

PARKER ROAD



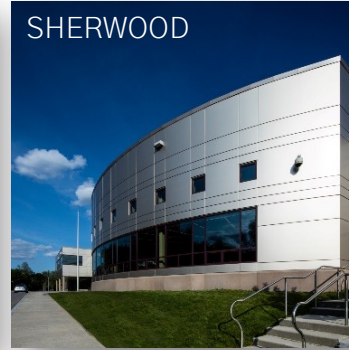
COOLIDGE



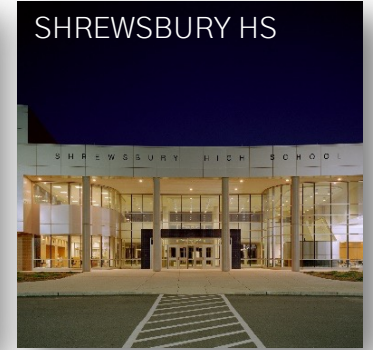
SPRING ST



SHERWOOD



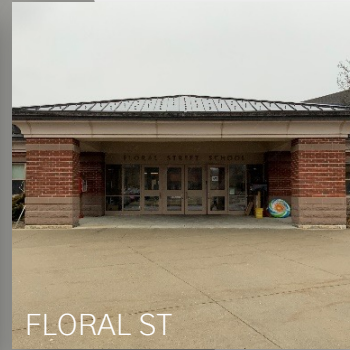
SHREWSBURY HS



BEAL



FLORAL ST



PATON



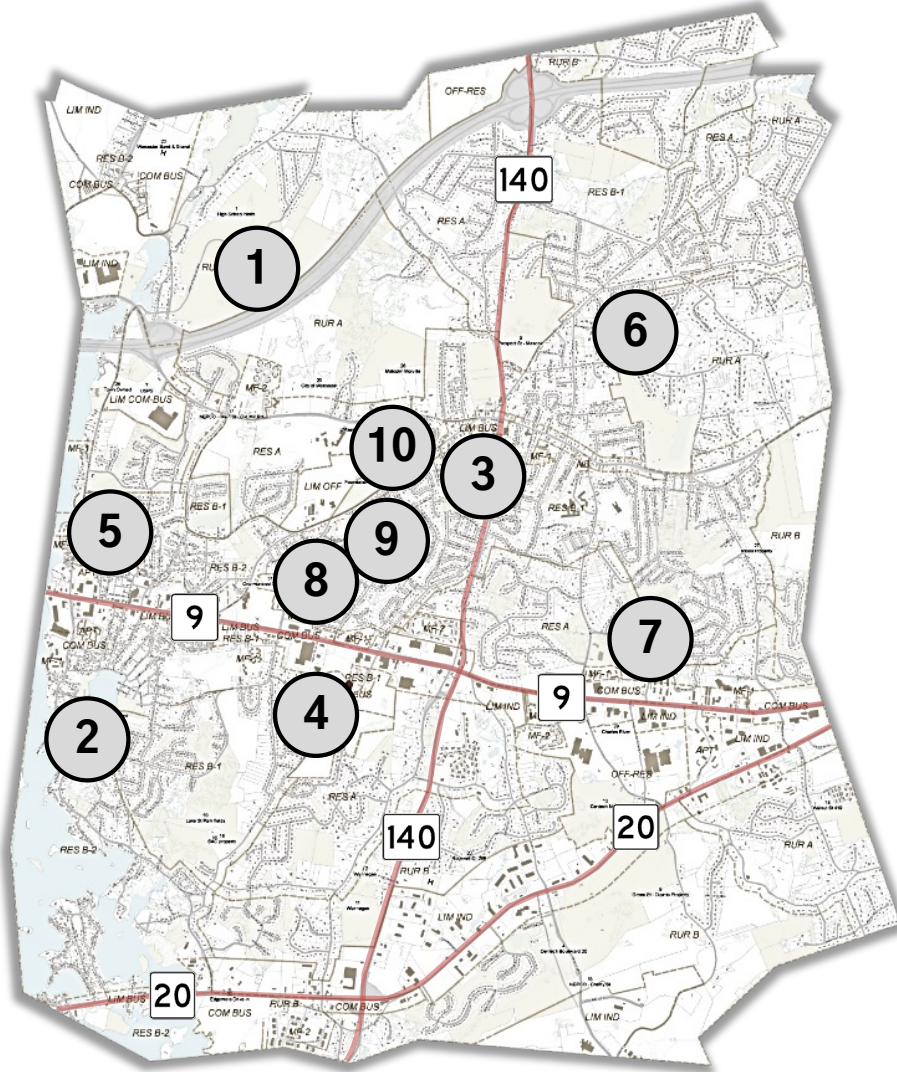
OAK



SPS ADMINISTRATION



# PRE-K THROUGH 12 CAPITAL INVESTMENT AND ASSESSMENT STUDY



- 1 – SHREWSBURY HIGH SCHOOL
- 2 – CALVIN COOLIDGE SCHOOL
- 3 – WALTER J. PATON SCHOOL
- 4 – MAJOR HOWARD BEAL SCHOOL
- 5 – PARKER ROAD PRESCHOOL
- 6 – SPRING STREET SCHOOL
- 7 – FLORAL STREET SCHOOL
- 8 – SHERWOOD MIDDLE SCHOOL
- 9 – OAK MIDDLE SCHOOL
- 10 – SPS ADMINISTRATION

# PROJECTED ENROLLMENT / SPACE NEEDS

- Calculation methodology based on:
  - Enrollment Forecasts
    - 2021/2031 McKibben Report
  - MSBA Space Summary Template
    - Pro-rated based on:
      - SPS classroom enrollment policy
      - SPS educational plan & pedagogy
- Exclusion of portable/modular classrooms for all applicable options

# ENROLLMENT & AREA FORECASTS

## ENROLLMENT

	2022- 2023	2031- 2032	10-YR DELTA
<b>PRE-K</b>			
PARKER ROAD	203	<b>242</b>	<b>39</b>
<b>ELEMENTARY (K-4)</b>	<b>1,975</b>	<b>1,971</b>	<b>(4)</b>
MAJOR HOWARD BEAL	609	<b>548</b>	<b>(61)</b>
CALVIN COOLIDGE	247	<b>292</b>	<b>45</b>
FLORAL STREET	520	<b>510</b>	<b>(10)</b>
SPRING STREET	308	<b>303</b>	<b>(5)</b>
WALTER J PATON	291	<b>318</b>	<b>27</b>
<b>MIDDLE SCHOOL (5-8)</b>	<b>1,892</b>	<b>1,675</b>	<b>(217)</b>
SHERWOOD (5-6)	948	<b>820</b>	<b>(128)</b>
OAK (7-8)	944	<b>855</b>	<b>(89)</b>
<b>HIGH SCHOOL (9-12)</b>			
SHREWSBURY HIGH	1,821	<b>1,749</b>	<b>(72)</b>

## DESIGN CAPACITY

- The student body population that a given school can support as it currently exists
- Calculated based on:
  - Current programmatic usage
  - SPS School Committee policy guidelines for class size
  - MSBA guidelines for classroom square footage sizes
- Portable/modular classroom square footage also excluded from this calculation

# ENROLLMENT / DESIGN CAPACITY

	ENROLLMENT			DESIGN CAPACITY			
	2022-2023	2031-2032	10-YR DELTA	MIN.	MEAN	MAX.	10-YR DELTA*
<b>PRE-K</b>							
PARKER ROAD	203	<b>242</b>	<b>39</b>	--	--	--	--
<b>ELEMENTARY (K-4)</b>	1,975	<b>1,971</b>	<b>(4)</b>	1,806	<b>1,896</b>	1,988	<b>(75)</b>
MAJOR HOWARD BEAL	609	<b>548</b>	<b>(61)</b>	808	<b>848</b>	888	<b>300</b>
CALVIN COOLIDGE	247	<b>292</b>	<b>45</b>	190	<b>200</b>	210	<b>(92)</b>
FLORAL STREET	520	<b>510</b>	<b>(10)</b>	467	<b>490</b>	514	<b>(20)</b>
SPRING STREET	308	<b>303</b>	<b>(5)</b>	145	<b>152</b>	160	<b>(151)</b>
WALTER J PATON	291	<b>318</b>	<b>27</b>	196	<b>206</b>	216	<b>(112)</b>
<b>MIDDLE SCHOOL (5-8)</b>	1,892	<b>1,675</b>	<b>(217)</b>	1,578	<b>1,651</b>	1,722	<b>(24)</b>
SHERWOOD (5-6)	948	<b>820</b>	<b>(128)</b>	800	<b>837</b>	873	<b>17</b>
OAK (7-8)	944	<b>855</b>	<b>(89)</b>	778	<b>814</b>	849	<b>(41)</b>
<b>HIGH SCHOOL (9-12)</b>							
SHREWSBURY HIGH	1,821	<b>1,749</b>	<b>(72)</b>	1,185	<b>1,250</b>	1,316	<b>(499)</b>

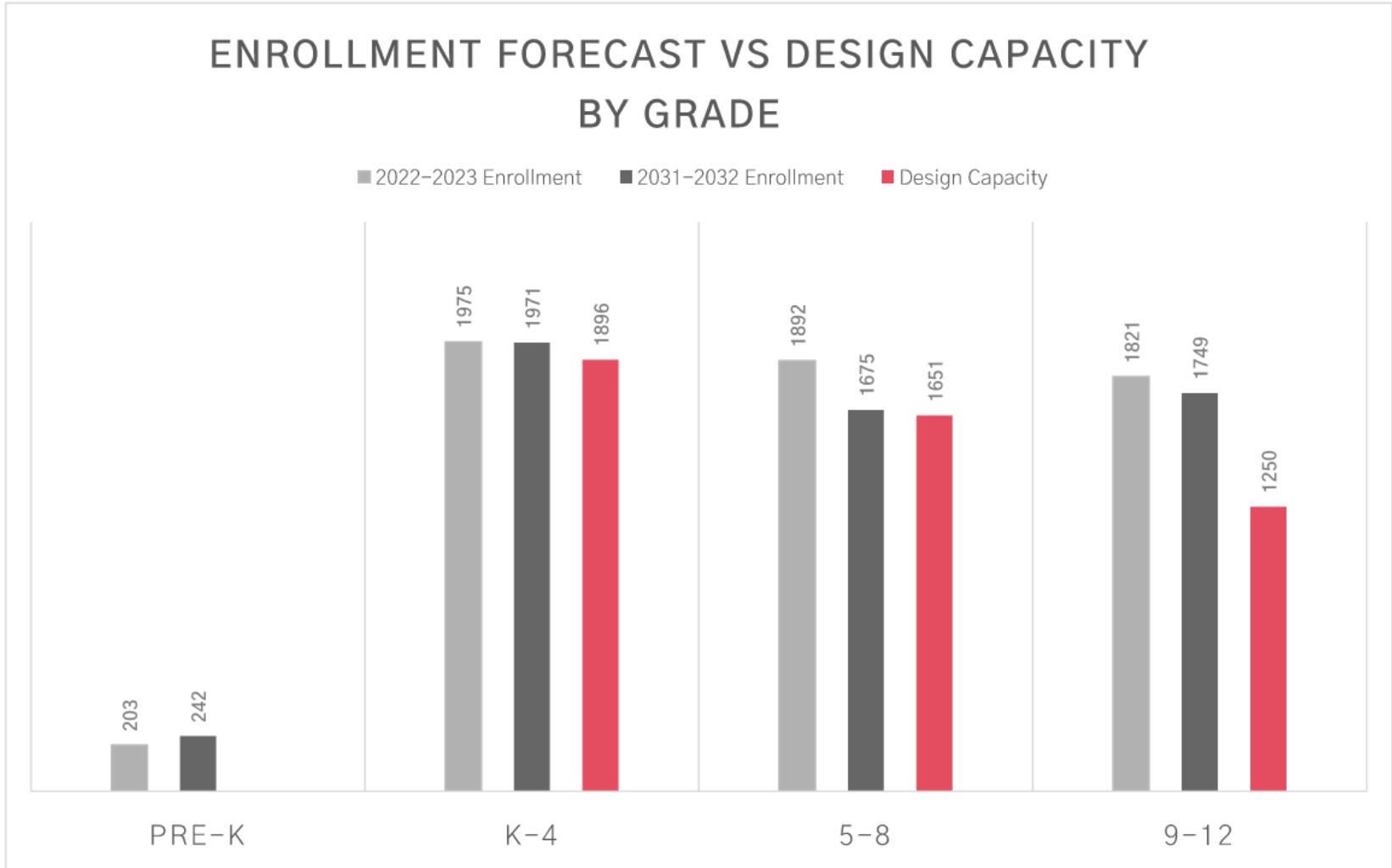
\*10-YR DESIGN CAPACITY DELTA = (MEAN DESIGN CAPACITY) - (2031-2032 ENROLLMENT)

# ENROLLMENT / DESIGN CAPACITY

	ENROLLMENT	DESIGN CAPACITY	
	2031-2032	MEAN	10-YR DELTA*
<b>PRE-K</b>			
PARKER ROAD	242	--	--
<b>ELEMENTARY (K-4)</b>	1,971	1,896	(75)
MAJOR HOWARD BEAL	548	848	300
CALVIN COOLIDGE	292	200	(92)
FLORAL STREET	510	490	(20)
SPRING STREET	303	152	(151)
WALTER J PATON	318	206	(112)
<b>MIDDLE SCHOOL (5-8)</b>	1,675	1,651	(24)
SHERWOOD (5-6)	820	837	17
OAK (7-8)	855	814	(41)
<b>HIGH SCHOOL (9-12)</b>			
SHREWSBURY HIGH	1,749	1,250	(499)

\*10-YR DESIGN CAPACITY DELTA = (MEAN DESIGN CAPACITY) - (2031-2032 ENROLLMENT)

# ENROLLMENT & AREA FORECASTS

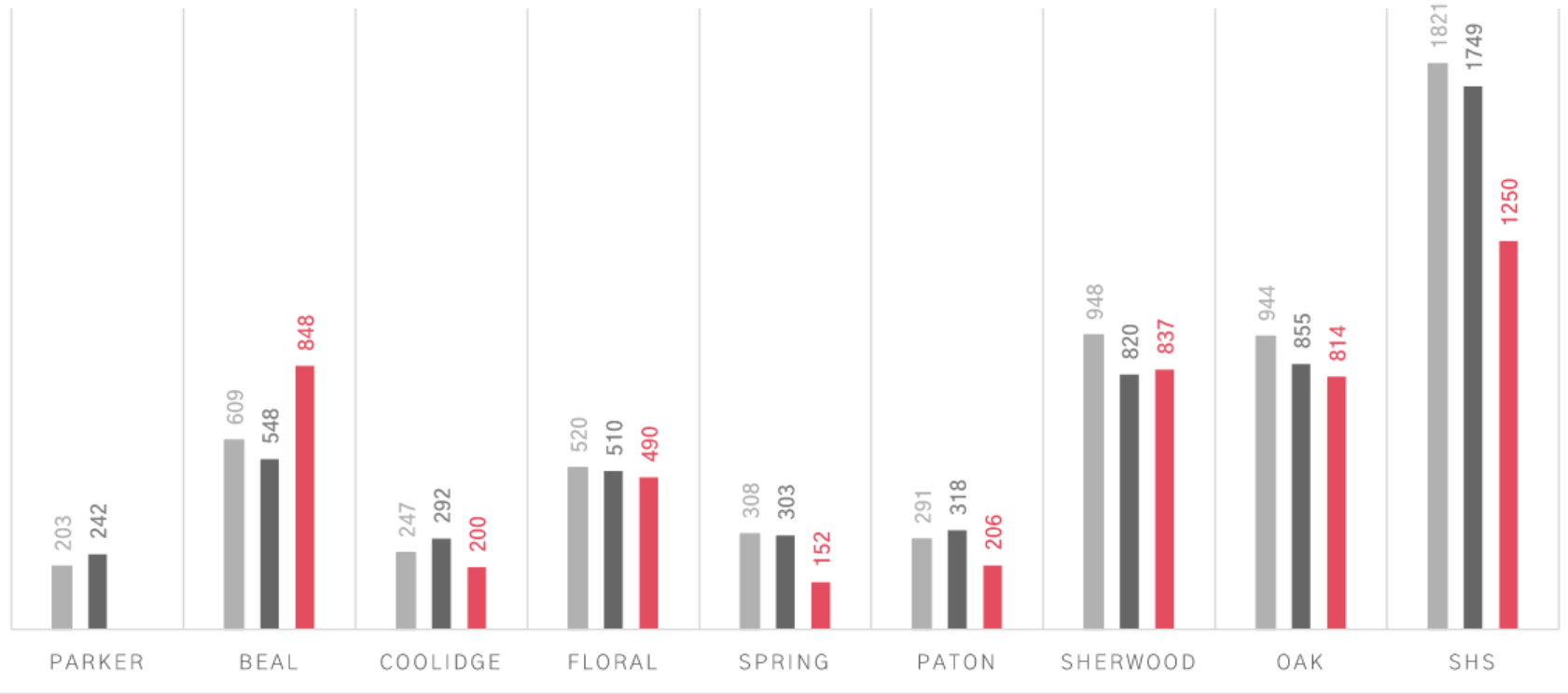




# ENROLLMENT & AREA FORECASTS

## ENROLLMENT FORECAST VS DESIGN CAPACITY BY SCHOOL

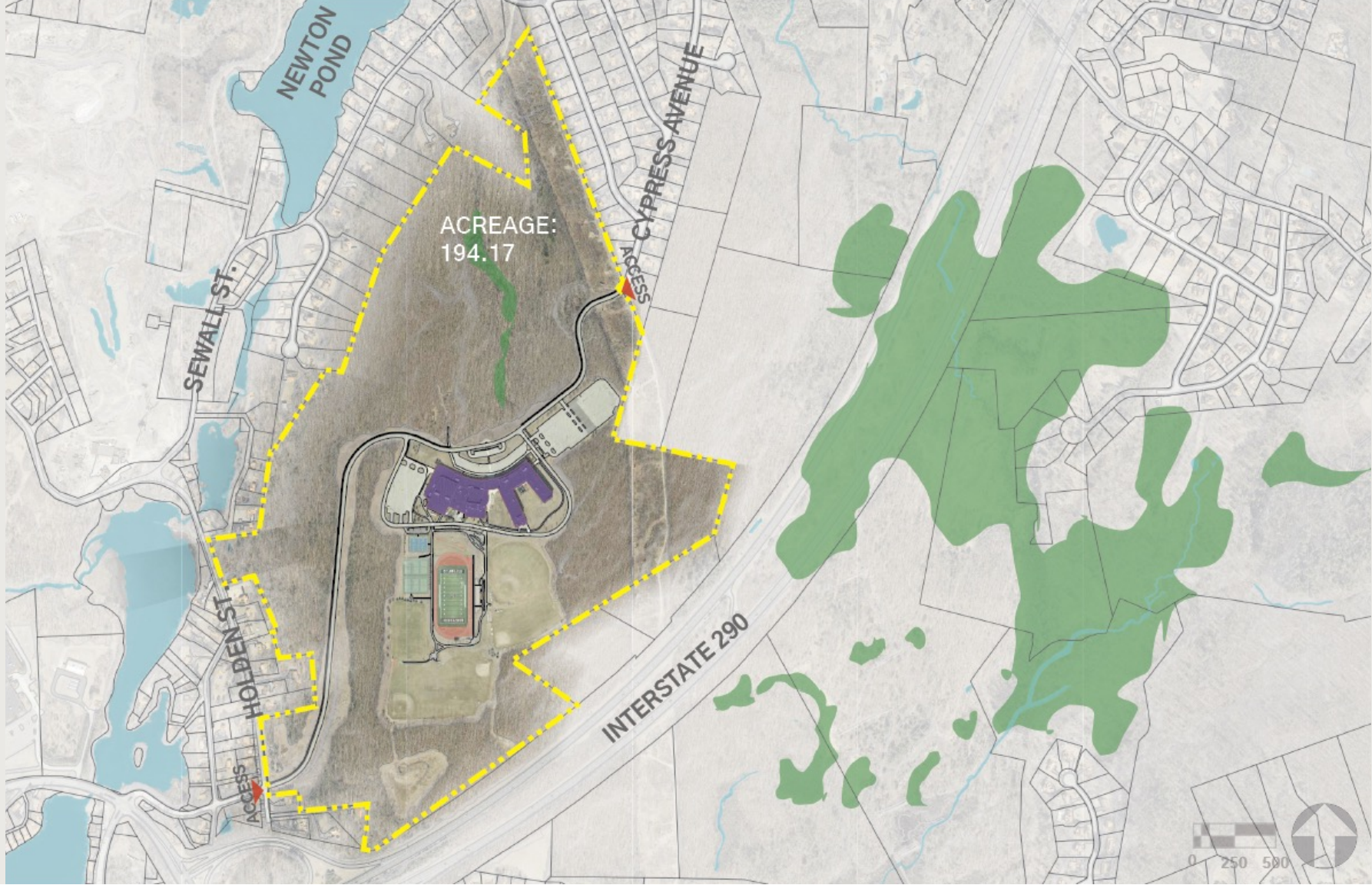
■ 2022-2023 Enrollment ■ 2031-2032 Enrollment ■ Design Capacity



# BUILDING ASSESSMENTS



# SHREWSBURY HS (9-12)



# SHREWSBURY HS (9-12)

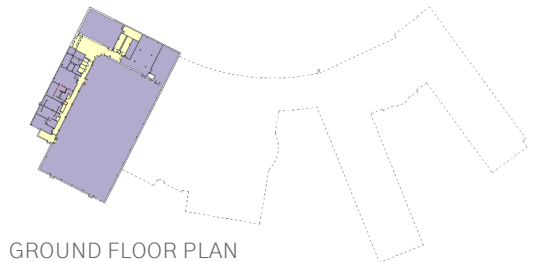
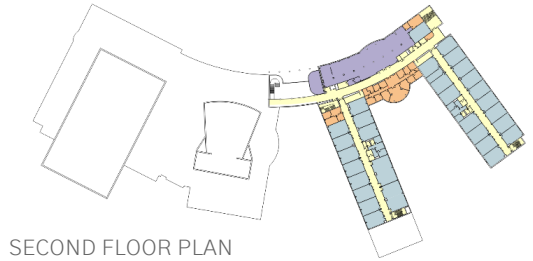
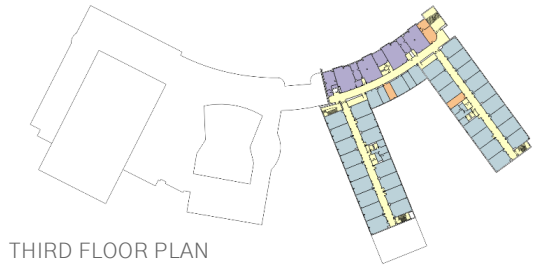
SCHOOL YEAR	TOTAL ENROLLMENT (9-12)	CHANGE
2022-23	<b>1,821</b>	—
2031-32	<b>1,749</b>	<b>(72)</b>
*Design Capacity	<b>1,250</b>	<b>(499)</b>

Enrollment numbers taken from “Population and Enrollment Forecasts, 2022-23 Through 2031-32”  
by McKibben Demographic Research, March 2022; see Appendix for full report.

\*Design Capacity refers to the mean student body population that a given school can support as it currently exists.  
Mean value is calculated based on the SPS School Committee policy guidelines for class size,  
as well as MSBA guidelines for classroom square footage size.

Note that portable classroom square footage is excluded from this calculation.  
See Educational Review Introduction for the calculation methodology.

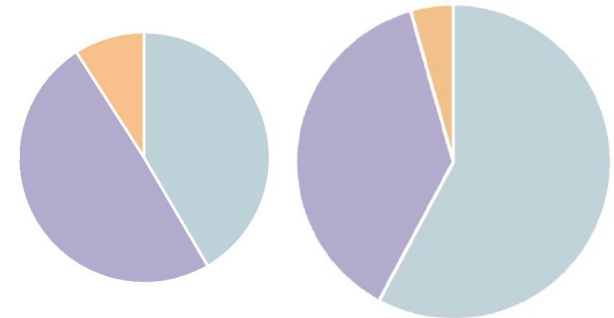
# SHREWSBURY HS (9-12)



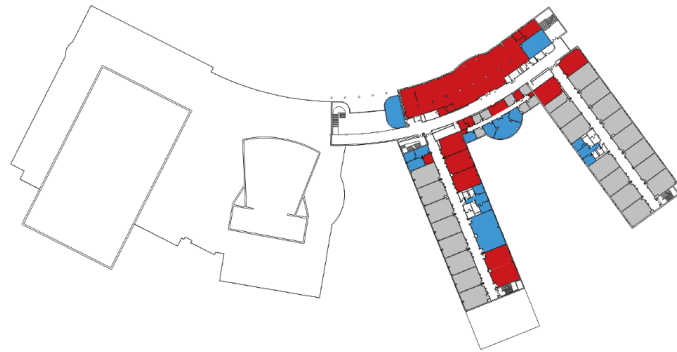
SPACE TYPE	EXISTING SQFT (NET)	MSBA GUIDELINE SQFT (NET)	DEFICIENCY (GROSS   GF=1.5)
CORE ACADEMIC SPACES <small>* Excludes portable classroom square footage.</small>	73,969	101,535	(41,349)
SPECIAL EDUCATION	9,669	26,160	(24,737)
OTHER (PRE-K SUITE)	1,743	0	2,615
<b>ACADEMIC TOTAL</b>	<b>85,381</b>	<b>127,695</b>	<b>(63,471)</b>
ART & MUSIC	10,395	8,350	3,068
VOCATIONS & TECHNOLOGY	7,722	21,600	(20,817)
HEALTH & PHYSICAL EDUCATION	47,454	26,194	31,890
MEDIA CENTER	9,201	10,831	(2,445)
AUDITORIUM & DRAMA	11,111	10,400	1,067
DINING & FOOD SERVICE	15,628	13,668	2,940
<b>CORE TOTAL</b>	<b>101,511</b>	<b>91,043</b>	<b>15,702</b>
MEDICAL	1,270	1,510	(360)
ADMINISTRATION & GUIDANCE	11,965	6,150	8,723
CUSTODIAL & MAINTENANCE	5,021	2,937	3,126
<b>ADMINISTRATIVE TOTAL</b>	<b>18,256</b>	<b>10,597</b>	<b>11,489</b>
<b>TOTAL FLOOR AREA</b>	<b>205,148</b>	<b>229,335</b>	<b>(36,281)</b>

LEGEND

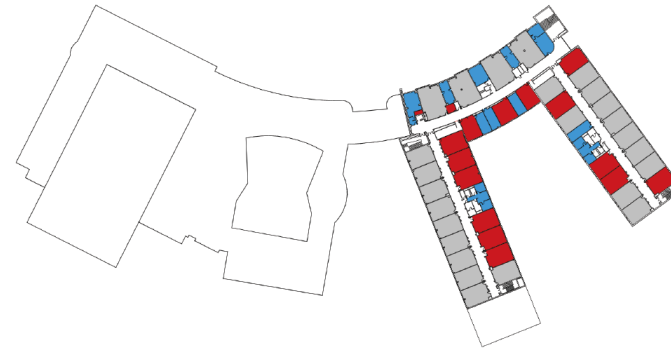
- ACADEMIC SPACES
- CORE SPACES
- ADMINISTRATIVE SPACES



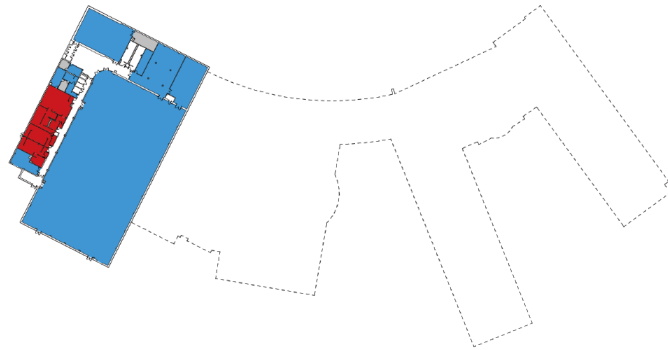
# SHREWSBURY HS (9-12)



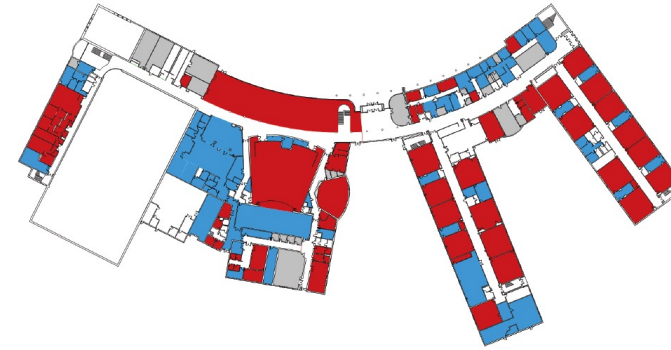
SECOND FLOOR PLAN



THIRD FLOOR PLAN



GROUND FLOOR PLAN

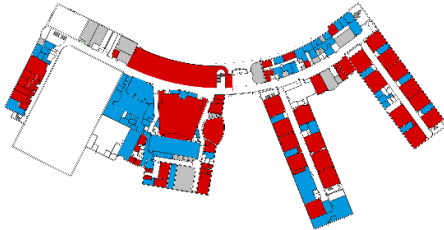


FIRST FLOOR PLAN

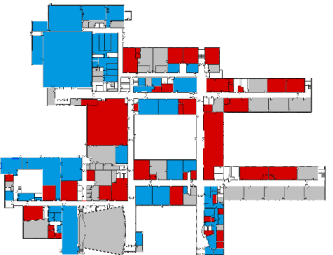
## LEGEND

- 10% OVER MSBA GUIDELINES
- MEETS MSBA GUIDELINES
- 10% UNDER MSBA GUIDELINES
- MODULAR/PORTABLE

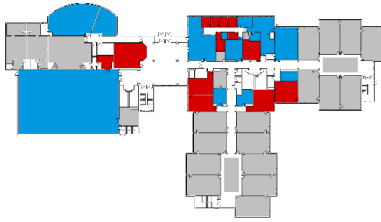
SCHOOL PLANS



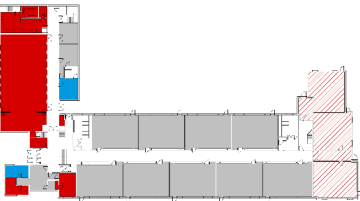
SHREWSBURY HIGH SCHOOL



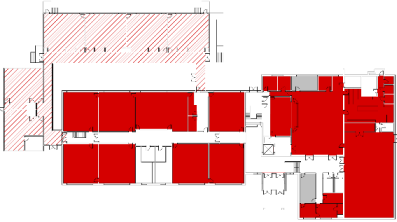
OAK MIDDLE SCHOOL



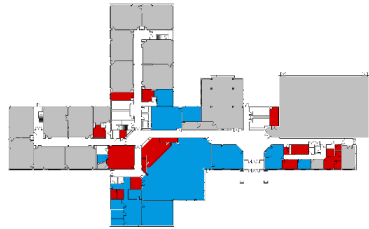
SHERWOOD MIDDLE SCHOOL



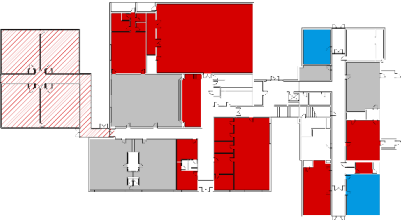
SPRING STREET SCHOOL



WALTER J. PATON SCHOOL



FLORAL STREET SCHOOL



CALVIN COOLIDGE SCHOOL



MAJ. HOWARD W. BEAL SCHOOL



PARKER ROAD PRESCHOOL





## PRIORITIES

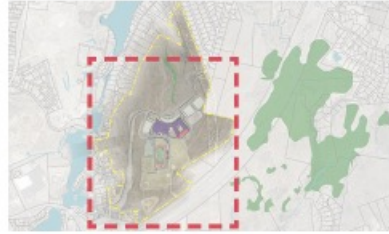
- Address Overcrowding at the High School
- Replace Coolidge Elementary School & Expand District Wide Pre-K
- Parity Among the K-4 Schools
- Address Aging Building Stock & Provide 21<sup>st</sup> Century Learning Spaces
- Net Zero Upgrades
- Provide Air Conditioning for Equity Across the District
- Unify School Department Administration

# BUDGET DEVELOPMENT METHODOLOGY

- 2024 Unit pricing
- New Construction vs Addition/Renovation
  - Tier I vs Tier II renovations
    - Tier I: major interior renovation, envelope improvements
    - Tier II: minor interior remodel (no space reconfiguration)
- Systems Upgrades
  - Add air conditioning – all buildings
- Net Zero Upgrades
  - Improvements to building systems included in base numbers
  - PV array costs listed separately from total budget numbers
- All budgets included in the presentation are Construction Cost Only

# HIGH SCHOOL (1749)

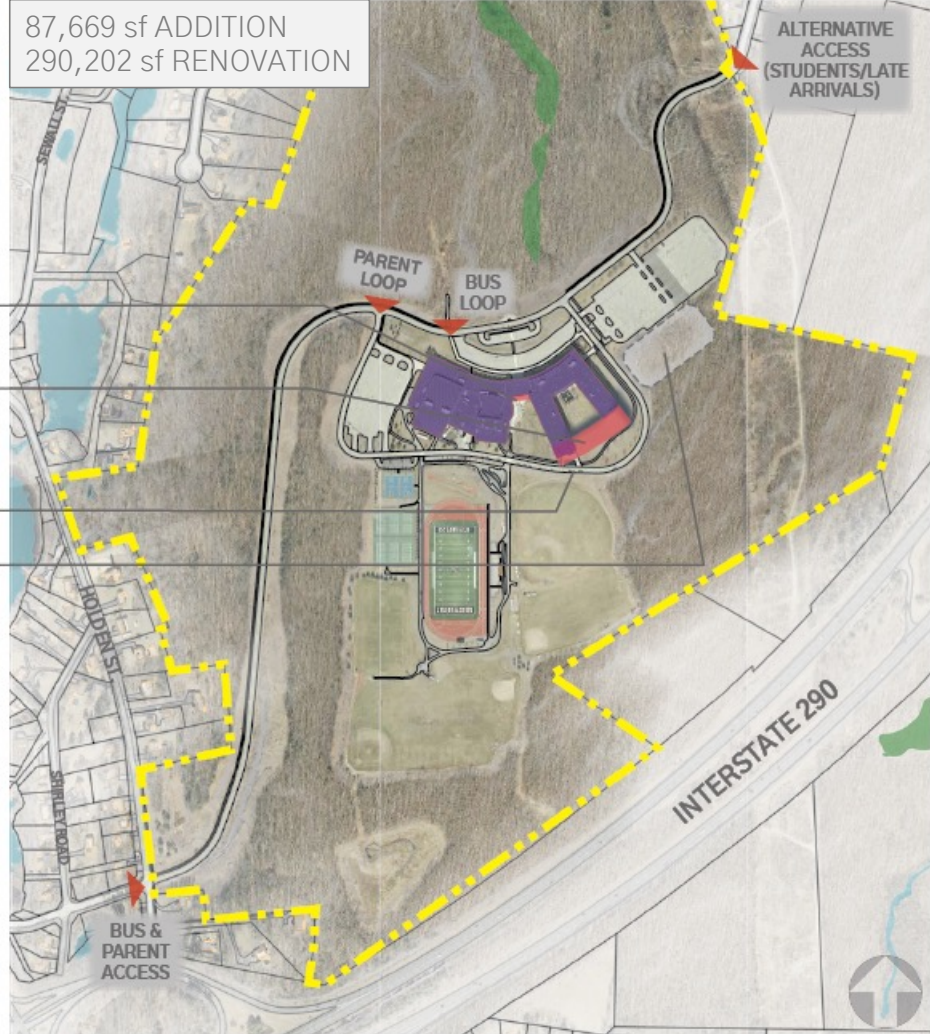
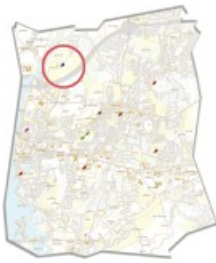
## ADDITION & RENOVATION



87,669 sf ADDITION  
290,202 sf RENOVATION

- Expanded cafeteria seating
- New three-story academic wing addition; connect two existing wings
- Reroute ring road as required
- Expanded parking lot

- Existing building to be renovated
- New building addition
- Existing building to be demolished
- Wetlands
- 200' wetlands buffer zone
- Property line
- Vehicular access points



# COOLIDGE (300)

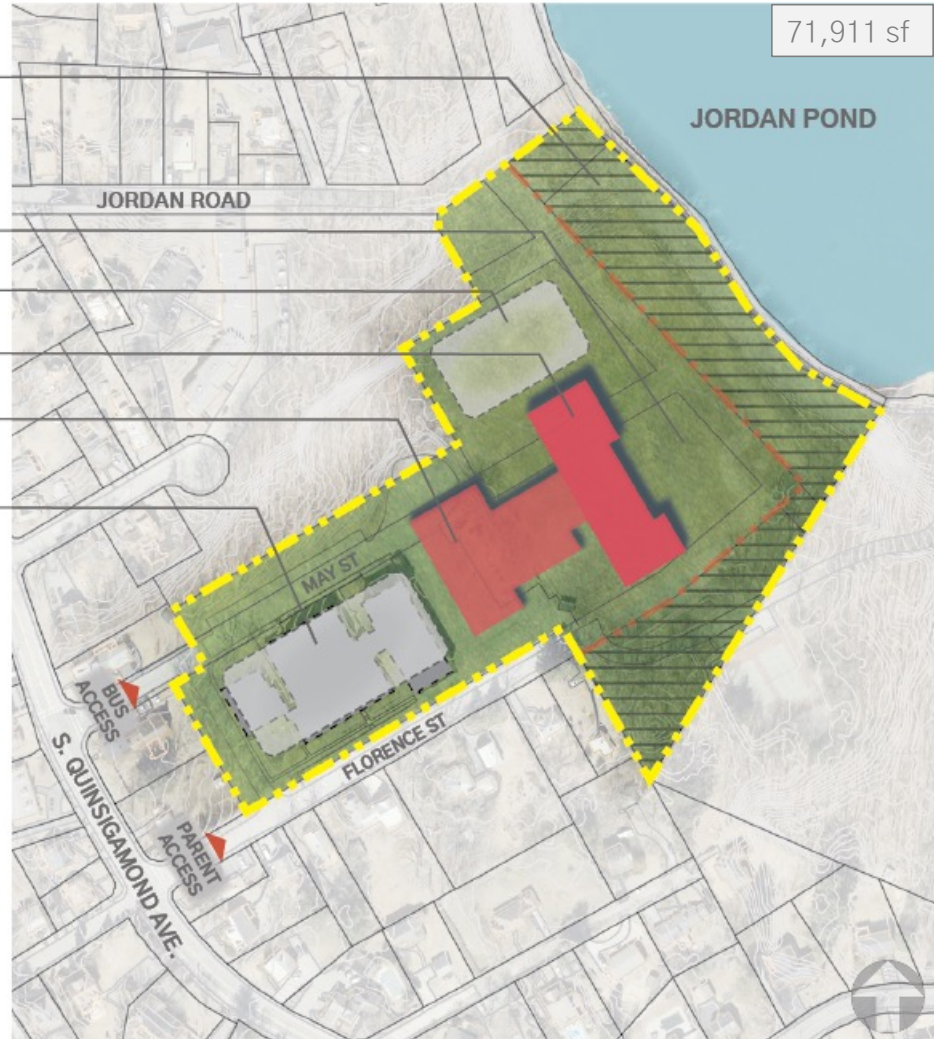
## NEW CONST. - K-4

- Hatched areas indicate town-owned land to add (change from playground to school use)
- New play field
- New paved play area
- New two-story academic wing
- New one-story gymnasium/cafeteria/administrative wing
- Demolish school in its entirety; student population to temporarily transfer to Beal during construction; create new expanded parking lot & reconfigured bus turnaround

-  New building
-  Existing building to be demolished
-  Wetlands
-  200' wetlands buffer zone
-  Property line
-  Vehicular access points



Locus Map



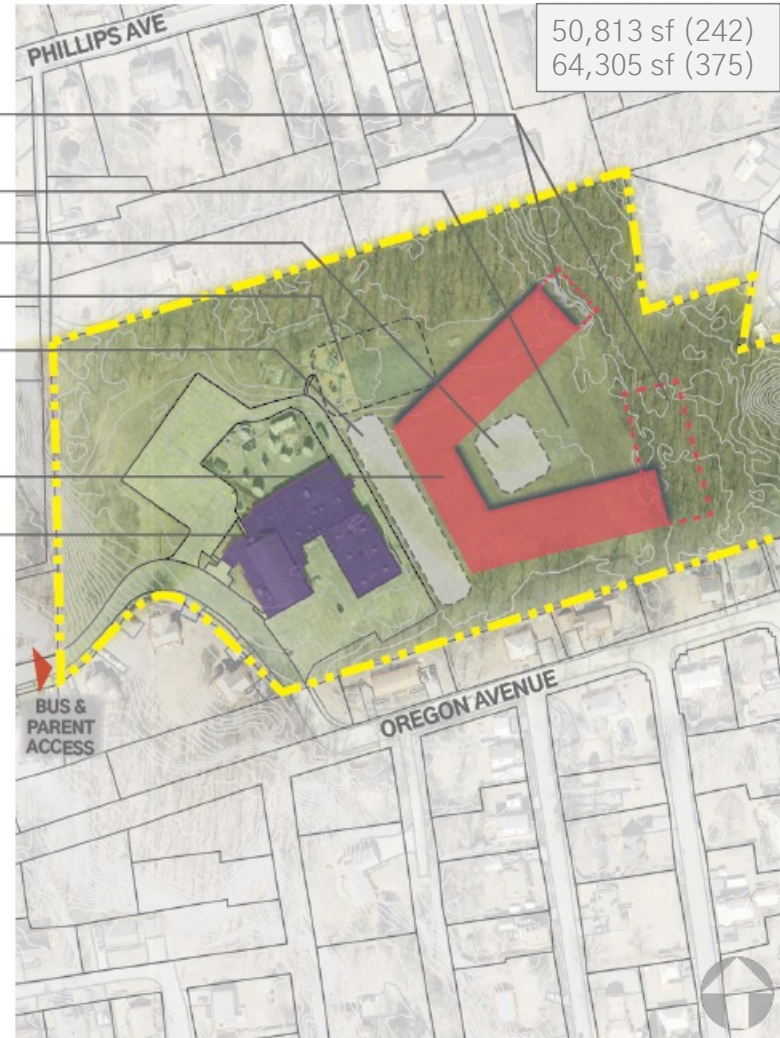
# PRE-KINDERGARTEN

## NEW CONST. - DISTRICT WIDE PRE-K

-  Existing building to be renovated
-  New building addition
-  Existing building to be demolished
-  Wetlands
-  200' wetlands buffer zone
-  Property line
-  Vehicular access points



- Potential future expansion for a 375-student population
- New play field
- New paved play area
- Existing play area to remain
- Expanded parking lot & bus loop
- New one-story preschool for 242 students
- Existing building to remain; reallocate for municipal use



# COOLIDGE & PRE-K (542)

## NEW CONST. - K-4 W/ DISTRICT PRE-K

Hatched areas indicate town-owned land to add (change from playground to school use)

New play field

New paved play area

New paved play area for pre-K/K students

New two-story academic wing  
(pre-K & K on first floor; 1-4 on second floor)

New one-story gymnasium/cafeteria/  
administrative wing

Demolish school in its entirety; student  
population to temporarily transfer to Beal  
during construction; create new expanded  
parking lot & reconfigured bus turnaround

- New building
- Existing building to be demolished
- Wetlands
- 200' wetlands buffer zone
- Property line
- Vehicular access points



Locus Map



## Consolidate School Department Administration

- Currently split between Town Hall, 15 Parker Road, and spaces throughout the district
- Based on previous reports  $\pm 6,000$  net sq.ft. is needed
- Consolidating into one location at Town Hall

**Leverage & Eliminate**  
through building orientation  
& envelope design

1

**Reduce & Optimize**  
through building systems  
efficiencies

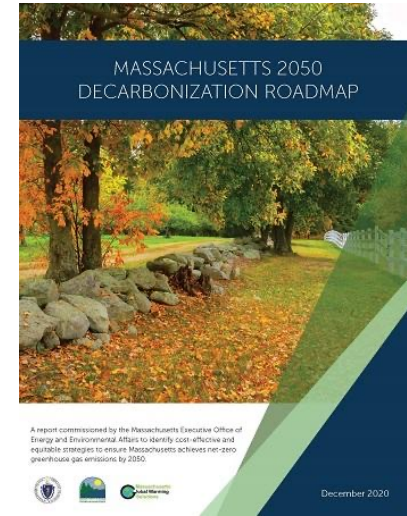
2

**Verify & Educate**  
through monitoring &  
occupant engagement

3

**Generate & Offset**  
through renewables,  
storage, & credits

4



Goal for this study was to make equipment and building system improvements to reduce or eliminate the reliance on fossil fuels with the goal of approaching net zero. Then offset the remaining deficit through renewable energy like photovoltaic panels and/or geothermal wells



## PRIORITIES

- Address Overcrowding at the High School
- Replace Coolidge Elementary School & Expand District Wide Pre-K
- Parity Among the K-4 Schools
- Address Aging Building Stock & Provide 21<sup>st</sup> Century Learning Spaces
- Net Zero Upgrades
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PARKER ROAD



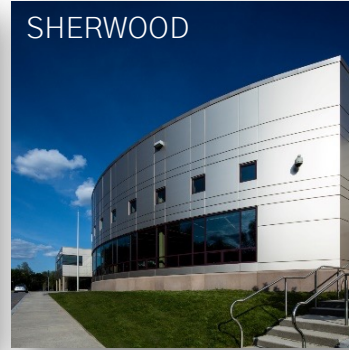
COOLIDGE



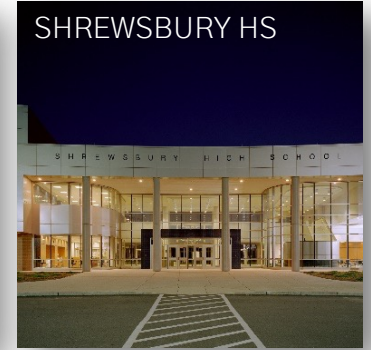
SPRING ST



SHERWOOD



SHREWSBURY HS



BEAL



FLORAL ST



PATON



OAK



SPS ADMINISTRATION



# PRE-K THROUGH 12 CAPITAL INVESTMENT AND ASSESSMENT STUDY