



ARLINGTON HIGH SCHOOL BUILDING PROJECT

SPECIAL TOWN MEETING - APRIL 29, 2019

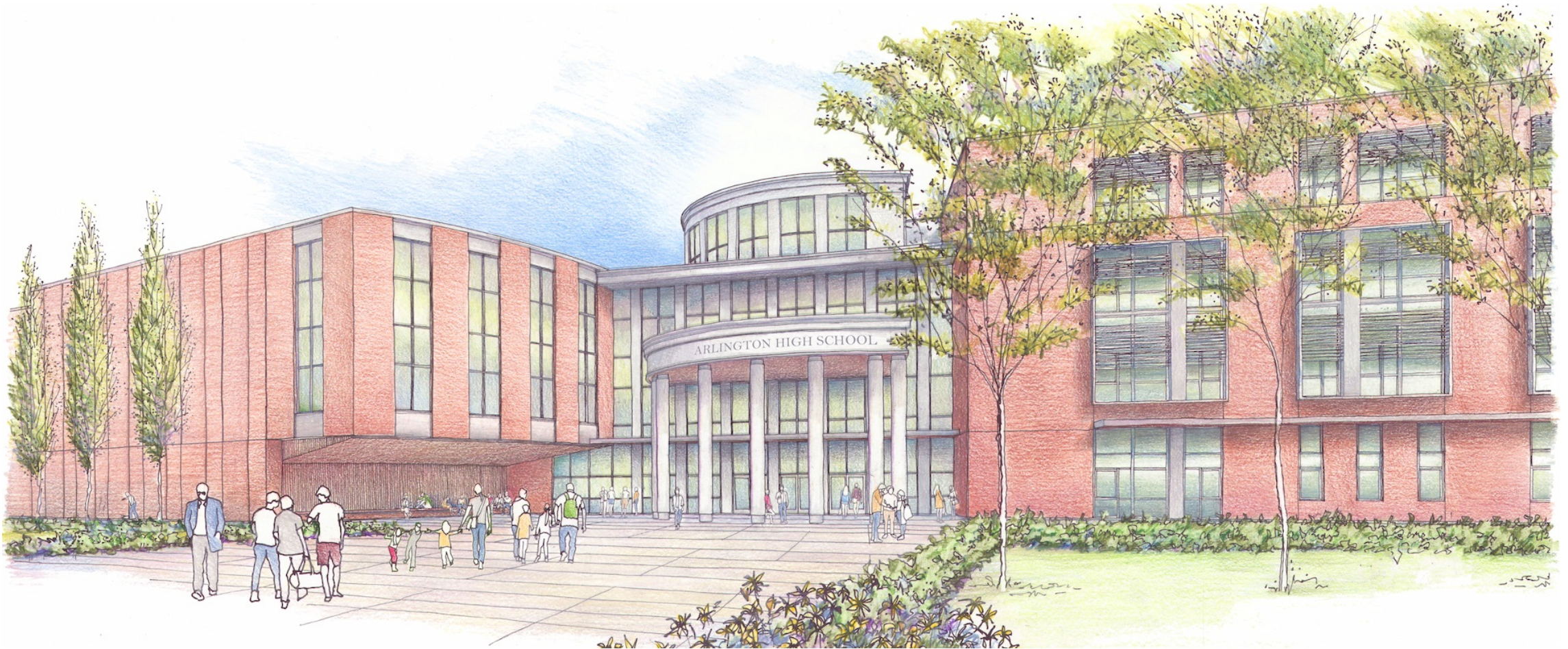
Project Overview

www.ahsbuilding.org





The New High School





Why do we need a new high school?

School on accreditation warning due to poor facility

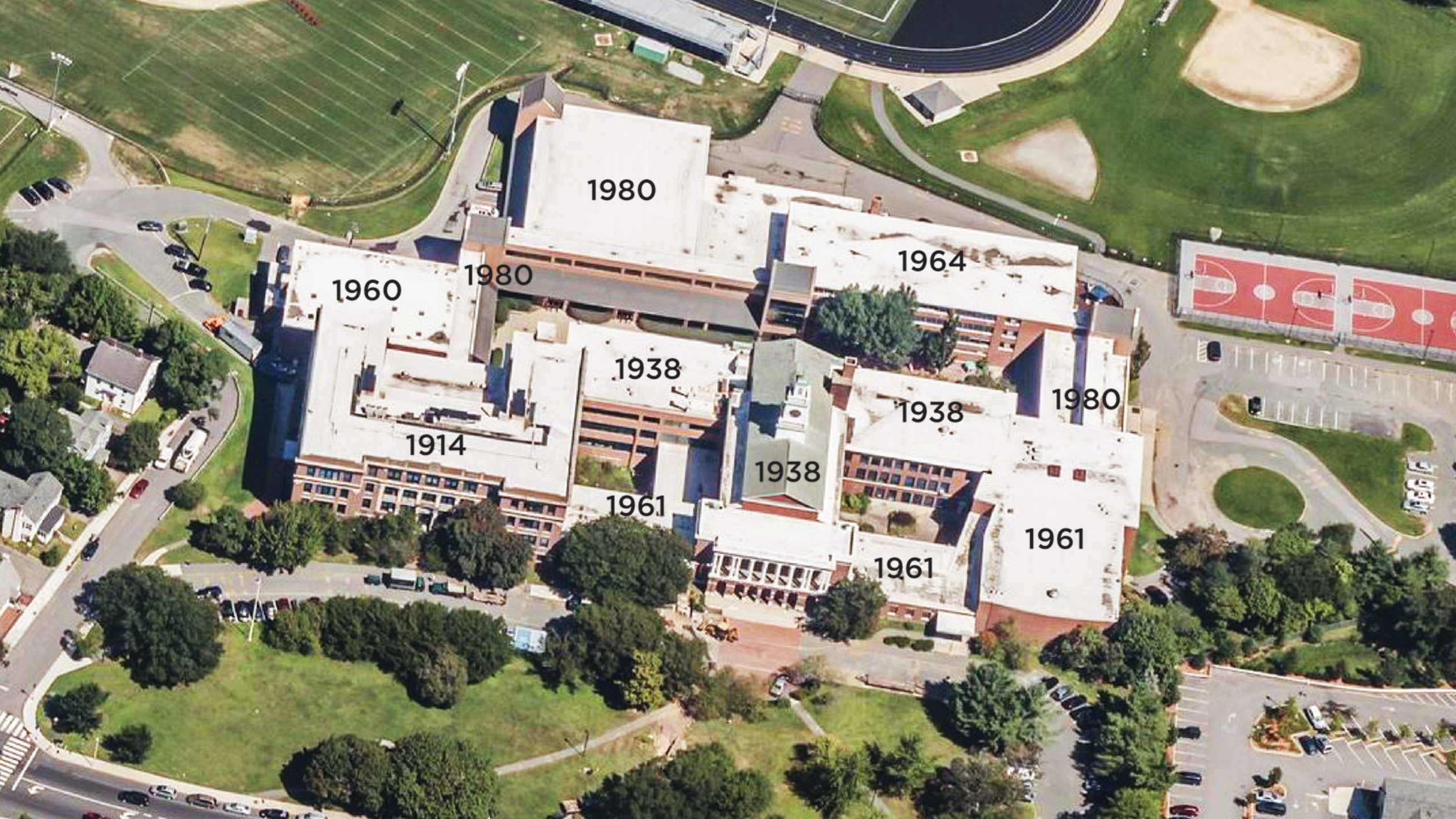


Deteriorating building in need of much repair



Growing enrollment – school now nearly at capacity





1980

1964

1960

1980

1938

1938

1980

1914

1938

1961

1961

1961



The MSBA Process: First Steps

2015

Statement of Interest (SOI)

2016

MSBA Invited Arlington to
Eligibility Period

2016

AHS Building Committee formed

2017

Design enrollment determined



AHS Project Complexities: Multiple Uses

- Menotomy Preschool
- LABBB Special Education Collaborative
- Arlington Community Education offices
- School District Administration & Payroll offices





AHS Project Complexities: Complicated Site

- Compact 22 acre site
- 24 foot grade change from Mass. Ave. to fields
- Mill Brook runs under the site
- Some site contamination





Facility Decisions

- IT, Facilities move to DPW
- Comptroller move to Town Hall
- District Admin/Payroll offices remain at AHS
- Preschool remains at AHS
 - Preschool eligible for MSBA reimbursement





Design Decision: New Facility

- Minimizes disruption to school
- Preserves two-thirds of front lawn
- Faster construction
- First building open to students in 2022
- More cost effective than renovation-addition options





Rising Expectations

- AHS ranked 9th in the state
- 21st century educational needs
- No Child Left Behind
- Technology

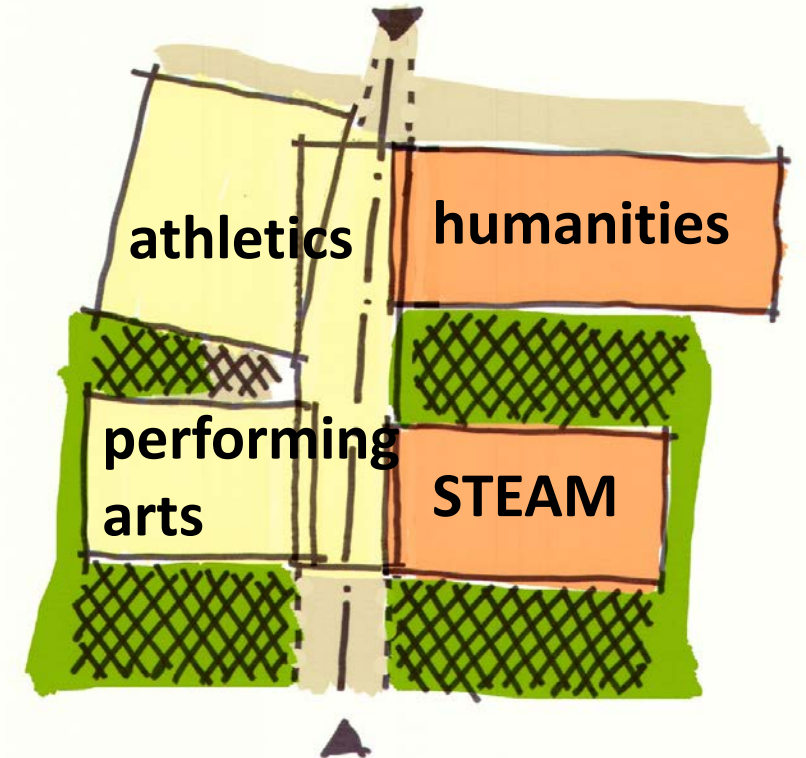


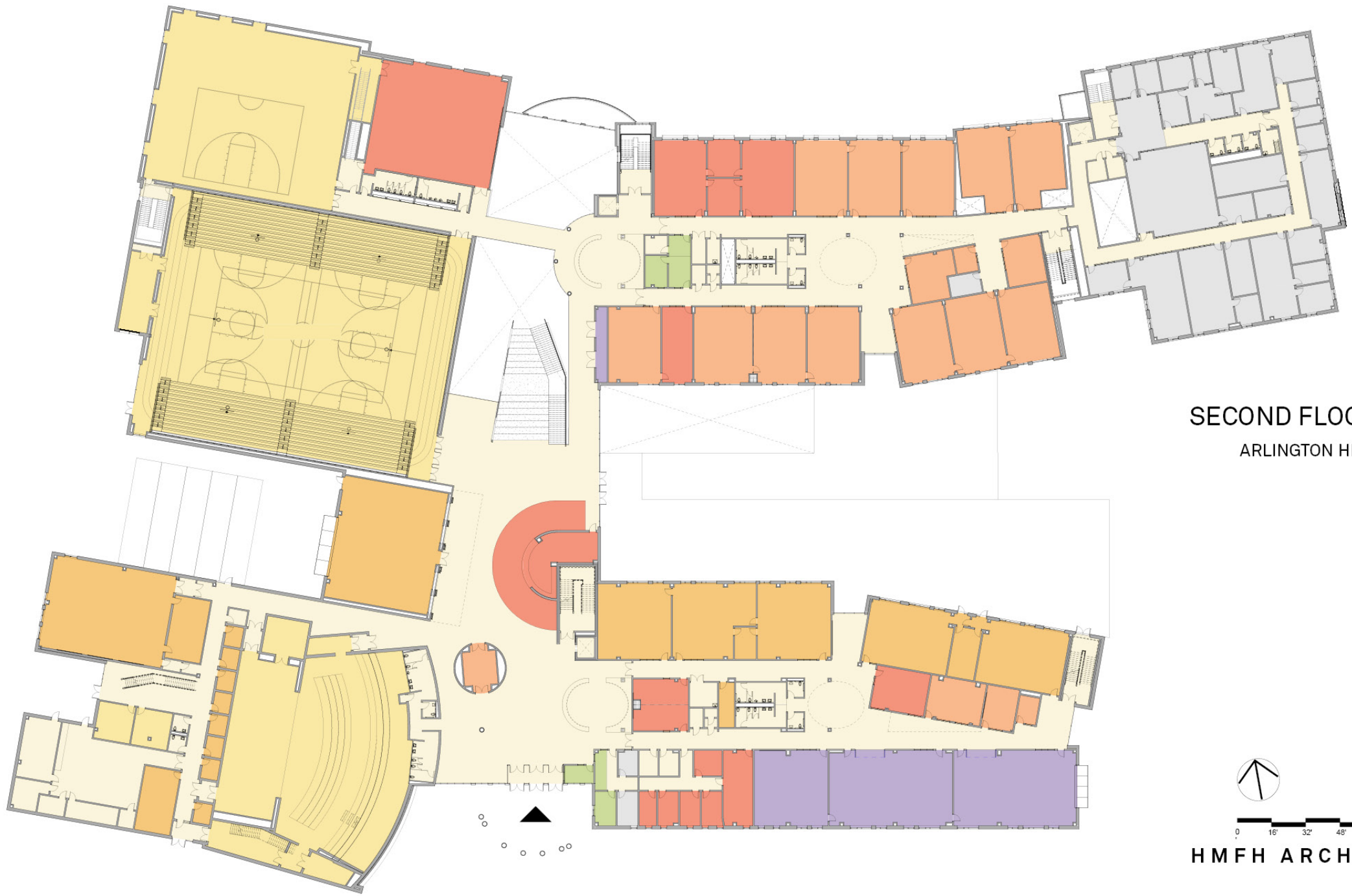


Balance and Flexibility

Balanced approach to educational spaces

- Promotes health and well-being
- Accommodates enrollment growth
- Flexibly addresses educational needs today and tomorrow



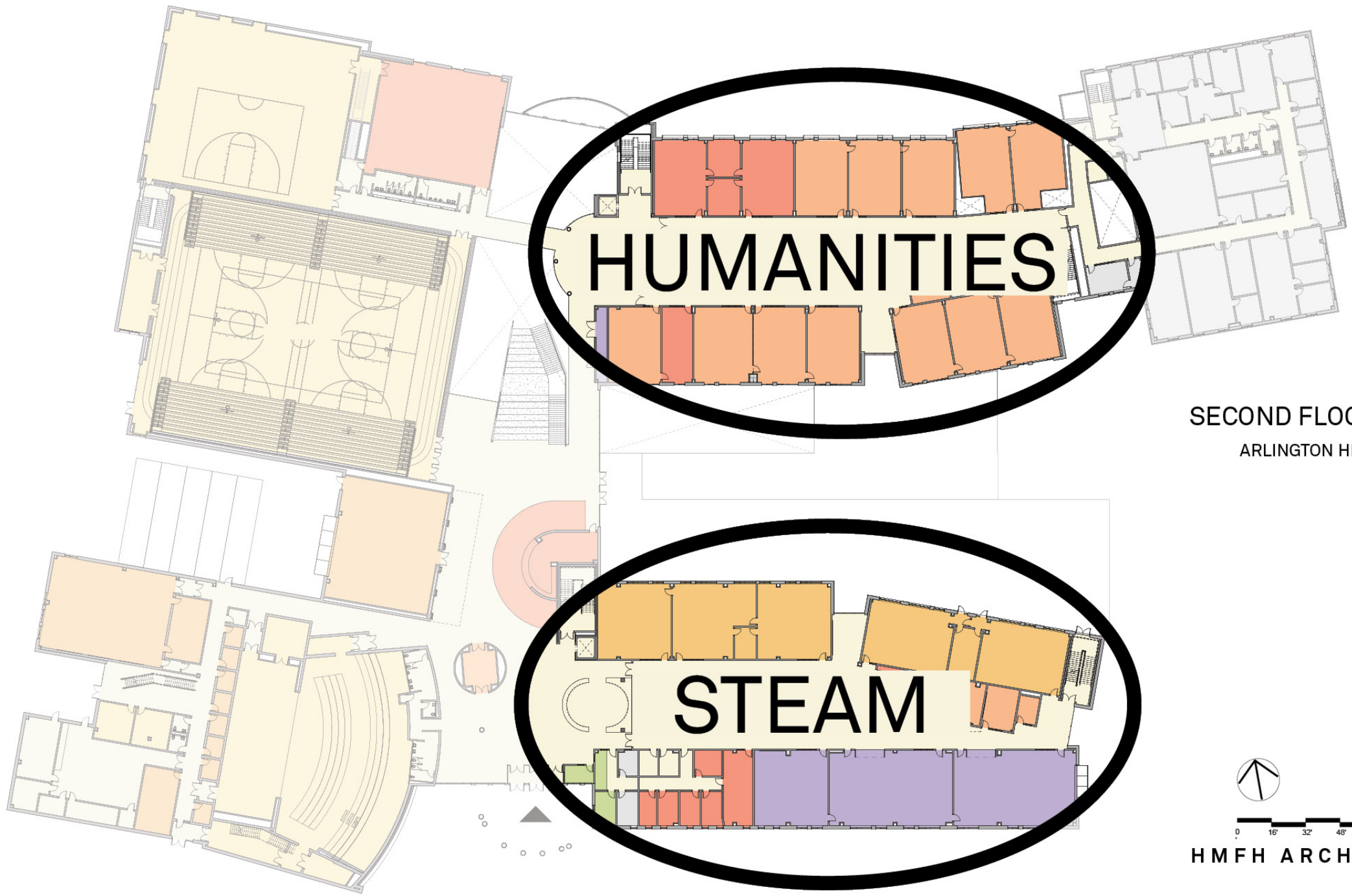


SECOND FLOOR PLAN
ARLINGTON HIGH SCHOOL



0 16' 32' 48' 64' 96'

HMFH ARCHITECTS



HUMANITIES

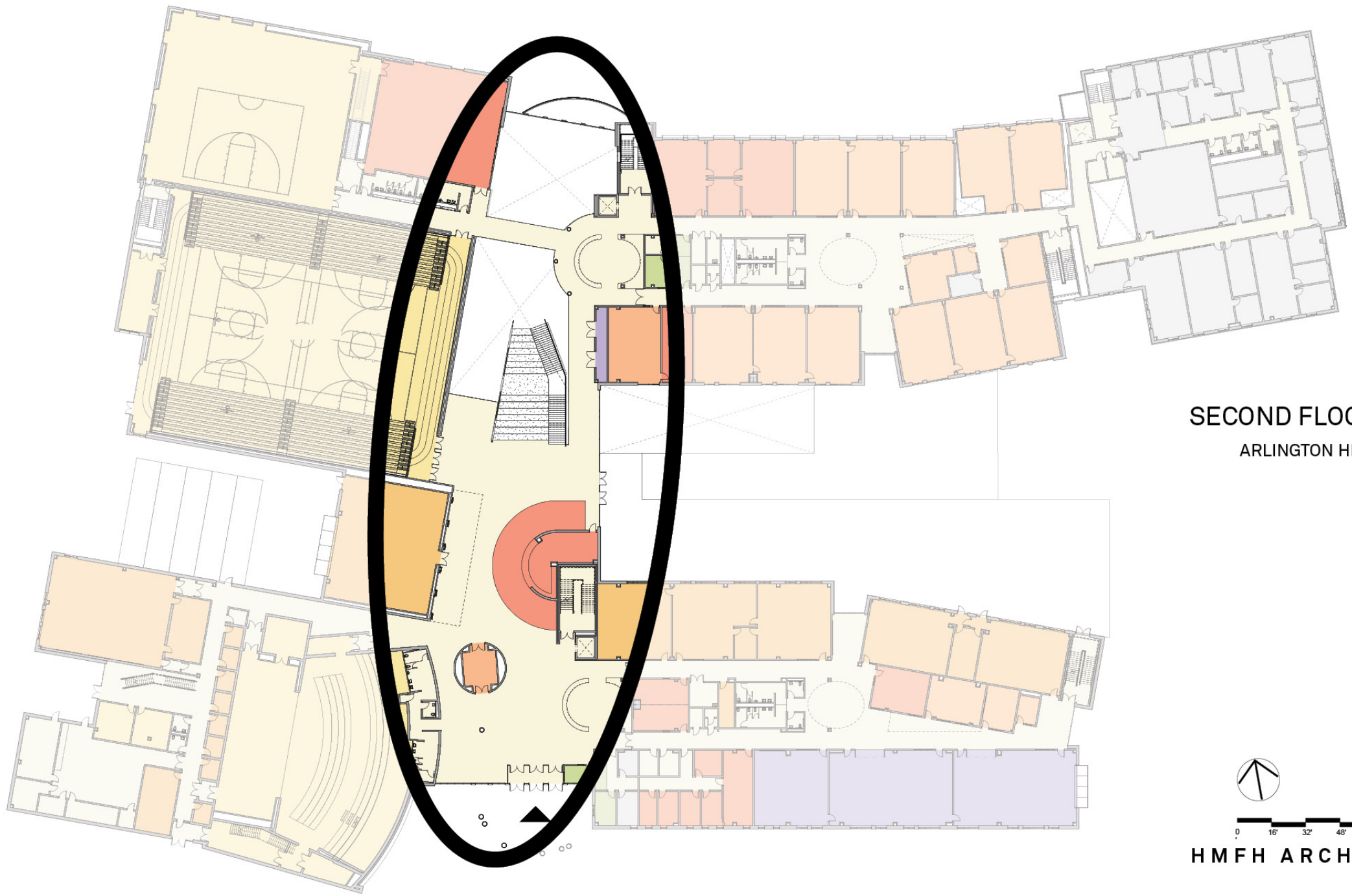
STEAM

SECOND FLOOR PLAN
ARLINGTON HIGH SCHOOL



0 16' 32' 48' 64' 96'

HMFH ARCHITECTS



SECOND FLOOR PLAN
ARLINGTON HIGH SCHOOL



0 16' 32' 48' 64' 96'

HMFH ARCHITECTS



ATHLETICS

The image is a detailed architectural floor plan of the second floor of Arlington High School. The plan shows a complex arrangement of rooms, corridors, and outdoor spaces. Two specific areas are highlighted with circular callouts: the 'ATHLETICS' section in the upper left, which includes a large gymnasium and a basketball court, and the 'PERFORMING ARTS' section in the lower left, which includes a theater and rehearsal spaces. The rest of the floor plan is divided into various classrooms, offices, and common areas, color-coded in shades of orange, yellow, and purple. A north arrow and a scale bar are located in the bottom right corner.

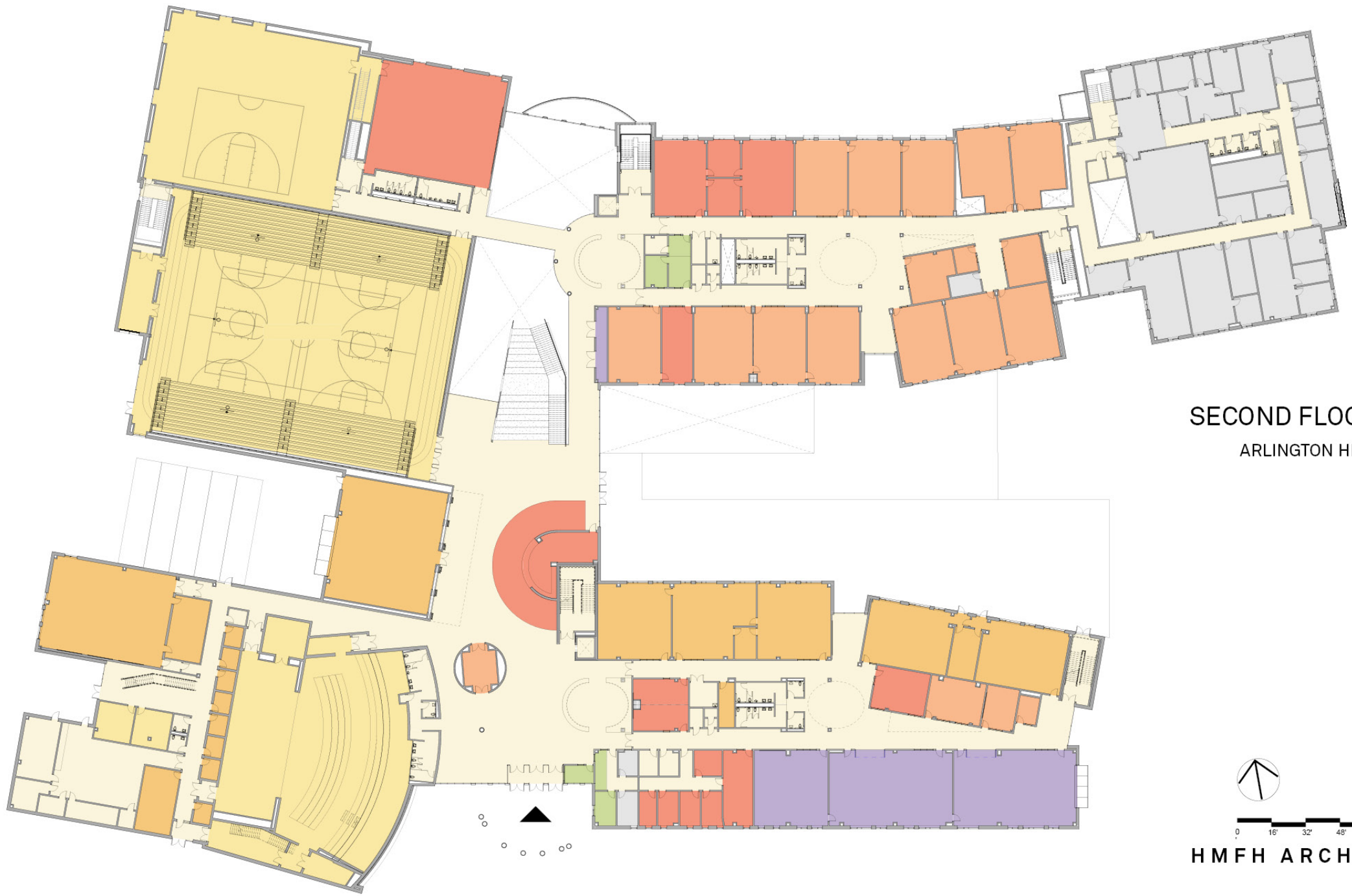
SECOND FLOOR PLAN
ARLINGTON HIGH SCHOOL

PERFORMING
ARTS



0 16' 32' 48' 64' 96'

HMFH ARCHITECTS



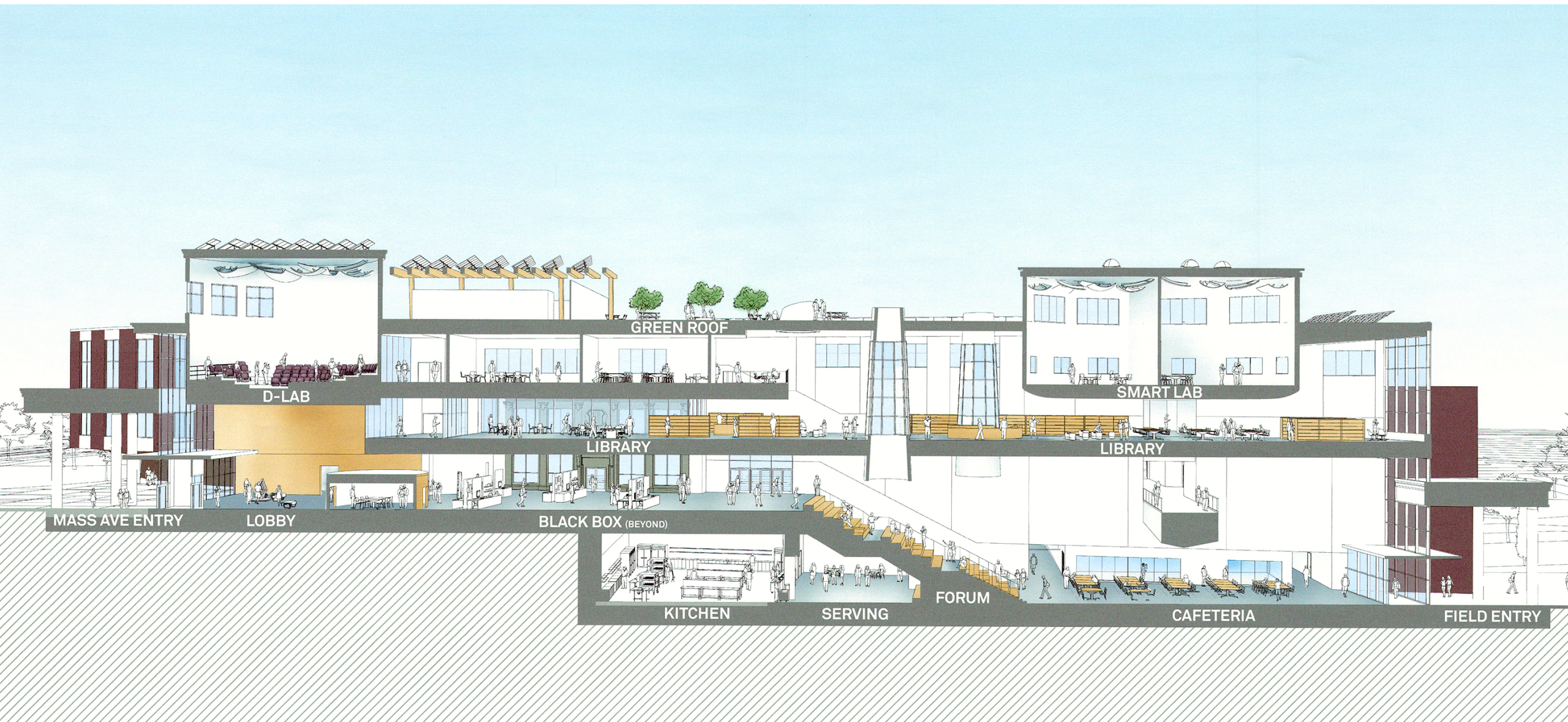
SECOND FLOOR PLAN

ARLINGTON HIGH SCHOOL



0 16' 32' 48' 64' 96'

HMFH ARCHITECTS





Historic element reuse

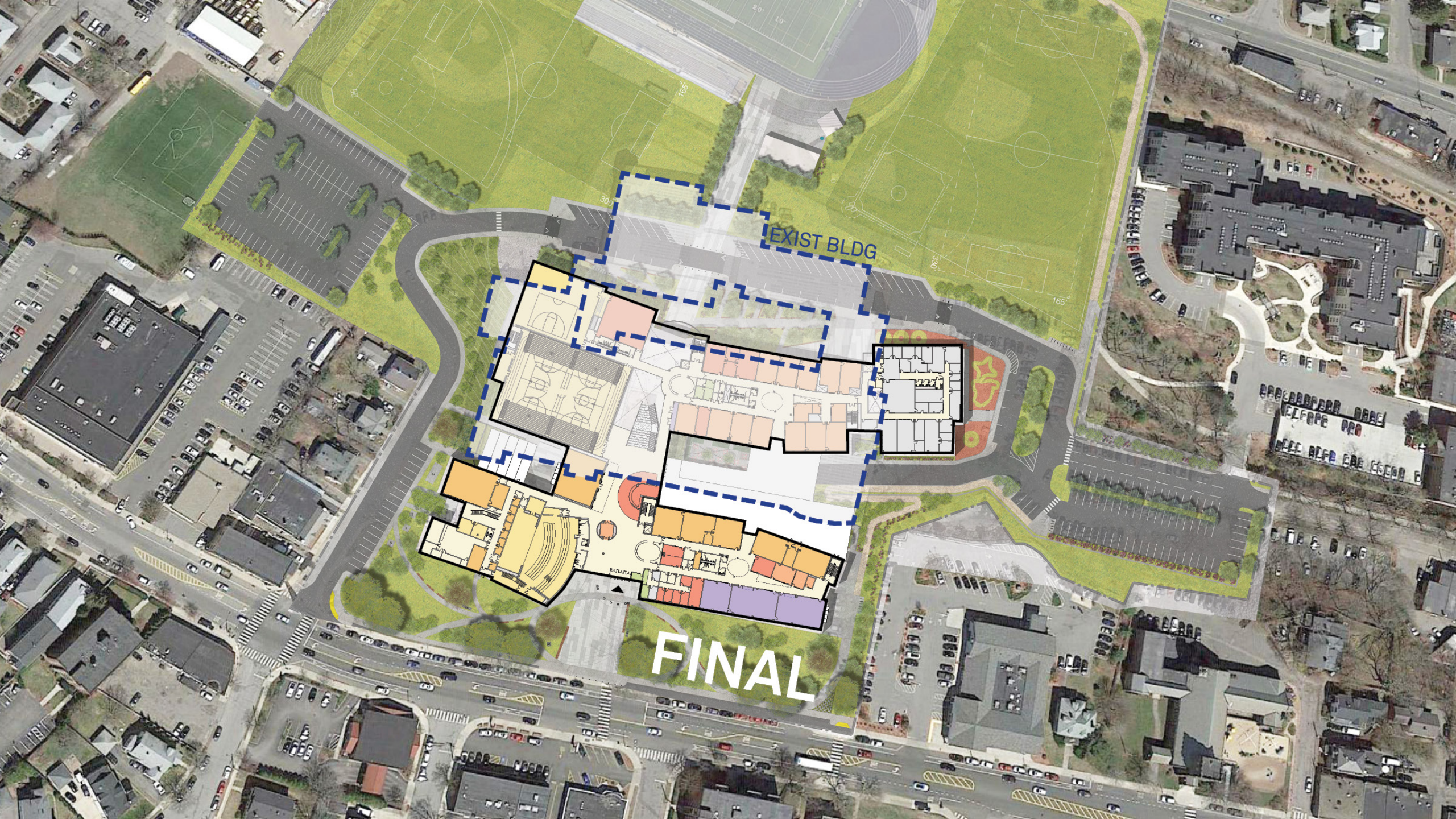
- Fusco façade featured in central spine
- Creative recognition of Collomb House façade at east courtyard
- Preservation and reuse of elements
 - Some original columns
 - Old Hall proscenium, friezes
 - River of Hands mural and Fusco carved wood panel
 - Clock tower mechanism
- Inventory and incorporate memorials







EXISTING



EXIST BLDG

FINAL



PHASE 1



PHASE 2



PHASE 3

This aerial photograph shows a school campus with various sports fields, including a large soccer field, a baseball field, and a track. A central building complex is highlighted with a black outline and filled with yellow, orange, and purple colors. A large black circle is drawn around the central part of this building complex, and the text "PHASE 3" is overlaid in a white box with a black border. The surrounding area includes parking lots, roads, and other school buildings.



PHASE 4



Sustainability and Clean Energy Goals

- Make sustainability integral to building design
- Design a highly energy efficient building
- Design for a carbon-neutral, all-electric building
- Use of ground-source heat pump and photovoltaic technology
- Part of Accelerate Performance Program
- A lifecycle analysis will be performed prior to making decisions





Other Sustainability Features & Goals

- Ample daylight, including light wells that bring daylight to interior spaces
- Better pedestrian and bicycle access and safety and direct access to the Minuteman Bikeway
- Planning for an electric vehicle future
- Specifications for environmentally friendly finishes and other building materials
- 100% recovery of food waste from cafeteria



Budget



- \$290.8M project total
 - Estimated Arlington share: \$204.8M
 - Estimated MSBA share: \$86M
- Mass. School Building Authority (MSBA) partnership
 - Strict process ensures that districts are building educationally appropriate and fiscally responsible facilities.
- MSBA's share cannot be increased
- Arlington's share cannot increase without local approval
 - 12% contingency (~\$30M) built into budget
- Value Engineering will continue up until the end of the project



Cost Reductions Already Made

Action	Savings	Effect
Selection of Design Option 3A – New Building (vs. renovating original buildings)	\$25M	Reduced overall project cost
Relocation of Comptroller, Facilities and Information Technology offices	\$8.4M	Reduced overall project cost
Value Engineering	\$7.1M	Reduced overall project cost
Accelerate Performance partnership	\$200,000+ in energy rebates	Reduces lifecycle costs of building



Cost Reductions Already Made

Action	Increase in MSBA Reimbursement
Proactive Building Maintenance Budget	1.61%
LEED (Leadership in Energy & Environmental Design) Certification	2%
Construction Manager at Risk delivery method	1%

High School Benchmark Analysis

	Arlington	Waltham** (Vocational Included)	Belmont (Upper Middle Included)	Saugus (Upper Middle Included)	Somerville (Vocational Included)
Total Project Cost	\$291M	\$381M	\$295M	\$160M	\$256M
Total Project Cost Escalated to AHS Schedule	\$291M	\$381M	\$311M	\$180M	\$287M
Construction Cost Per Sq. Ft.	\$576	Unknown	\$560	\$533	\$606
Design Enrollment	1,755	1,830	2,215	1,360	1,590
Project Cost Per Pupil *	\$165,728	\$208,357	\$140,409	\$132,499	\$181,098

Analysis escalated to AHS schedule. Refer to www.ahsbuilding.org for the complete analysis. *Cost per pupil calculation includes sq. ft. for non-HS program space, Arlington has more non-HS space than comparable projects. **Waltham data is from the Preferred Schematic Report, Schematic Design figures are not yet available.



Estimated Taxpayer Impact

Dwelling	Average Assessed Value (Jan. '19)	Annual Tax Impact (full load)
Condominium	\$464,795	\$496
Single Family Home	\$752,184	\$802
2 Family Home	\$860,758	\$918
3 Family Home	\$915,450	\$976

Note: Belmont households will pay an average of \$1,800/year for their HS



Maintenance

- Facilities Department created in 2015
- Proactive asset management database details all building systems and prescribes all required maintenance
- Hired HVAC and trades personnel
- Ensures investment in the High School will be well cared for
- Receiving 1.61% additional MSBA reimbursement for submitting a proactive and detailed maintenance plan



What if...?



The Consequences of a 'No' Vote

- More burden on taxpayers
- Longer construction and completion date

	'No' Vote Renovation/Addition	New High School
Estimated cost to Arlington taxpayers	\$259M	\$205M
Estimated contribution from MSBA	\$0	\$86M
Annual tax impact on single family home	\$1,014	\$802



The Result

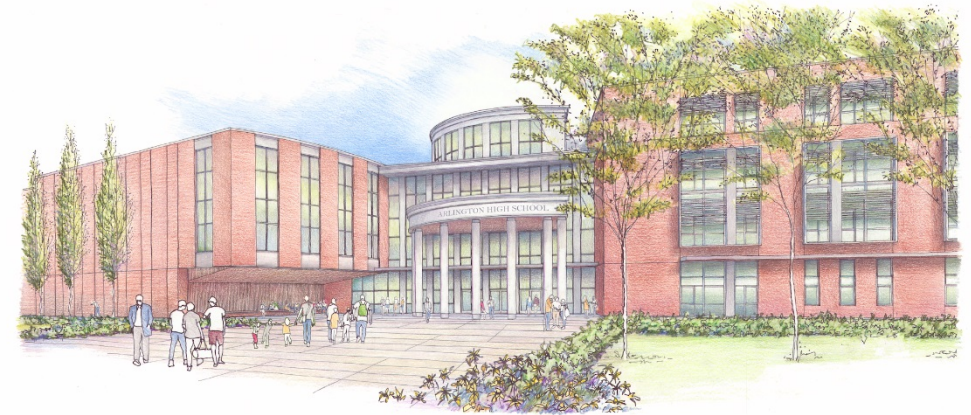
- Vastly inferior school
- Many major windowless educational spaces
- Auditorium seating reduced from 916 to 566 seats to comply with ADA
- Numerous additional classrooms obstructed by columns
- Several undersized spaces (visual/performing arts, cafeteria, library)
- Layout and wayfinding worsened due to scattered departments





Thank you

- We have a chance to shape the future
- Meets 21st century Educational Vision
- Addresses enrollment growth
- Best project for Arlington



We respectfully ask for your support.