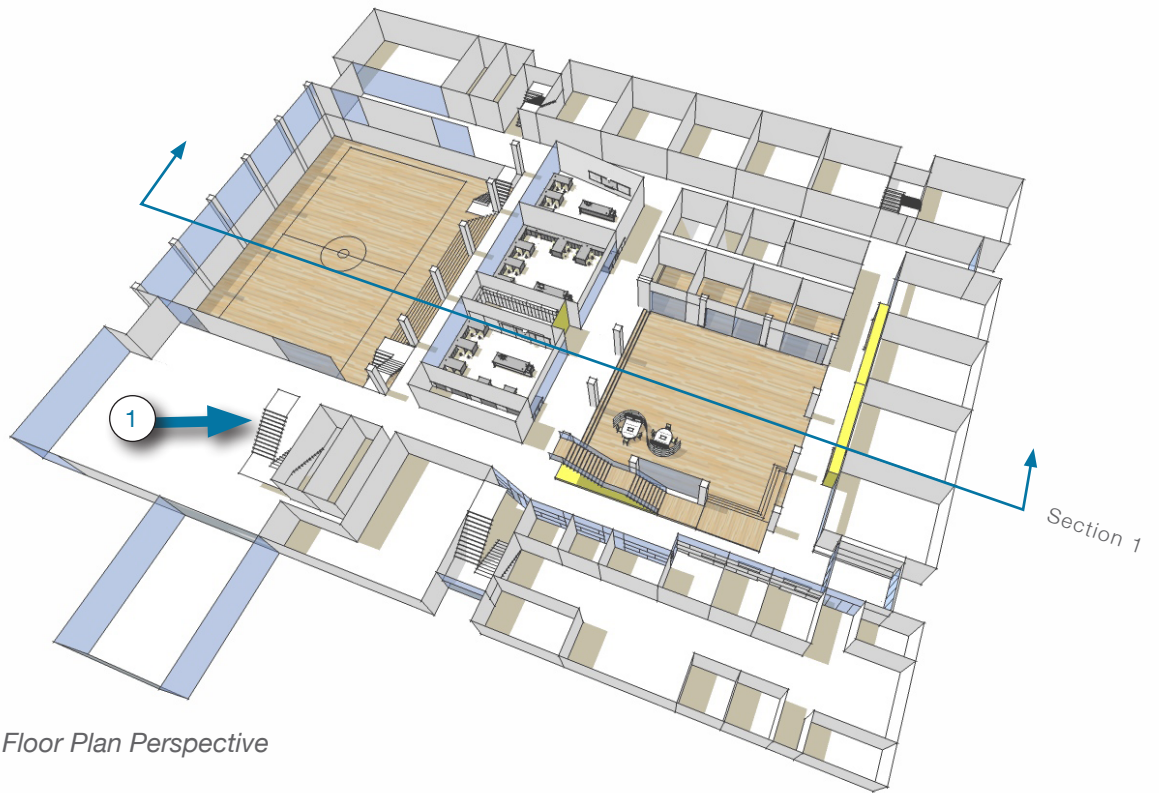


Legend

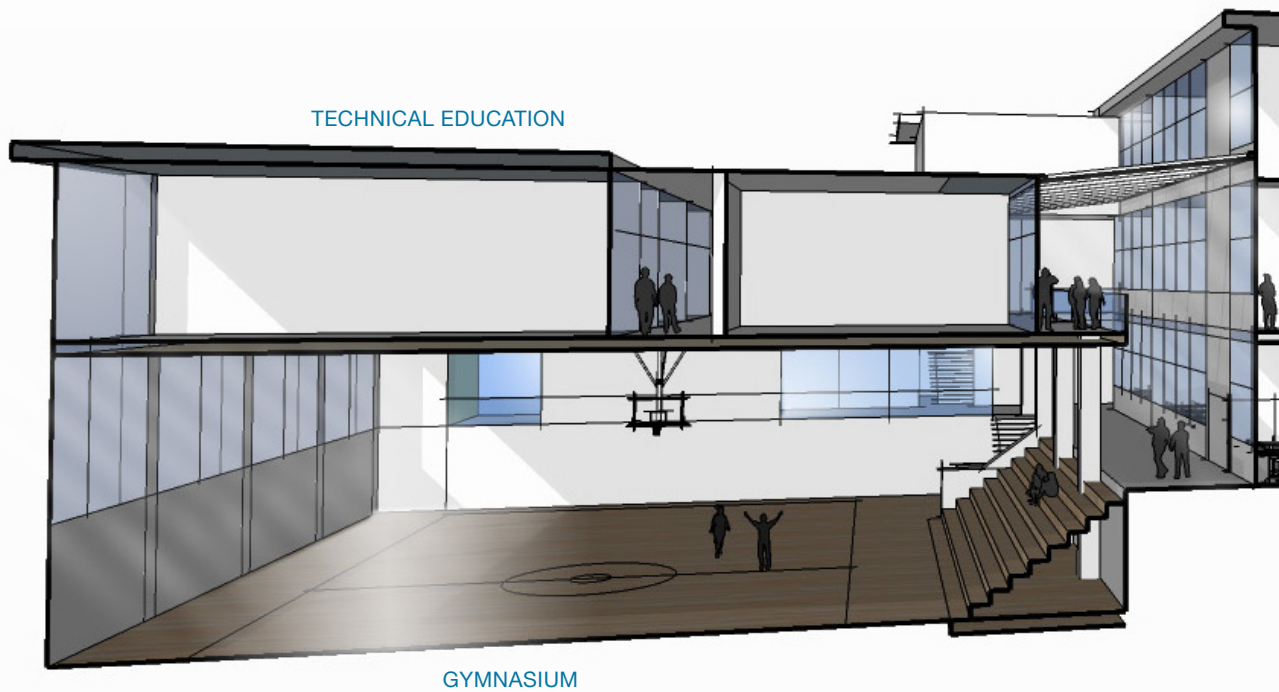
- A. Core Classrooms
- B. Science Labs
- C. Collaborative / Breakout Areas
- D. Art / Music / Drama Studios
- E. Student Services
- F. Dining / Food Service
- G. Physical Education
- H. Media Center
- I. Instructional Support
- J. Technical Education
- K. Work and Family Studies
- L. Forum



MIDDLE SCHOOL



First Floor Plan Perspective



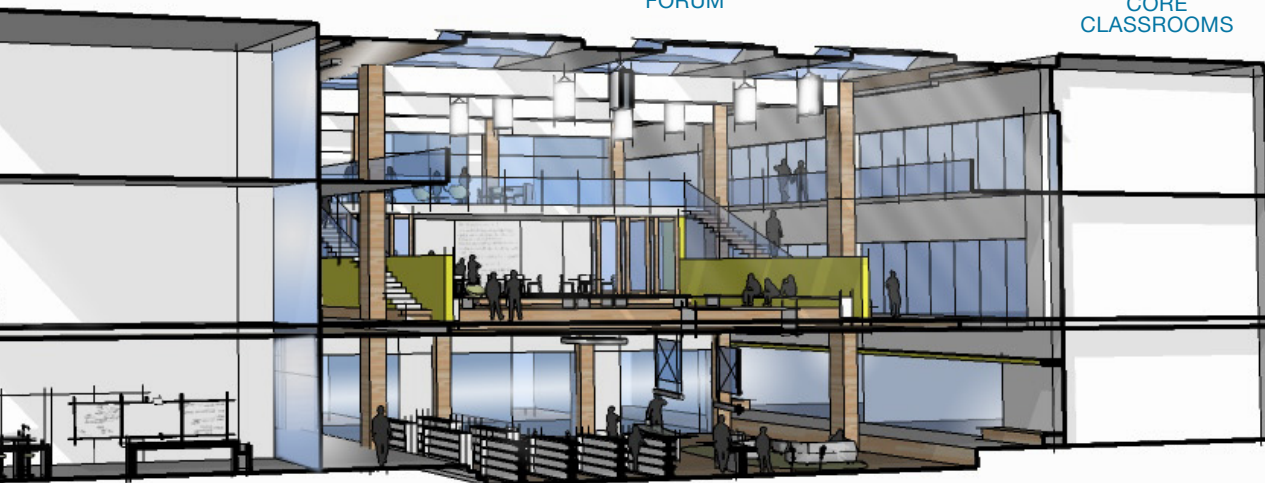


View 1 - Middle School Multipurpose Room

SCIENCE LABS

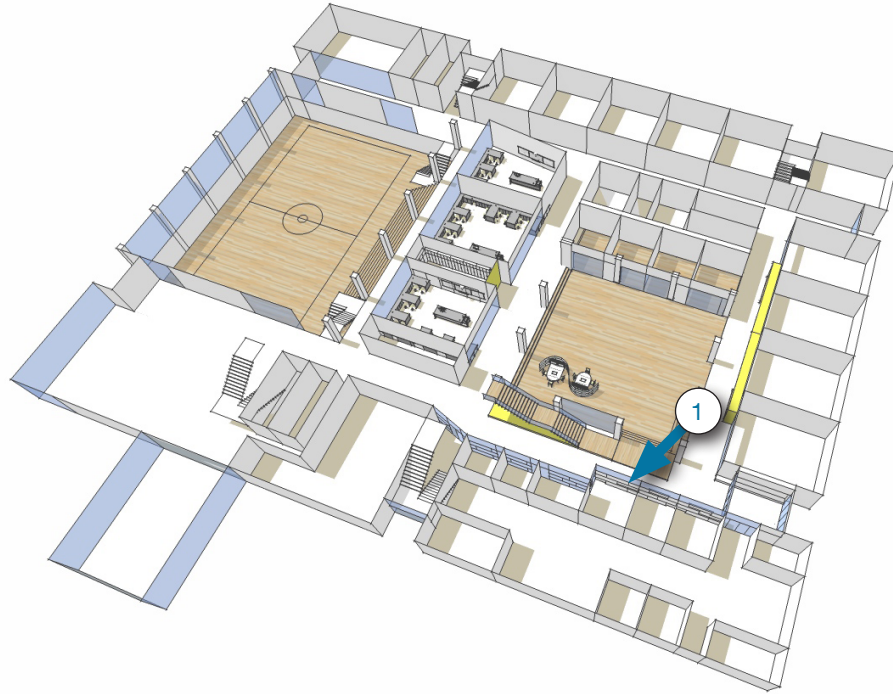
FORUM

CORE CLASSROOMS

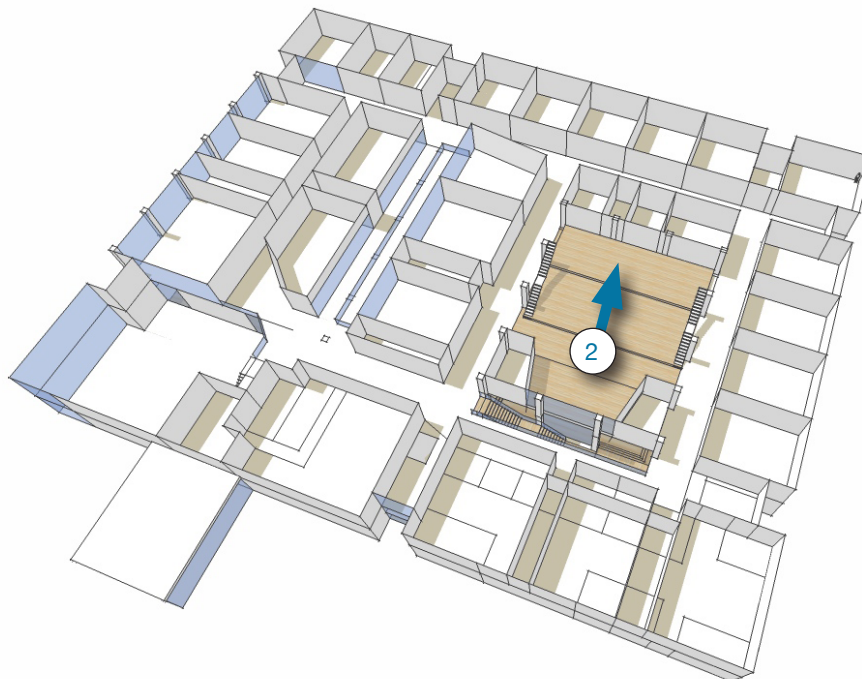


MEDIA CENTER

Section 1 - Middle School



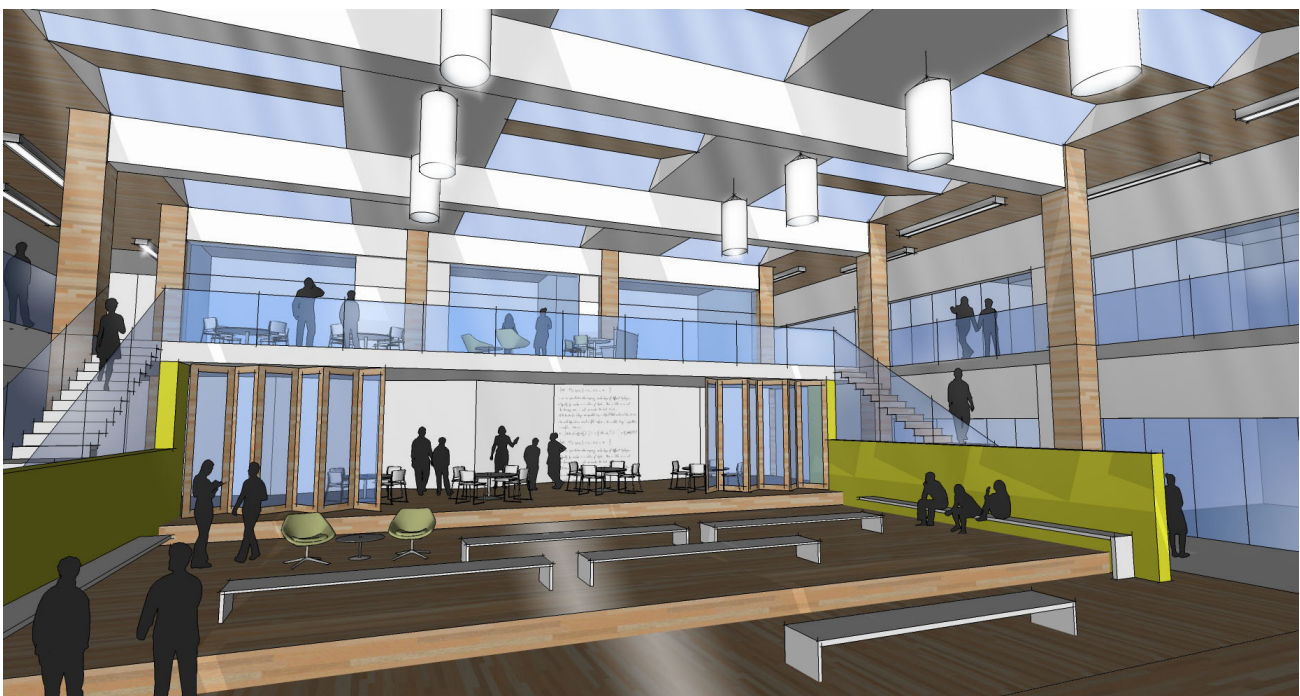
First Floor Plan Perspective



Second Floor Plan Perspective



View 1 - Middle School Media Center

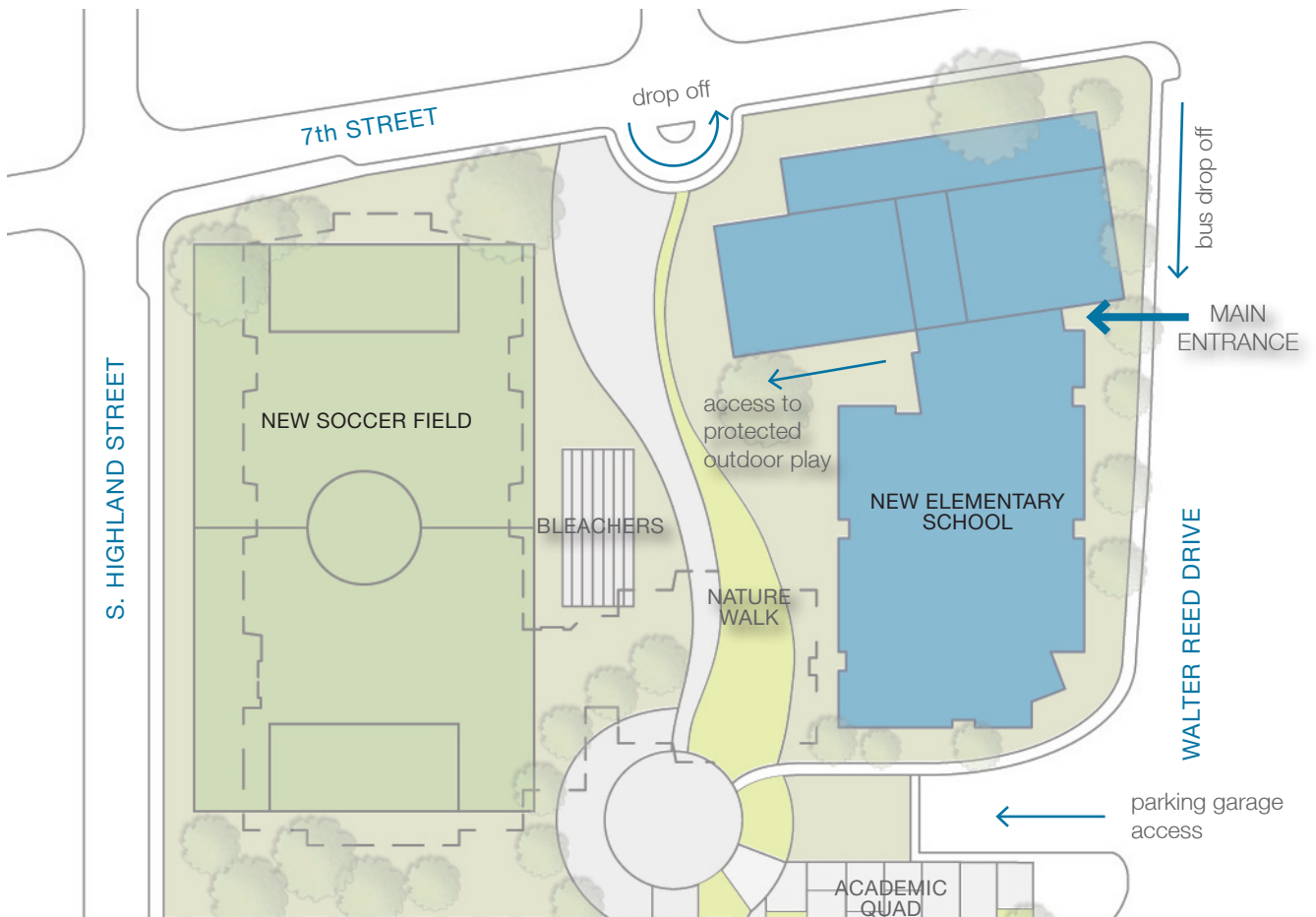


View 2 - Middle School Forum

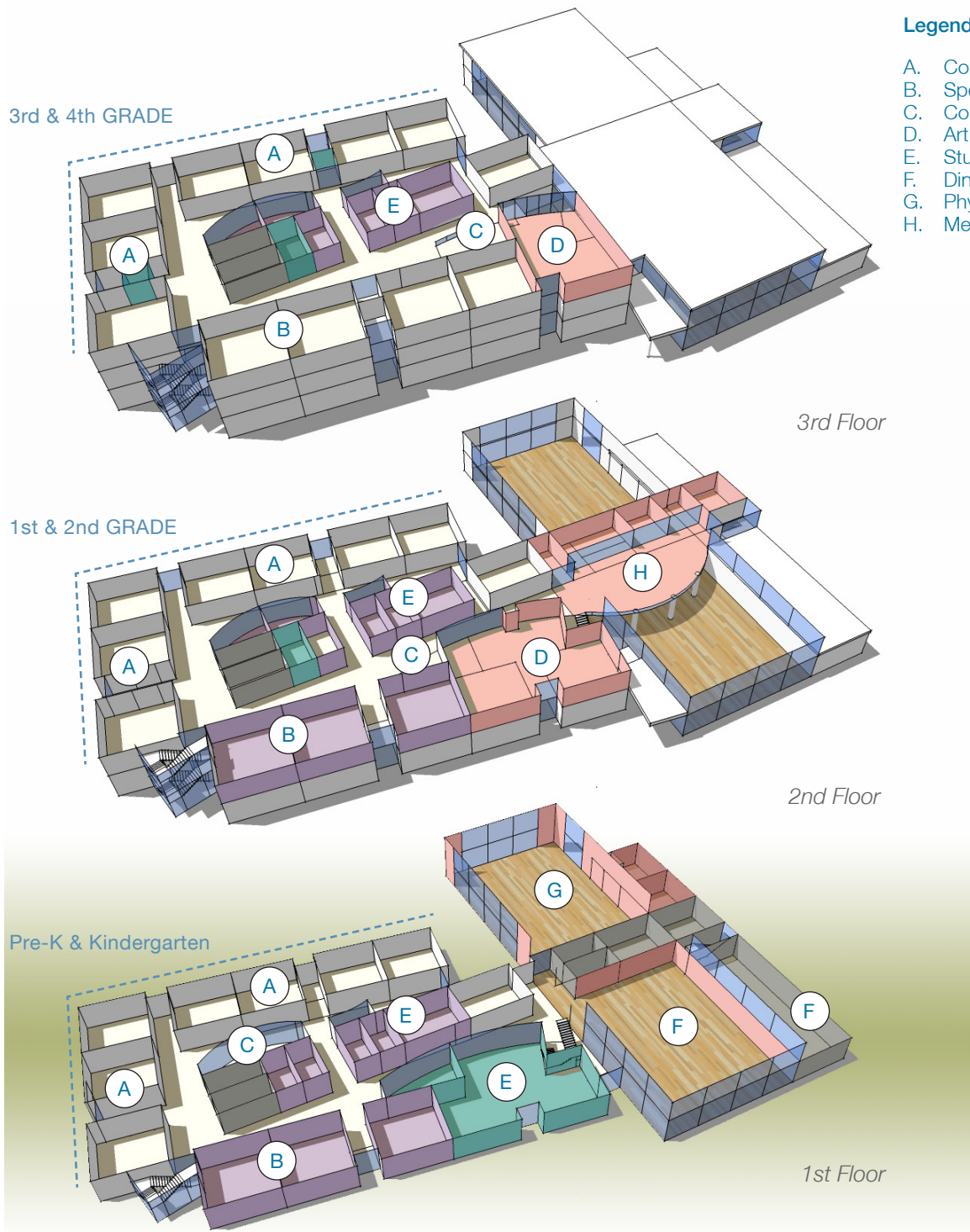


ELEMENTARY SCHOOL

Similar to the middle school, the primary objective is to allow the building to encourage exploration, discovery, and applied learning. The proposed elementary school is located on the northeast corner of the site with easy bus drop-off on the east side and access to protected outdoor play on the west side. Following the Form Based Code, the two-story portion of the building faces the adjacent neighborhood while the three-story portion faces the more commercial street. The layout of the various programs within the elementary school promotes ample natural daylighting as well as visibility between spaces so that learning is always on display. Providing a unique built environment piques the interest of curious children.

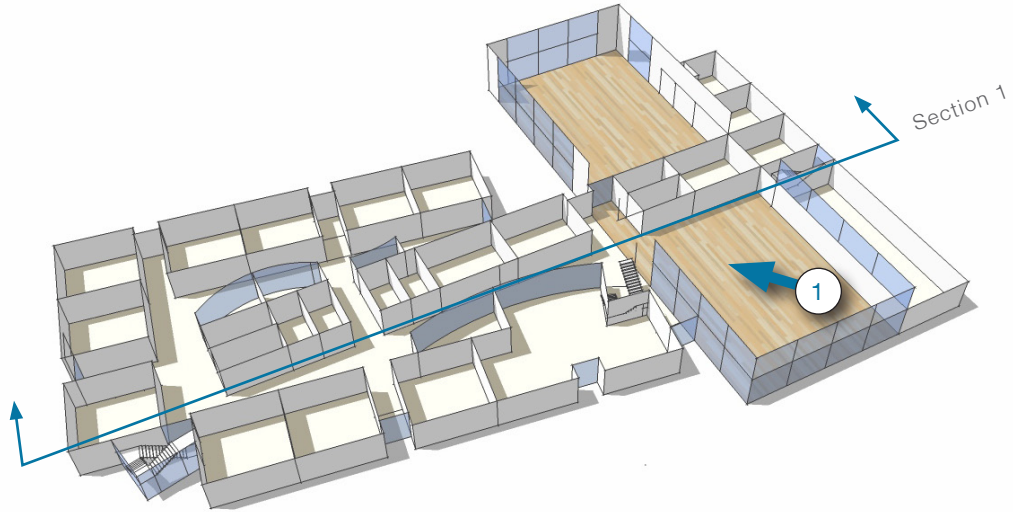


Site Plan





ELEMENTARY SCHOOL PROGRAM

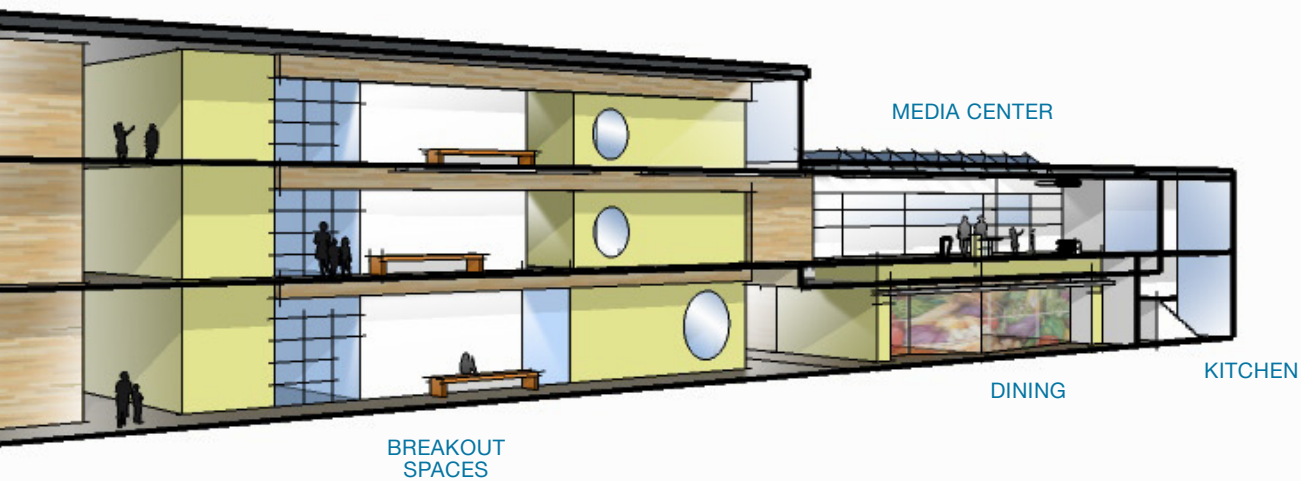


First Floor Plan Perspective





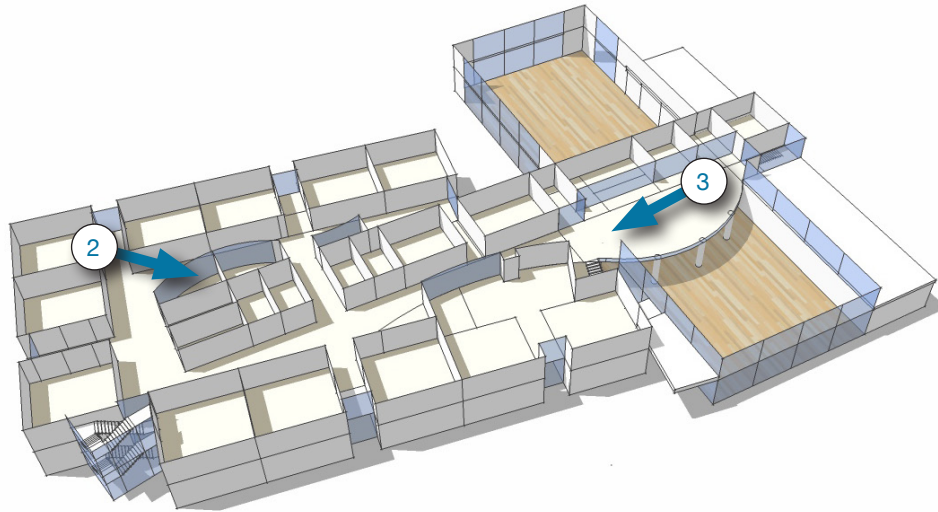
View 1 - Elementary School Multipurpose Room



Section 1 - Elementary School Section



ELEMENTARY SCHOOL PROGRAM



First Floor Plan Perspective



View 2 - Elementary School Break-Out Spaces



View 3 - Elementary School Media Center