



WINCHESTER PUBLIC SCHOOLS  
FACILITIES MASTER PLAN

REPORT PREPARED BY

**FLANSBURGH**

JULY 25, 2017

---

# Winchester Public Schools

## Master Plan Update



Unanimously approved by Winchester School Committee

---



# Winchester Public Schools Master Plan Update

## Acknowledgments

### Overview

- 0.1 Introduction
- 0.2 Executive Summary
- 0.3 Existing Conditions Summary
- 0.4 Summary of Options

### Section 1 | Enrollments & Design Options

- 1.1 Grades PreK-5 Enrollments & Design Options
- 1.2 Grades 6-8 Enrollments & Design Options
- 1.3 District Office Relocation Design Options

### Section 2 | Existing Conditions Summary

- 2.1 Ambrose Elementary School
- 2.2 Lincoln Elementary School
- 2.3 Lynch Elementary School
- 2.4 McCall Middle School
- 2.5 Muraco Elementary School
- 2.6 Mystic Elementary School
- 2.7 Parkhurst Elementary School

### Section 3 | Enrollment Projections

### Section 4 | Space Needs

### Section 5 | Presentations & Meeting Notes

### Section 6 | Appendix

- Cost Estimates
-

## Acknowledgments

### Acknowledgments

Flansburgh Architects would like to acknowledge the following individuals for their dedication to the Winchester School Department and their assistance to the design team:

#### *Town Administration*

Mr. Richard Howard	Town Manager
Ms. Beth Rudolph	Town Engineer
Mr. Brian Szekely	Town Planner
Mr. Peter Lawson	Facilities Director, DPW
Ms. Meg White	Project Coordinator

#### *School Committee*

Ms. Susan Verdicchio	Chair
Mr. Christian Nixon	Vice Chair
Ms. Cynthia Bohne	Member
Mr. Chris Linskey	Member
Mr. Michelle Bergstrom	Member
Mr. Michael Schindelmann	Former Member

#### *Board of Selectmen Representatives*

Mr. James Whitehead	Chair
Mr. Lance Grenzeback	Former Chair

#### *Winchester Public Schools Administration*

Ms. Judith Evans, Ed.D.	Superintendent
Ms. Jennifer Elineema, Ph.D.	Assistant Superintendent
Mr. John Danizio	Director of Finance
Mr. Sean Walsh	Director of Personnel
Ms. Pamela Girouard	Administrator of Special Education
Ms. Kelly Clough	Principal, Lincoln Elementary School
Mr. John Dupuis	Principal, Lynch Elementary School
Mr. Jorge Goncalves	Principal, McCall Middle School
Ms. Chris Kelley	Interim Principal, Winchester High School
Ms. Laurie Kirby	Principal, Muraco Elementary School
Mr. Dennis Mahoney	Principal Winchester High School
Ms. Leigh Petrowsky	Principal, Ambrose Elementary School
Mr. Grant Smith	Principal, Vinson-Owen Elementary School
Ms. Leslie West	Assistant Principal McCall Middle School

#### *Working Group members & Workshop Attendees*

Ms. Samantha Allison	Finance Committee Representative
Ms. Judith Evans, Ed.D.	Superintendent
Mr. Richard Howard	Town Manager
Mr. Mariano Goluboff	Finance Committee Representative
Ms. Jessica Lohnes	EFPBC Representative
Mr. Roger Michelson	Finance Committee Representative
Mr. Christian Nixon	School Committee Representative
Ms. Shelly Walsh	EFPBC Representative
Ms. Meg White	Project Coordinator
Ms. Susan Verdicchio	School Committee Representative

## 0.1 Introduction

Flansburgh Architects was hired on April 6, 2016 to prepare a Master Plan for the Winchester Public Schools. The purpose of the 2017 Master Plan is to provide updated information on space needs, options for increasing available space and estimated costs for the options, to meet the program needs for continued growth in enrollments.

Throughout the course of researching and developing this report, Flansburgh Architects worked closely with the Winchester Master Plan Working Group during multiple meetings, and gained input from school principals, district administration and Winchester DPW regarding the condition, ongoing maintenance plans and functionality of each school. Meetings were held with representatives from the community to assist in defining the educational vision for the entire Winchester School District. The extensive amount of information gathered herein should be used as a resource for any future work to be done to these facilities and when reviewing the educational reorganization goals. All future work, repairs and changes to the facilities should be reviewed to their impact on the district-wide long-term goals.

The Winchester Public School District currently serves 3,355 students in grades PreK to 8 (4,623 in grades PreK-12). There are ten school facilities in the district: five elementary schools, one middle school and one high school, the Carriage House, as well as two former elementary school facilities not currently functioning as schools. The age and conditions of each of the facilities vary greatly with some buildings having few upgrades since their construction. A newly renovated Winchester High School, currently serving 1,268 students in grades 9-12, is scheduled to be opened in September 2017.

### I. Winchester Public Schools Educational Program Visioning Workshop

Flansburgh Architects met with the Working Group, joined by administrative leaders and school principals, on June 16, 2016 to share goals and priorities for the district's educational program, review examples of 21st Century learning environments, and develop guiding principles for the WPS master planning process.

The group assessed the district's Strengths, Challenges, Opportunities and Goals with regard to development of its academic programs and facilities.

Participants identified strengths such as: the district is proactive - not reactive; engaged parents; community pride in schools; and cooperation/interaction between older and younger students and senior citizens. Challenges included: rooms lacking effective ventilation/windows; funding of places not people; stress on staff and families; obstacles to teacher collaboration. Finally, participants named opportunities and goals, including: cross grade/school interaction; lots of talent in the district; extraordinarily strong programming; and to become less compartmentalized. Ensuring the continued success of academic support programs such as the social/emotional learning RULER program out of Yale, and others, should be considered in planning.

The group discussed school design solutions and desired building features to foster 21st Century education and empower independent learners. Building entrances and "gate-keeping" should be warm, inviting, and also provide security. Classroom areas should be agile within neighborhood groupings, with distributed services, integrated technology, built-in but flexible storage (including device charging stations) and include supervised spaces affording a sense of privacy. Teaching spaces should be flexible to accommodate interdisciplinary and project-based learning, the arts, as well as co-teaching and tri-teaching models. Professional workshop space is needed to encourage teacher collaboration. The library media center can be the heart of the school, with flexible furniture to allow multipurpose functions. Schools should provide makerspaces, perhaps within or adjacent to the library/media center, as well as an innovation lab for robotics and CAD.

Outdoor and indoor spaces should promote connection to nature, with access to natural light and fresh air, and encourage walking and biking. Finally, schools should welcome community access, retaining a human-scaled, small-school feel within larger buildings, to encourage interdisciplinary collaboration as well as independent, life-long learning.

II. Enrollment

Past & Present: As part of Winchester’s last Master Plan (2006-07), demographer Economic Policy & Resources, Inc. (EPR) was retained to develop a set of reasonable projections for Winchester’s five neighborhood elementary schools. Using historical enrollment growth and construction permit data as well as secondary macro-economic sources, EPR’s 5-year time horizon (2006-07 to 2010-11) predicted K-5 enrollment growth of 9.6% while actual growth was nearly 14%. At the time, there was consensus that sharp increases in Winchester’s median home values was a headwind (so-called “cooling effect”) against sharper enrollment increases. Given that Winchester was one of only ten municipalities in the Commonwealth whose median home values increased during the subsequent Great Recession (marginally, by less than 1%) and with an increase in the number of dual wage-earner and non-traditional/multi-generational families, Winchester’s “draw” has remained strong even as median home values have sharply climbed. As Winchester’s last Schools Facilities Master Plan was being finalized late in 2006, median single family home value was \$735,000 and had been climbing at over 9% per year for some time. By 2016, Winchester’s median single family home value was \$1,062,500, a five-year increase of 48%. Throughout this time, Winchester has seen sustained residential development and growth which leaves the district with a present day space shortage.

A shortfall in 40B affordable housing (less than 3% with a goal of 10%) leaves the School Committee and the community at large concerned about pending projects and the students they will bring. A comparison of Winchester’s enrollment versus the Commonwealth as a whole-- from the previous Master Plan to present day-- shows that the district continues to buck the state-wide trend towards steadily decreasing enrollment. Winchester’s sustained double-digit growth places it on the cusp of the Commonwealth’s 50 largest public school districts. A decade ago, Winchester was 58% larger than the Massachusetts average. Today the district is nearly double (96%) the state average. Winchester is no longer a small school district:

<u>Total Enrollments</u>	<u>2006-2007</u>	<u>2016-2017</u>	<u>+/-</u>	<u>% Change</u>
PK-12 Massachusetts	968,661	953,748	-14,913	1.5% Decrease (MA)
<b>PK-12 Winchester</b>	<b>3,944</b>	<b>4,623</b>	<b>+679</b>	<b>17.2% Increase (WPS)</b>
Avg. MA District Size	2,490	2,361	-129	5.2% Decrease (MA)
WPS Size as % of MA Avg.	58% Greater	96% Greater	----	----
State Rank by Enrollment	70th	52nd	----	----

*Source: Massachusetts Dept of Elementary and Secondary Education (DESE) School & District Profiles FY07 and FY17*

Future: Looking forward to a 5-year and 10-year horizon with an appreciation for past efforts to project enrollment falling short of actual figures, the Master Plan Working Group sought to broaden “inputs” for the purposes of projecting enrollment growth. In addition to historical growth and census data, a number of other factors were considered, including:

- Mass Housing/DHCD approved 40B projects
- Submitted 40B projects (submitted but not yet approved)
- Large vacant/undeveloped parcels and existing zoning
- Demolition permits and rate of bedroom expansion associated with tear-downs/reconstruction

The Working Group, School Committee, Administration, and Town Management are strongly supportive of this broader set of inputs, as two 40B projects in initial planning in December 2016 (approximately 360 units) are now “public” with one developer engaged with the neighborhood and Selectmen and another now filed with Mass Housing/DHCD. The scale of 40B developments range from 96 units (Cambridge Street - Vinson-Owen District, Mass Housing/DHCD approved) to over 300 units (Holton Street - Muraco/Lynch District line, developer in public discussion). The Board of Selectmen have committed to a Housing Production Plan, though its development and impact on schools are unknown

at this time. Given that the impact of known and anticipated 40B affordable housing projects still falls short of the legislated 10% benchmark, it is not anticipated that the Housing Production Plan will drive enrollments any lower than currently projected.

While the largest development/student growth likelihood stems from 40B development, there is consensus among the team that recent teardown and multi-family development will continue to occur from Winchester Center north along the Main Street corridor driving 200 additional units in the next twenty years (100 assumed by year 2027 for this Master Plan update). Substantial portions of this area of town are zoned for multi-family though existing structures are smaller 3BR single family homes not protected by Winchester’s Demolition Delay Bylaw. Although the 10-year enrollment projection is slightly less than that seen in the last decade (still double-digit growth), it is the projected 5-year growth of over 13% that speaks to Winchester’s urgent need for facilities expansion.

<b>WPS K-12 Enrollment</b>	<b>2016-17 School Yr.</b>	<b>2021-22 School Yr.</b>	<b>2026-27 School Yr.</b>
Excluding PK students	4,536 (current)	5,141 (13.3%, 5-yr growth)	5,253 (15.8%, 10-yr growth)

With input from Winchester’s Town Manager, Town Planner and Town Engineer, specific and credible parcels for higher-density development were carefully analyzed along with the Town’s demolition activity. Associated enrollment growth by grade level (K-5, 6-8 and 9-12) and timeframe (5-year or 10-year) is incorporated into projections and was used as a basis for the Lynch and Muraco SOIs voted by the School Committee and Board of Selectmen in April 2017. While this Master Plan calls for four of five Winchester elementary schools to be expanded to meet projected enrollment in the coming decade, it is assumed that any further growth (or a higher growth rate than projected to 2026-27) will require a sixth neighborhood elementary school—most likely on the Mystic School site.

**WINCHESTER 5 YEAR PROJECTED ENROLLMENT GROWTH 2016/17 - 2021/22 ENROLLMENTS**

GRADES	CENSUS/ BIRTHRATE	CAMBRIDGE	HOLTON	FOREST RIDGE	MAIN ST. NORTH	KRAFT FOODS	DEMO / REBUILD	TOTAL INCREASE
UNITS		96	300	Homes	50	Homes	40	
K-5	31	28	117	12	20	12	20	240
6-8	43	14	58	6	10	6	10	147
9-12	116	13	58	6	9	6	10	218

CLASSROOMS REQUIRED (ADDITIONAL)	
K-5	240 @ 20 STUDENTS = 12 NEW CLASSROOMS
6-8	147 @ 24 STUDENTS = 7 NEW CLASSROOMS
9-12	218 @ 24 STUDENTS = 9 NEW CLASSROOMS

3.30.17 WINCHESTER, MA **FLANSBURGH**

**WINCHESTER 5 YR TO 10 YR PROJECTED ENROLLMENT GROWTH 2021/22 - 2026/27 ENROLLMENTS**

GRADES	KRAFT FOODS	MAIN ST. NORTH	HIGHLAND AVE.	WATERFIELD	DEMO / REBUILD	TOTAL INCREASE
UNITS	Townhomes	50	15	50 Micro	35	
K-5	8	20	7	5	18	58
6-8	4	10	3	2	9	28
9-12	4	9	3	2	8	26

CLASSROOMS REQUIRED (ADDITIONAL)	
K-5	58 @ 20 STUDENTS = 3 NEW CLASSROOMS
6-8	28 @ 24 STUDENTS = 1 NEW CLASSROOM
9-12	26 @ 24 STUDENTS = 1 NEW CLASSROOM

### III. MSBA Guidelines

When the Massachusetts School Building Authority (MSBA) partners with a school district, it is because the Board finds the project eligible and a priority (over other submittals) based on an evaluation of specific criteria published in the Statement of Interest (SOI) process. In this instance, the Winchester School Committee and Board of Selectmen identified three eligible criteria for consideration of SOIs submitted for the Lynch and Muraco elementary schools: 1) Existing Enrollment/Overcrowding, 2) Future Enrollment/Overcrowding and 3) Existing Physical Plant Age/Condition. If accepted into the process, the MSBA will assist the town in hiring an Owner's Project Manager (OPM) to help manage the design and construction process. The OPM, in conjunction with the town, next hires an Architect to develop design options in a Feasibility Study. Typically a Feasibility Study required by the MSBA includes consideration of potentially lower-cost alternatives to whole-building renovation or replacement, such as redistricting, leasing another existing facility, or building on a different site. An MSBA Feasibility Study has two parts: the first part develops the Preliminary Design Program (PDP) and then moves to the Preferred Schematic Report (PSR). The MSBA will review the Feasibility Study and make a determination whether to move the project to the next phase, Schematic Design. During the Schematic Design Phase the architect will develop options based on the MSBA specific requirements. During Schematic Design the architect will engage the community for direct feedback regarding the school. At the end of the Schematic Design Phase the MSBA will develop a project funding agreement and vote whether to move forward to the next Phase. The town will vote on whether to accept the agreement through a debt exclusion. If the Town accepts the agreement, the project moves into Design Development, then Construction Documents. Finally, a contractor is chosen and the project moves into the Construction Phase.

The MSBA requirements include everything from the number of students per class to the size of the individual rooms, as well as which types of spaces are required. Desired spaces not within the MSBA space guidelines will not be part of the funding agreement and will not be reimbursed by the MSBA. Winchester uses a different class size than the MSBA. The MSBA uses 24 students per classroom, while Winchester uses an average of 20 students per classroom. This would result in more classrooms required for the same number of total enrollment. The MSBA would argue to increase class size for a new project. The MSBA also will not provide funding for the Central Offices wherever it is located or for student swing space required for a project.



of Selectmen voted in April 2017 to submit Statement of Interest Forms on both Lynch and Muraco to the MSBA). The new schools will increase capacity by 220 students. Enrollment projects suggest an increase of 240 students in the next five years and 298 total after ten years. Options for additional capacity exist in other schools. Vinson-Owen was designed to allow for expansion. The fit-up of three (3) classrooms in existing shell space was completed in November 2016. An additional 4 to 5 classrooms can be added to the roof area designed for occupancy. These new classrooms can accommodate 80 to 100 additional students. If further capacity is needed, the Ambrose School capacity can be increased by building a new six classroom addition by replacing the two existing modular classrooms for a net of four (4) classrooms (80 students). Note: These capacities are based on Winchester School Committee class-size guidelines at 20 students per classroom. The Massachusetts School Building Authority (MSBA) uses a maximum class size of 24 students.

7. The Town of Winchester should consider partnering with the MSBA on the two new school projects. The schedule for proceeding with the Lynch School and Muraco School projects would be dependent upon when the MSBA approves the projects and agrees to State reimbursement. The time frames for each project would be approximately as follows:

Lynch – Study Phase 6 months; Design Documents 8 months, Bid; Award 2 months; Construction 14 months - Total 24 months

Muraco - Study Phase 6 months; Design Documents 8 months, Bid; Award 2 months; Construction 14 months - Total 24 months.

8. Provided that the new schools are desired by the 2021-2022 school year, authorization to commence the Lynch design should occur no later than December 1, 2018. This will allow bidding in July 2019 and construction to be completed for a September 2020 occupancy. Muraco design and drawings should follow immediately after the 2019 bidding of the Lynch School. The project could be bid in July of 2020 and built for the 2021 school year, swing space to relocate students must be available elsewhere.
9. The estimated total project costs (in 2017 dollars) for these 2 projects *including fully air conditioned academic and administrative spaces*, furniture, equipment, technology, and soft costs are as follows:

	<u>Est. Project Cost</u>	<u>Est. MSBA Reimbursement</u>	<u>Net Cost</u>
New Lynch Elementary	\$50M	\$17.5M to \$20M	\$30M to \$32.5M
New Muraco Elementary	\$45M	\$15.75M to \$18M	\$27M to \$29.25M
Vinson-Owen Classroom Expn.	\$3.5M		\$3.5M

These estimates should be increased for inflation and rising construction costs if construction starts after the year 2020, at a compounded rate of interest of 3% per year.

B. McCall Middle School:

1. The middle school is experiencing the most student enrollment pressure within the school system. The enrollment projections indicate an increase of 150 students within the next five years not including students already in the elementary system. Six (6) options (a couple with multiple variations) were reviewed for converting existing rooms into classrooms, as well as a new classroom addition, to resolve current and projected enrollment at McCall Middle School. The preferred option is to build a permanent addition along with converting existing basement spaces, for a net gain of seven (7) new classrooms.
2. Existing middle school enrollment shows an immediate need for three additional classrooms. This need could be addressed by converting the basement level Youth Center spaces into three (3) classrooms. This conversion could be completed by the fall of 2018 if design proceeds by the Fall of 2017. Enrollment projects indicate there will be a need for four (4) more classrooms by the Fall of 2020. It is recommended that a permanent classroom addition be ready for occupancy by the Fall of 2020 to accommodate this need. The authorization to commence Design

## Overview

Development and Construction Documents for the new classroom addition should be given by the Fall of 2018. This will allow bidding by May 2019 and construction completion for occupancy by September 2020.

3. The preliminary estimated total project costs for the interior classroom renovation and classroom addition including furniture, equipment, technology, and soft costs is approximately \$7,000,000 (in 2017 dollars). Phase I is approximately \$1,200,000. Phase II is approximately \$5,600,000. *Both phases include full air conditioning of academic spaces.*

### C. Winchester High School

1. Enrollment at WHS is likely to continue to increase during the next decade, based on both in-district student counts and projected building projects. In general, high school capacity for meeting the space needs of increased enrollment is much more flexible than lower grade levels, based on the following:
  - High schools can use classroom spaces more flexibly than other levels and can use spaces more efficiently based on the number of teaching periods in a day/week, unlike elementary schools where students are home-based in one classroom for the day.
  - By modifying the master schedule, high schools can make more rooms available as space needs increase. This could include using before/after school hours for some courses, as needed.
  - The trend at the secondary level is for students to leave the school campus for some community-based experiences, which gives more space flexibility.
  - The use of blended/online learning in coming years is likely to decrease the need for traditional classroom experiences at the high school level.

### D. Central Administration Offices

1. The Central Administration Offices are currently located in the Parkhurst School, just four blocks from Ambrose Elementary School. The Central office was moved there in 2013 from the Lynch School as part of a short to mid-term plan. A more permanent solution was reviewed as part of this Master Plan Study. Multiple location options included space at the new proposed Lynch or Muraco Schools, as well as at the Carriage House, which is adjacent to the Ambrose School. The cost analysis shows the Carriage House renovation to be only slightly more than including space at one of the new schools. The estimated costs for the Carriage House renovation is approximately \$3,000,000.
2. The relocation of Central Administration Office allows for Parkhurst to be utilized as swing space for students during a new construction project, or it may be used as a school in the event the enrollment project increase surges sooner than expected and exceeds the current capacities at existing schools. The Parkhurst could also potentially be a revenue stream to the town if it were rented.

## II. Ten-Year Plan Goals

### A. Elementary School (K-5)

1. Winchester will continue to add enrollment throughout the school system in the second five-year period, though at a slower rate. Should the projected enrollments be realized, and depending on the recommended replacement time frames of the Lynch and Muraco schools, additional capacity would be available at the Vinson-Owen and Ambrose Schools as described above.
2. Other facilities reviewed and evaluated, but with no/or limited anticipated capital improvements in this 2016-2017 to 2026-2027 Master Plan:

Ambrose - The condition of the existing building is good and the 2009 modulars accommodate the student population needs for the coming decade, however the Working Group recommended and the School Committee concurred (with a vote to adopt/approve) that once the modular classroom buildings reach the end of their useful lives and/or further enrollment growth dictates, the building and site lend themselves to a 3-story, six (6) classroom addition

in the footprint of the existing modular classrooms, bringing Ambrose up to a future 540 student design enrollment (460 students - 40 in modulares + 120 in new addition = 540)

Lincoln - The overall condition of the existing facility is good, but the building is land-locked by the site. The school was originally built as the Winchester High School in 1904, and was renovated from 1998 to 2000 and houses grades K-5. The current enrollment is 408 students in 20 classrooms. No work is anticipated that would affect future capacity.

Mystic - The Mystic School was originally constructed in 1925 and hasn't been used as a school building since it was used as swing space for the renovation of the Lincoln school in 2000. However, the school facility still has value for future enrollment growth and/or swing space beyond the next decade. The school's location within Winchester is preferred should a 6th elementary school, or some other instructional building, be necessary to accommodate long-term enrollment growth. The school does not currently have an elevator. Adding an elevator will enhance the facility and make it more suitable for future use.

Parkhurst - The Parkhurst School was built in the 1940s with 12 classrooms and two modular classrooms were added in 2004 to accommodate students in swing space during the construction of the Ambrose School. In 2011, the facility was upgraded for use as swing space for the Vinson-Owen School reconstruction project. The building is not fully accessible, and currently serves the Central Offices (considered as a short-term arrangement) which occupies the upper level. The lower level remains inaccessible and vacant due to the lack of an elevator in the facility. In 2011 The Massachusetts Architectural Access Board [MAAB] granted temporary use of the full building as swing space for Vinson-Owen students during construction of the new school, however with construction of the new V-O complete, the MAAB does not permit occupancy of the lower level by any occupant/tenant until the building is made fully accessible. It is recommended that consideration be given to providing an elevator at Parkhurst to make the facility accessible. This would make Parkhurst a viable option for future growth either as swing space or as a permanent solution.

#### B. McCall Middle School

1. If the proposed permanent classroom addition is built by 2020 (Phase II, following Phase I in fall 2018), this should solve both the short term and long term needs of the middle school.

#### C. Winchester High School

1. The renovated high school size and program is anticipated to handle the projected enrollments until the year 2026. Future high school curriculum and teaching methods could have an impact on the facility usage (i.e. more classes could be taught online or more community internships) could relieve pressure on classroom spaces.

### III. Top Priorities for the Master Plan

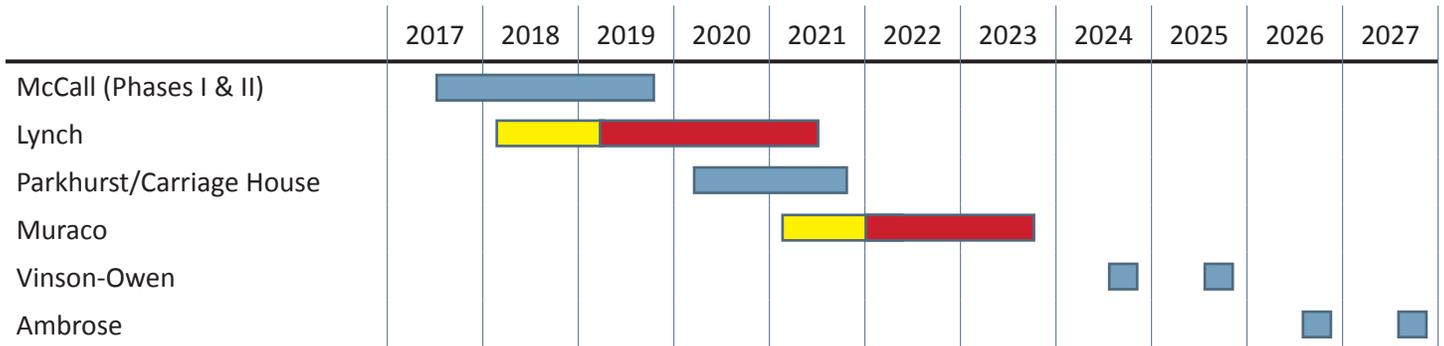
- Find permanent building solutions for:
  - McCall Middle School overcrowding
  - Lynch/Muraco overcrowding and aged/outdated physical plants
- Develop a permanent location for the Central Offices (Carriage House)
- Develop phased implementation plan
- Maximize opportunity for future MSBA state reimbursement
- Obtain community consensus: Fall 2017 Town Meeting approval
- Minimize Redistricting
- Maintain five (5) neighborhood elementary schools through next decade of enrollment growth
- Provide cost options
- Provide green/sustainable options; reduce O&M costs

IV. Master Plan Schedule

The attached master plan schedules show potential phasing for the various projects in the master plan. The schedules present potential scenarios with regard to MSBA approval. It is somewhat optimistic to assume MSBA state reimbursement for the projects would be approved approximately one to two years apart. The new school projects would proceed according to the actual dates of MSBA funding approvals. The plan is flexible to allow for any of the projects to proceed ahead of another depending on the priorities existing at the moment.

1. Should the two elementary schools, Lynch and Muraco, be replaced, this will resolve their space needs and upgrade the schools to current standards. However, the new schools alone will not resolve all the classroom space needs in the district. Additional proposed classrooms at Vinson-Owen would provide the remaining classroom spaces.
2. The McCall Middle School Phase I classroom renovations should to be completed by September of 2018 and the Phase II addition should to be completed by September of 2020 to meet the projected enrollments in grades 6-8.
3. The Winchester High School project is anticipated to be completed by September of 2017.

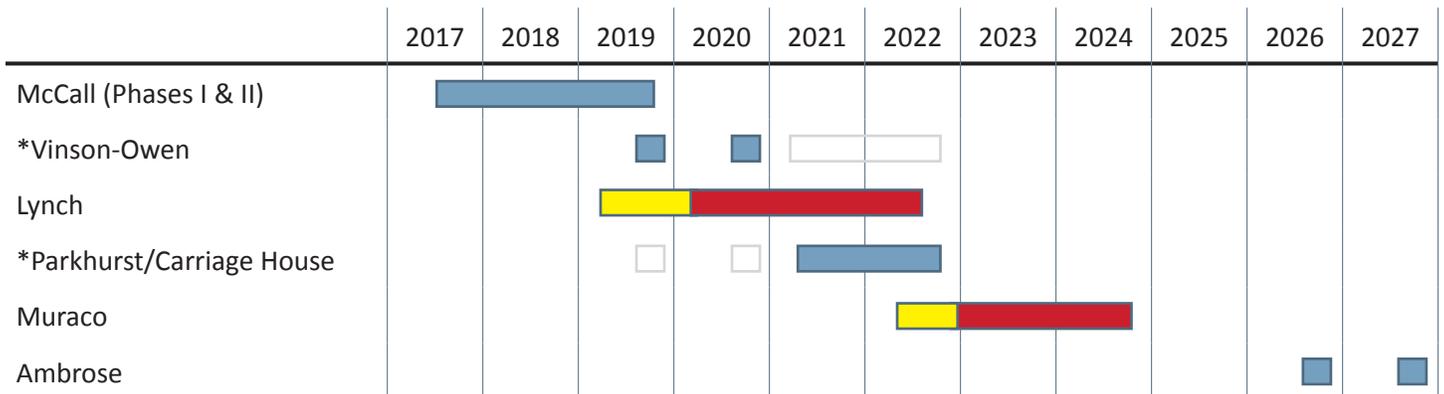
**Option 1: Master Plan Schedule (if the MSBA accepts a new Lynch Statement of Interest in the Fall of 2017 triggering Winchester vote Spring of 2018)**



Note: This schedule shows a proposed phasing of the projects which may need to be adjusted according to MSBA State funding approvals.

- Addition/Renovation Project
  - New Construction Project
- YEARS 1-5**
1. McCall Middle School Expansion (Two Phases)
  2. New Lynch Elementary Feasibility Study & Construction (with expanded six classroom preschool)
  3. Central Office move to Carriage House and Parkhurst prepare for rent or students/swing space, if required
  4. Muraco Elementary School Feasibility Study
- YEARS 6-10**
5. New Muraco Elementary School Construction
  6. Vinson-Owen Elementary Expansion Phase 2 (Phase 1 completed Fall 2016)
  7. Ambrose Elementary Expansion (if required, should enrollment growth exceed Master Plan projections)

**Option 2: Master Plan Schedule (if the MSBA does not accept a new Lynch Statement of Interest until Fall of 2018 triggering Winchester vote Spring of 2019)**

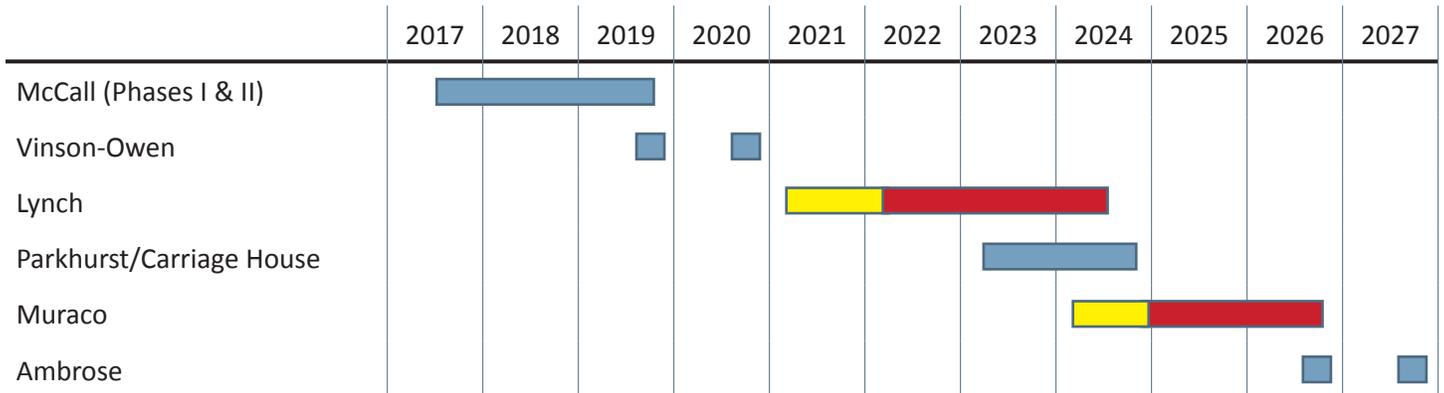


Note: This schedule shows a proposed phasing of the projects which may need to be adjusted according to MSBA State funding approvals.

\* Project timeframe is interchangeable with each other. Both projects provide additional space in relatively little time. P/CH would have operational costs while Vinson-Owen would require no additional overhead costs.

- Addition/Renovation Project
  - New Construction Project
- YEARS 1-5**
1. McCall Middle School Expansion (Two Phases)
  2. Vinson-Owen Elementary Expansion Phase 2 (Phase 1, Completed Fall 2016)
  3. New Lynch Elementary Feasibility Study & Construction (with expanded six classroom preschool)
  4. Central Office move to Carriage House and Parkhurst prepared for rent or students/swing space, if required
- YEARS 6-10**
5. Muraco Elementary School Feasibility Study
  6. Ambrose Elementary Expansion (if required, should enrollment growth exceed Master Plan projections)

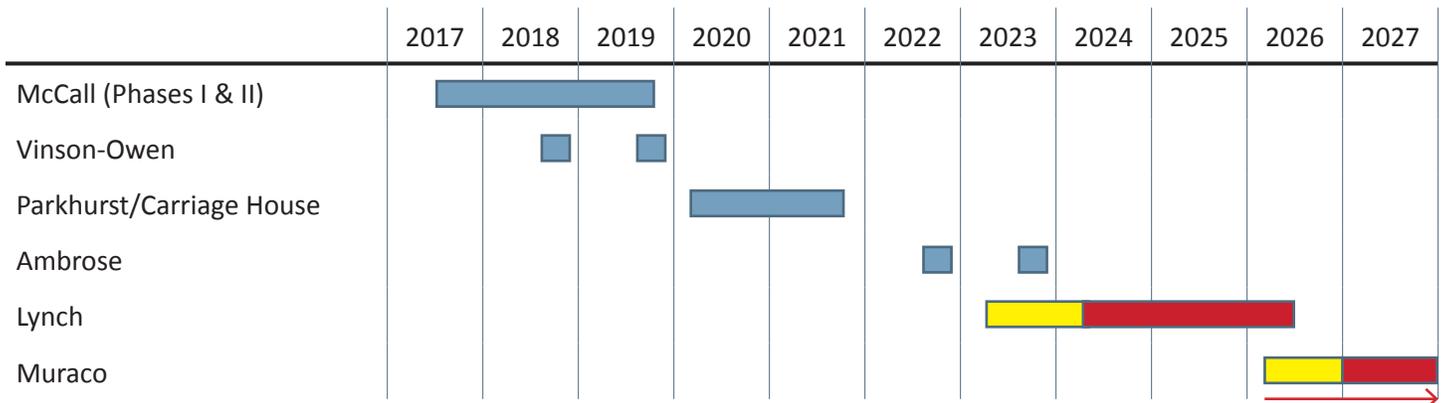
**Option 3: Master Plan Schedule (if the MSBA does not accept a new Lynch Statement of Interest until Fall of 2020 triggering Winchester vote Spring of 2021)**



Note: This schedule shows a proposed phasing of the projects which may need to be adjusted according to MSBA State funding approvals.

- Addition/Renovation Project
  - New Construction Project
- YEARS 1-5
1. McCall Middle School Expansion (Two Phases)
  2. Vinson-Owen Elementary Expansion Phase 2 (Phase 1, Completed Fall 2016)
  3. New Lynch Elementary Feasibility Study & Construction (with expanded six classroom preschool)
- YEARS 6-10
4. New Lynch Elementary (Construction)
  5. Central Office move to Carriage House and Parkhurst prepared for rent or students/swing space, if required
  6. New Muraco Elementary School Feasibility Study & Construction
  7. Ambrose Elementary Expansion (if required, should enrollment growth exceed Master Plan projections)

**Option 4: Master Plan Schedule (if the MSBA does not accept a new Lynch Statement of Interest requiring 100% town self-funding)**



Note: This schedule shows a proposed phasing of the projects which may need to be adjusted according to MSBA State funding approvals.

- Addition/Renovation Project
  - New Construction Project
  - To Extend Beyond Chart
- YEARS 1-5
1. McCall Middle School Expansion (Two Phases)
  2. Vinson-Owen Elementary Expansion Phase 2 (Phase 1, Completed Fall 2016)
  3. Central Office move to Carriage House and Parkhurst prepared for student use (until Lynch or Muraco are complete)
  4. Ambrose Elementary School Expansion Design & Bidding
- YEARS 6-10
5. Ambrose Elementary Expansion (net pick-up of four classrooms with removal of modulars)
  6. New Lynch (or Muraco) Elementary School Design & Construction (with expanded six classroom preschool)
  7. New Muraco (or Lynch) Elementary School Design & Construction (preschool is tied to whichever school is built first)

### 0.3 Existing Conditions Summary

Overall the Winchester Elementary and Middle Schools systems are in good to fair condition, but some are nearing the end of their useful life. The requirements to meet current codes will impact all spaces and effectively require full renovations of the schools where systems replacement is necessary to achieve compliance. Should the Town opt to move forward with a particular school for renovation, additional testing and investigations will be required to further evaluate the existing conditions of the building and site:

The following additional investigations are anticipated:

- Catch basin and drainage structure inspection
- Grease trap inspection
- Structural investigation/testing
- Hydrant flow test
- Interior drainage and pipe inspection
- Brick tie investigation
- Roof cuts to determine roofing components and thicknesses
- Infrared roof scan
- Additional destructive testing for hazardous materials
- Geotechnical test pits/borings

Working in conjunction with the Town of Winchester, Flansburgh Architects has prepared this existing conditions report in the Spring of 2016. This report considers the quality and anticipated life of the physical plant of the schools, the buildings interior and exterior building components, play fields, and site features, structural systems, mechanical /electrical plumbing systems and technology infrastructure. The findings of this report will assist in finalizing the Town's capital plan and assure that systems and materials left in place are sound and appropriate for the school's anticipated life. The process involved a physical survey of the buildings by the following qualified architects and engineers:

- Flansburgh Architects – Architectural
- BALA Consulting Engineers – Mechanical, Plumbing Electrical, Fire Protection
- Boston Building Consultants – Structural
- Nitsch Engineering – Civil/Site Survey
- Edvance – Data/Communications, Technology
- Crosby, Schlessinger, Smallridge – Landscape Architecture
- Tavares Design Associates – Equipment and Food Service
- Fuss & O'Neill EnviroScience – Hazardous Materials

The exterior envelopes of the older elementary schools (built or renovated prior to the year 1999) are generally in fair condition with some evidence of cracking and spalling of masonry components. Under the current energy standards, the exterior walls R-Values are very low and options need to be explored to increase the R-Values to meet today's standards. Increasing the exterior walls R-Values will reduce the size of the HVAC systems and save energy. Newer schools such as Vinson-Owen and Ambrose are generally up to standards. The High School upon completion of construction should also be up to code.

#### *Windows*

There are various window systems throughout the buildings. Many of the original windows are still in place with only sporadic replacements at the older schools (built or renovated prior to the year 1999). All existing single glazed windows should be

## Overview

replaced. There is some evidence of steel lintels rusting, which should be addressed by scraping and repainting the lintels. Newer school windows are within standards.

### *Roofs*

The roof systems in general are in good condition. The current R-Values however, may be less than current energy standards. Should the town opt to move forward with a particular school for renovation, new roof penetrations and new roof top equipment would be required. At that time, it would be prudent to remove the existing membrane and insulation. A new roof system with new insulation and a new membrane and trim will improve the R-Value, save energy and provide a 20-30 year warranty.

### *Interior*

The existing finishes in general, have been maintained to the extent possible, but are worn and need to be replaced at older schools like Muraco and Lynch. This is true even at the Ambrose School. If a particular school is chosen for renovation, then structural upgrades, as well as new mechanical, electrical, plumbing and fire protection system installations would be required throughout, which would require the replacement of all or most interior finishes.

New ceilings could improve acoustics in classrooms and corridors. Where any asbestos tiles still remain, new replacement flooring should be provided which would satisfy ADA standards and eliminate the need to protect existing hazardous flooring during future renovation work, which can be as expensive as new flooring. This replacement approach allows for full warranties throughout and the availability of "attic stock" for future repairs if necessary. It is anticipated that a renovation would require modifications to many spaces to include new walls and doors. As a result, all spaces should be repainted.

Building specialties, during a renovation, such as lockers, chalkboards, tackboards, casework, toilet partitions, etc. would be replaced to provide new components with full warranties and long life expectancies. Although many improvements have been made to the schools over the years for handicapped accessibility, it is anticipated that a renovation would require all areas to be updated to meet today's standards.

Where door hardware is original to earlier non-renovated buildings (such as Muraco and Lynch), they do not meet handicap accessibility code regulations and need to be replaced with levers. Several other handicap accessibility issues exist at doorways throughout some schools and require code compliant doors and frames.

### *School Summaries*

#### Ambrose Elementary School

Overall the Ambrose Elementary School systems are in good condition. The school was opened in 2005, so the mechanical, electrical and fire protection systems are only 11 years old. However, there has been a constant battle with HVAC system water clarity and pipe corrosion in the system. A very aggressive water treatment and filtration program has resulted in thinning walls of the piping most prevalent in the bends of the coils. Many have been replaced, but problems continue to manifest with significant leaks. The cast iron boilers were affected such that the buildup caused poor circulation and the flame from the burner caused cracking of sections. Sections of iron pipe have had to be replaced. The exterior envelope of the school is masonry and is still in good condition, with only some minor cracking of masonry components. The windows throughout the building are in good condition, as is the roof system. The interior finishes in general, have been maintained.

#### Lincoln Elementary School

Overall the Lincoln Elementary School systems are in good condition. The school was completely renovated in 1998 to 2000 making the mechanical, electrical and fire protection systems are only 14 years old. The Lincoln school is fully air-conditioned. The exterior envelope of the school is masonry and is still in good condition with only some minor cracking of masonry components. The windows throughout the building are in good condition and the roof system is still in good condition. The interior finishes in general, have been maintained, but some are worn and need to be replaced.

Lynch Elementary School

The Lynch School built in 1960 as Winchester's junior high school is currently in need of infrastructure upgrades. While the exterior envelope is generally in good condition and has been maintained, the infrastructure deficiencies suggest a major renovation or replacement is required. Some of the existing school's deficiencies include handicap accessibility issues, asbestos that needs to be removed, outdated HVAC systems and controls, outdated electrical service, deteriorating exterior masonry joints and sealants, inefficient windows, and kitchen servery. Because the Lynch School has adequate space for current educational programming, it provides opportunities for future options for swing space if a new Lynch is built.

McCall Middle School

Overall the McCall Middle School systems are in good condition. The school was renovated in 2000. The last addition was completed in the summer of 2009. The exterior envelope of the school is masonry and is still in good condition with some minor cracking of masonry components. The windows throughout the building are in good condition, as is the roof system. The interior finishes in general, have been maintained, but some are worn and need to be replaced. The mechanical, electrical and fire protection systems are generally working well. However, there have been some issues with the pneumatic heating controls, due to splitting/cracking and leakage in control lines.

Muraco Elementary School

The Muraco School built in the mid 1960s is currently undersized and in need of infrastructure upgrades. While the exterior envelope is generally in good condition and has been maintained, the space needs and infrastructure deficiencies suggest a major renovation or replacement is required. Deficiencies to be addressed include an aging exterior envelope with old windows and doors, an antiquated electrical system, lack of a sprinkler system, asbestos and handicap access issues, as well as space needs including the lack of a separate gymnasium, no kitchen, or a separate computer lab, and rooms that do not provide good acoustical separation. The facility is more than 50 years old. The size of a renovated school with addition or a new school would require going up an additional story (or two), rather than a one story building as on site now, and the installation of an elevator.

Mystic Elementary School

The Mystic School was built in two phases in the 1910s and 1930s. Due to the lack of an elevator, the lowest level the lowest level and middle level gymnasium are not usable as part of a school program and there are significant barriers to accessible routes to Mystic's access/egress points given the sharp topography of the site. The building is currently used as the Town's Recreation Department with an after-school educational/child care tenant leasing the lower level spaces. Should the building be used as a school again in the future, a new elevator will need to be installed as a minimum and depending on the student population, likely a significant addition, as well as complete mechanical, plumbing, fire protection and electrical replacement.

Parkhurst Elementary School

The Parkhurst School was built in two phases in the 1940s. Due to the lack of an elevator, the lowest level is not usable as part of a school program. The building is currently used as the District Offices and previously was used as swing space during the new Vinson-Owen construction. The interior finishes were upgraded during the Vinson – Owen building phase, but the infrastructure is still old and reaching or exceeding the end of their useful life and should be replaced. Should the building be used as a school again in the future, a new elevator will need to be installed as a minimum and depending on the student population, likely a significant addition, as well as complete mechanical, plumbing, fire protection and electrical replacement.

Vinson-Owen Elementary School

The three-story Vinson-Owen School was constructed from 2012-2013. Originally designed with 21 classrooms, the fit-up of lower level shell space was completed in November of 2016 yielding three additional K-5 instructional spaces for a current design enrollment of 480 students. Given that the building is nearly new and in excellent condition, Vinson-Owen is excluded from the detailed Existing Conditions report in Section 2.

## 0.4 Summary of Options

The Winchester Public School District currently serves 3,355 students in grades PreK-8 and 1,268 in grades 9-12 at Winchester High School. The Town has seen regular enrollment growth since the last Master Plan Study in 2006-2007. Due to increasing enrollments, the elementary schools and middle school are seeing space need pressures, currently with a four-classroom deficit at the elementary school level, and a three-classroom deficit at the middle school level. Future projections suggest that the enrollments will continue to grow.

Flansburgh Architects explored various designs to increase program space throughout the school system. Options were evaluated at all existing school facilities and included potential grade shifts. Each school was assessed for potential additions and or replacement to increase available space. All options included estimated costs.

### A. Elementary School: (K-5)

1. Ambrose School has a target of 23 classrooms (including two existing modular classrooms) with a Design Enrollment of 460 students. As of June 1, projected enrollment at Ambrose for school year 2017-18 is 429 students in 22 sections. The "extra" 23rd classroom is occupied by the Cognitive Specialized Learning Center program. The Ambrose School is in excellent condition. To address future enrollment growth, a proposed 6 classroom addition to replace two existing modular classrooms would result in a net increase of four classrooms. The future capacity at Ambrose would then be 540 students.
2. Lincoln School has a target of 20 classrooms (excluding the extended use of the Music Classroom as a general education classroom due to enrollment pressures on and off since 2006) with a Design Enrollment of 400 students. As of June 1st, projected enrollment at Lincoln for school year 2017-18 is 402 students in 21 sections. Post-June 1st enrollment moves in this district may result in 20 sections in the fall, which would yield the Music Classroom back for music instruction for the first time in over a decade, though this remains to be seen. Since the school is land locked and has had a recent renovation, no additional work is anticipated for the Lincoln School.
3. Lynch School has a target of 22 classrooms with a Design Enrollment of 440 Students. As of June 1st, projected enrollment at Lynch for school year 2017-18 is 491 students in 24 sections. Lynch has historically housed the district's 5-classroom integrated preschool program (89 PreK students in 2016-17). Given the lack of available space for additional sections at Lynch, the Superintendent announced on July 11th a plan for the 2017-18 school year to move two of five preschool classrooms from Lynch to the recently completed shell space fit-up/expansion at the Vinson-Owen school. This move frees up space for an additional classroom in the upcoming school year and continued short-term enrollment growth. It should be noted that the Lynch school has already repurposed a number of spaces for general education classrooms. To address Lynch's growth and space shortage, the district and School Committee may wish to consider a limited redistricting of the Lynch - V-O border effective for the 2018-19 school year. The Lynch School is 57 years old and the infrastructure is reaching the end of its useful life. Without an upgrade, there will be continual capital projects to keep the school operating. Options for an addition/renovation and a complete replacement project were analyzed. A new structure would allow for additional classrooms and include dedicated PreK spaces.
4. Muraco School has a target of 21 classrooms (including two existing modular classrooms) with a Design Enrollment of 420 students. As of June 1st, projected enrollment at Muraco for school year 2017-18 is 379 students in 21 sections. The Muraco School is more than fifty years old and the infrastructure is reaching the end of its useful life. Without an upgrade, there will be continual capital projects to keep the school operating. Options for an addition/renovation and a complete replacement project were analyzed. A new structure would allow for additional classrooms. Depending on the time frame of building a new school, if Muraco is built before Lynch, then Muraco would be designed with PreK spaces in lieu of Lynch. The Town of Winchester Flood Mitigation Program includes a potential culvert-widening project where the Aberjona River abuts the northwestern corner of the Muraco site.

5. Vinson-Owen School has a target of 24 classrooms (including lower-level fit up of three classrooms completed fall 2016) with a Design Enrollment of 480 students. As of June 1st, projected K-5 enrollment at Vinson-Owen for school year 2017-18 is 422 K-5 students in 21 sections. The school was originally built with 21 classrooms and the potential for two future expansions: A new three-classroom expansion into existing shell space was completed in November and another four to five classrooms can be added to the top level which is only half built out. Adequate bathroom and egress capacity has already been constructed to accommodate this second expansion option. The Vinson-Owen school could potentially reach a capacity of 580 students. Because the School Committee has not redistricted after the shell space/fit-up expansion project completed November 2016, Vinson-Owen's capacity is greater than its district enrollment. As noted above, due to continued enrollment growth and space shortages at Lynch Elementary School, the Superintendent has opted to move two of five Pre-K classrooms from Lynch to Vinson-Owen for the 2017-18 school year.
6. Mystic School is not currently operating as a school, but does provide the potential for future swing space or as a sixth neighborhood school. The school has 12 classrooms. Options for addition/renovation and replacement were developed. The site of the Mystic School is preferred due to its central location and proximity to future developments.
7. Parkhurst School has 14 classrooms (including two modulars installed in 2005 for use as swing space during construction of the Ambrose School), but is not currently being used as a school. Instead, the Central Offices are the tenants, since 2013. The location of Parkhurst presents a challenge as it is relatively close to the Ambrose and Vinson-Owen schools and is not in a desirable location relative to future developments. Options for addition/renovation and replacement projects were analyzed. There is no clear preferred option for Parkhurst. Parkhurst was last used as swing space during the Vinson-Owen construction project. Significant renovations were done at the time to prepare the school as swing space (including new accessible parking, routes and door hardware), but the school still lacks an elevator which makes the lower level inaccessible. As it is currently built out, Parkhurst represents a potential 280 student capacity.

#### B. Middle School

1. The McCall Middle School is currently experiencing a deficit of three (3) classrooms. The current enrollment is 1,134 students. Various options for adding classrooms were explored. Two (2) areas provide potential. The basement Youth Center can be converted to three (3) classrooms and a three-story addition at end of D-Wing could provide an additional six (6) classrooms. Building out these additional classrooms would bring the capacity of the Middle School to 1,276 students which would be the maximum size considered.
2. In order to accommodate the increase in student enrollment, the existing Cafeteria will need to be expanded to maintain a reasonable lunch schedule. Various options were explored for increasing the Cafeteria capacity. The best option is to expand the cafeteria towards the outside patio with a one story addition. The additional enrollment also increases the need for additional athletic support space. In order to accommodate this need, the large storage area below the E-Wing could be fit out with new team rooms and toilets. These new spaces can also serve the Manchester Field and Knowlton Stadium.

#### C. High School

1. The newly renovated High School has been designed to accommodate 1,370 students. No options for future enrollment were considered in this study.

#### D. Central Offices

1. The Central Offices are currently located in the Parkhurst School. Options for relocating the Central Offices were explored at the various elementary schools, either with an addition or as part of new construction. Ultimately, the Carriage House at the Ambrose School appears to be a perfect fit, both in size and location, and the School Committee identified this as the preferred option by consensus in April.

## K-5 Summary of Options

2026-2027 Ten Year K-5 Enrollment				
	Enrollment	Class Sections	Classrooms	Shortfall
School Year 2016-2017	2,136 <i>actual</i>	110 <i>actual</i>	106 <i>available</i>	4 classrooms
School Year 2026-2027	2,440 <i>proposed</i>	125 <i>required</i>	125 <i>required</i>	125-106= 19 classrooms

Grades K-5 Options for 2026-2027 School Year			
	Lynch Elementary	Muraco Elementary	Vinson-Owen Elementary
<i>Cost of Construction</i>	\$34,658,000 to \$38,124,000	\$30,326,000 to \$33,359,000	\$2,280,000 to \$2,400,000
<i>Construction Contingency</i>	\$3,466,000 to \$3,812,000	\$3,033,000 to \$3,366,000	\$228,000 to \$240,000
<i>Soft Cost</i>	\$10,397,000 to \$11,437,000	\$9,098,000 to \$10,008,000	\$684,000 to \$720,000
<i>Probable Cost Range</i>	\$48,521,000 to \$53,373,000	\$42,457,000 to \$46,733,000	\$3,192,000 to \$3,360,000

Based on Enrollment Numbers  
 Current Enrollment: 2,136 Students  
 2026-2027 Enrollment: 2,434 Students  
 Enrollment Increase: +298 Students

## 6-8 Summary of Options

### Grades 6-8 Options for 2026-2027 School Year

Based on Enrollment Numbers

Current Enrollment: 1,134 Students  
 2026-2027 Enrollment: 1,309 Students  
 Enrollment Increase: +175 Students  
 Classrooms Required: 9 Total

<b>McCall Middle School</b>	Phase I: Youth Center Renovation, 3 Classrooms & Specialist's Space	Phase II: 6 New Classrooms, Cafeteria Expansion, Team Room Fit-Out
Current Enrollment - 1,134	1,194	1,314
Projected Enrollment	60 Additional Students	120 Additional Students
Current Classrooms - 51	51 Classrooms	54 Classrooms
Required Classrooms	54 Total Classrooms	60 Total Classrooms

### Grades 6-8 Options for 2026-2027 School Year

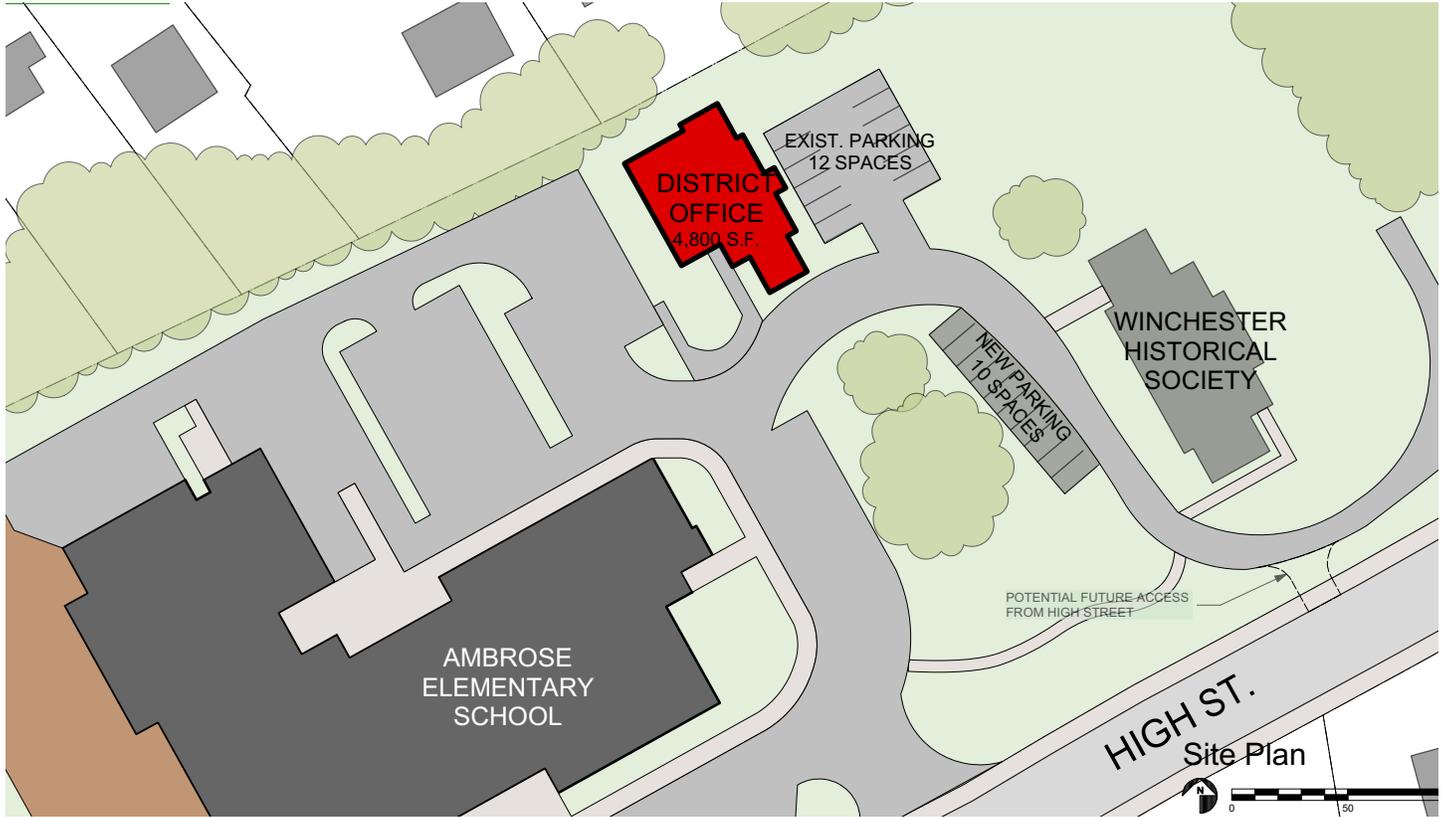
	Classroom Reconfiguration & Specialists' Workroom - Phase 1
Cost of Construction	\$1,000,000* to \$1,100,000*
Construction Contingency	\$100,000 to \$110,000
Soft Cost	\$300,000 to \$330,000
Probable Cost Range	\$1,400,000 to \$1,540,000

	Classroom Addition, Cafeteria Addition, Team Room - Phase 2
Cost of Construction	\$3,976,320 to \$4,373,952
Construction Contingency	\$397,632 to \$437,395
Soft Cost	\$1,192,896 to \$1,312,186
Probable Cost Range	\$5,566,848 to \$6,123,533

\* Add alternates for Outdoor Classroom, entry portico at pedestrian walkway and Teacher's Toilet will add approximately \$200,000 to the cost of construction.

## District Office Relocation

WPS-6 - District Office in the Carriage House at Ambrose Elementary School



<b>District Office Relocation</b>	
	WPS-6
<i>Cost of Construction</i>	\$1,990,000 to \$2,189,000
<i>Construction Contingency</i>	\$199,000 to \$219,000
<i>Soft Cost</i>	\$657,000 to \$722,000
<b><i>Probable Cost Range</i></b>	<b>\$2,846,000 to \$3,130,000</b>

---

## **Section 1 | Enrollments & Design Options**

1.1 Grades PreK-5 Enrollments & Design Options

1.2 Grades 6-8 Enrollments & Design Options

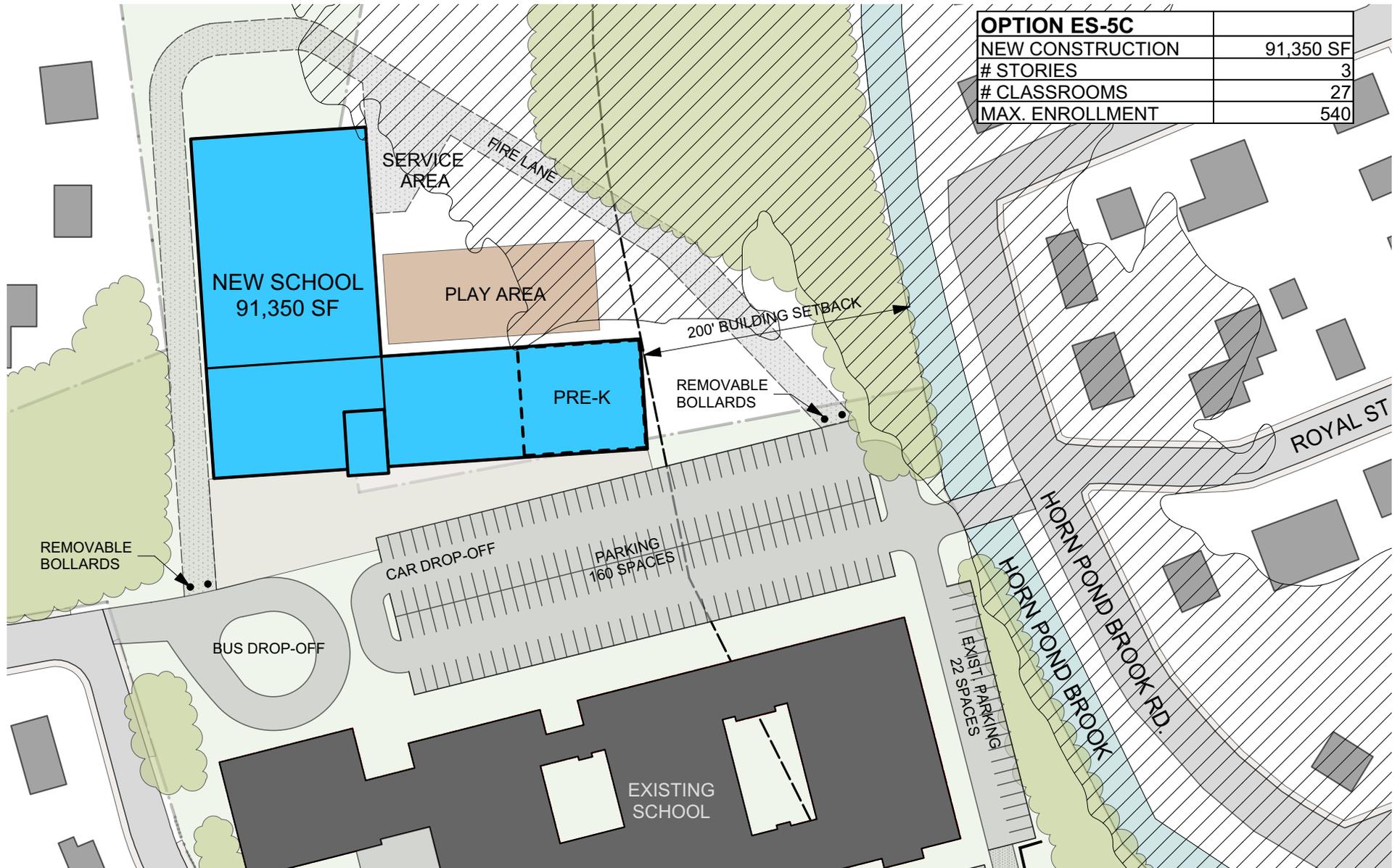
1.3 District Office Relocation Design Options

---

# 2026- 2027 Ten Year K-5 Enrollment

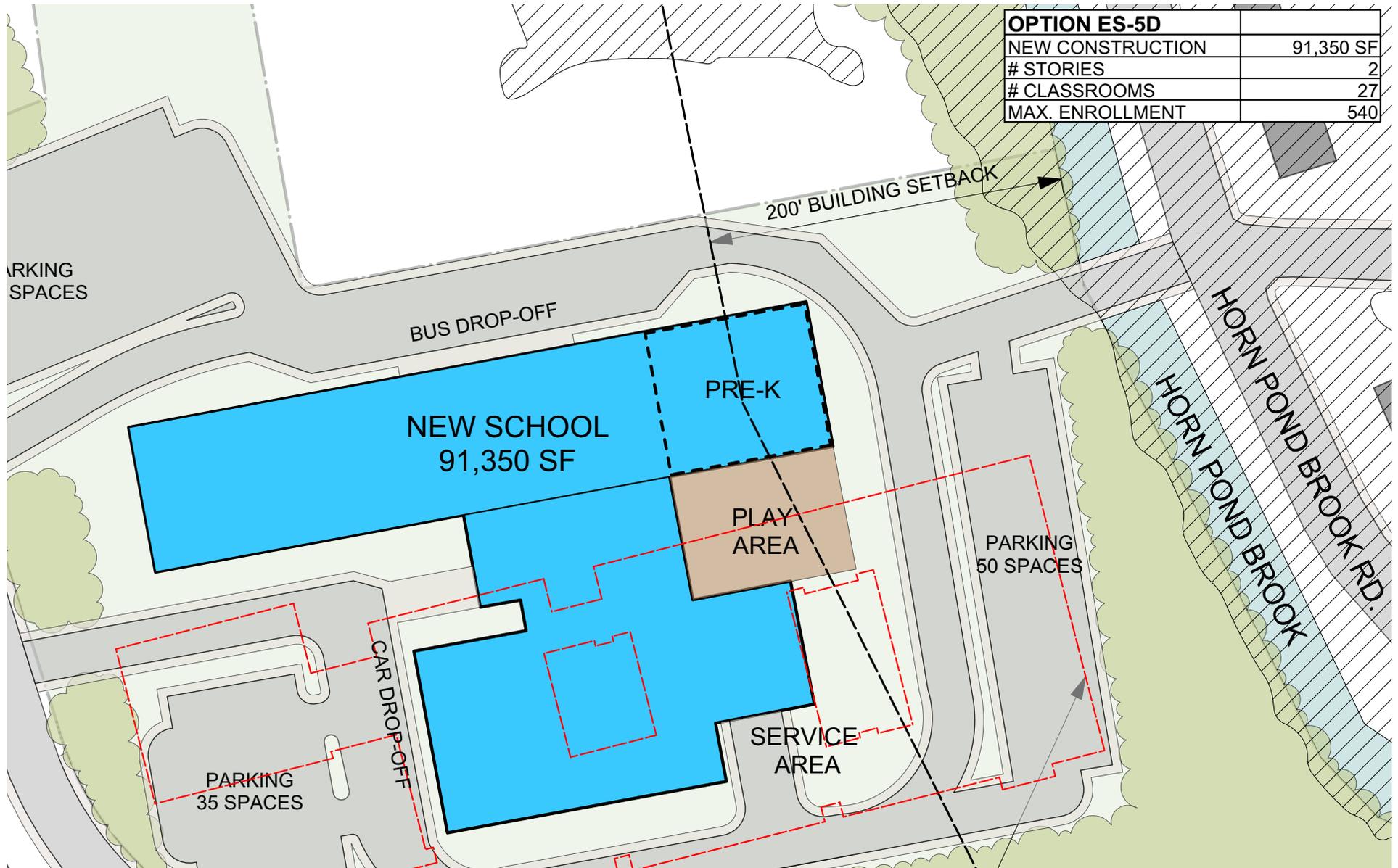
	<u>ENROLLMENT</u>	<u>CLASS SECTIONS</u>	<u>CLASSROOMS</u>	<u>SHORTFALL</u>
SCHOOL YEAR 2016-2017	2,136 <i>actual</i>	110 <i>actual</i>	106 <i>available</i>	4 classrooms
SCHOOL YEAR 2026-2027	2,434 <i>proposed</i>	125 <i>required</i>	125 <i>required</i>	$125-106= 19$ <i>classrooms</i>

**OPTION ES-5C - Lynch Elementary School - Two Stories**

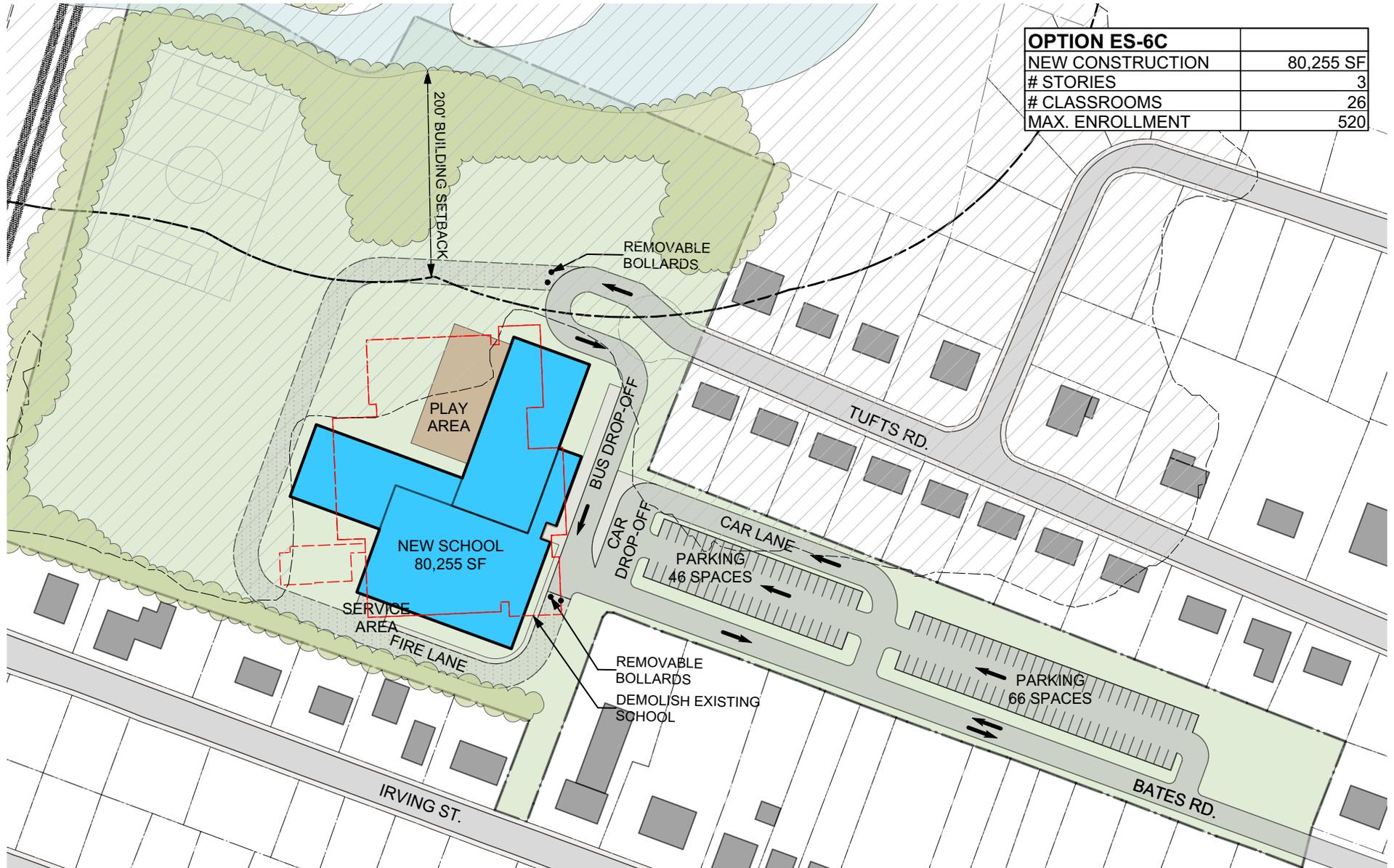


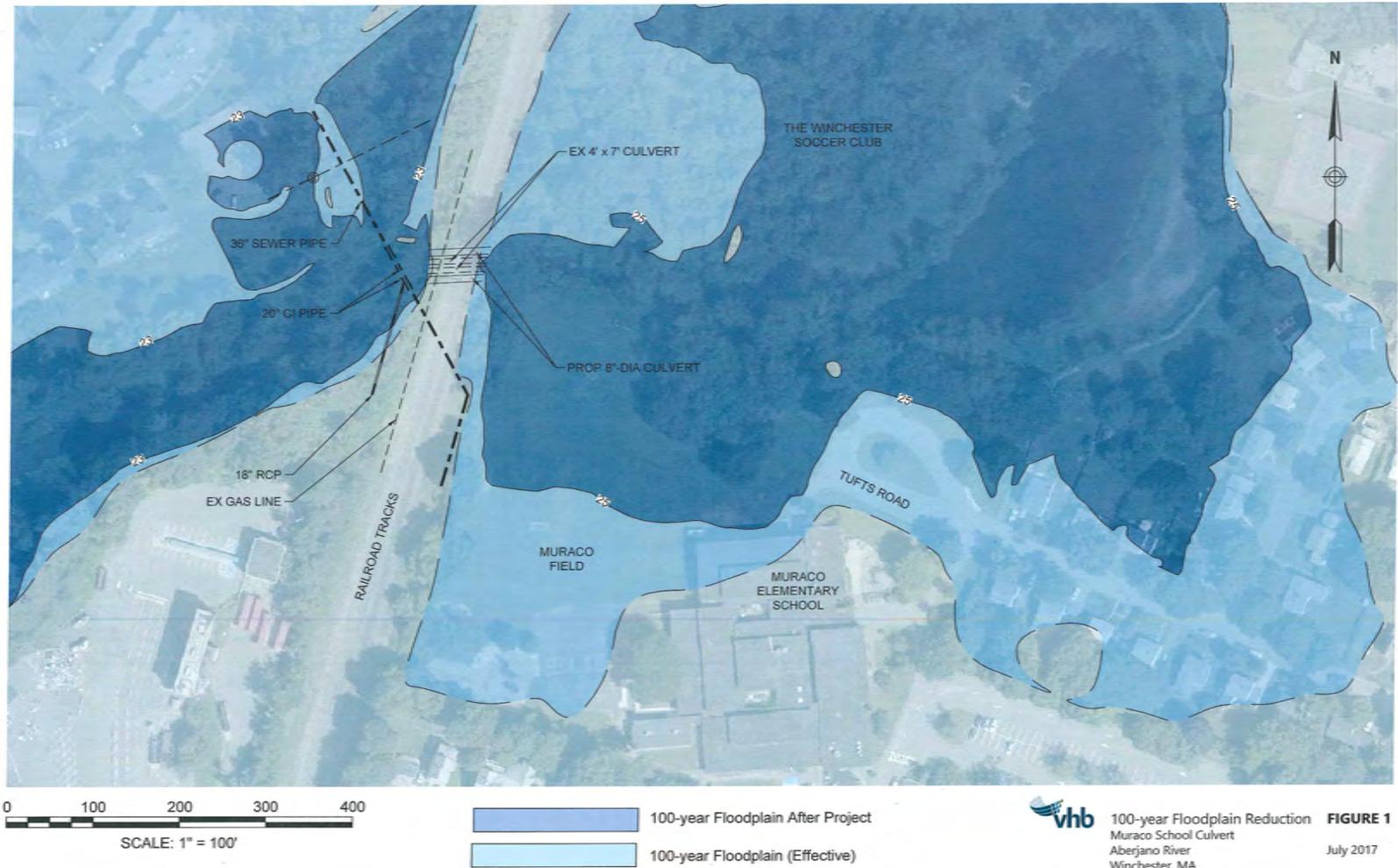
<b>OPTION ES-5C</b>	
NEW CONSTRUCTION	91,350 SF
# STORIES	3
# CLASSROOMS	27
MAX. ENROLLMENT	540

**OPTION ES-5D - Lynch Elementary School - Two Stories**



**OPTION ES-6B- Muraco Elementary School - Three Stories**





Flood Mitigation

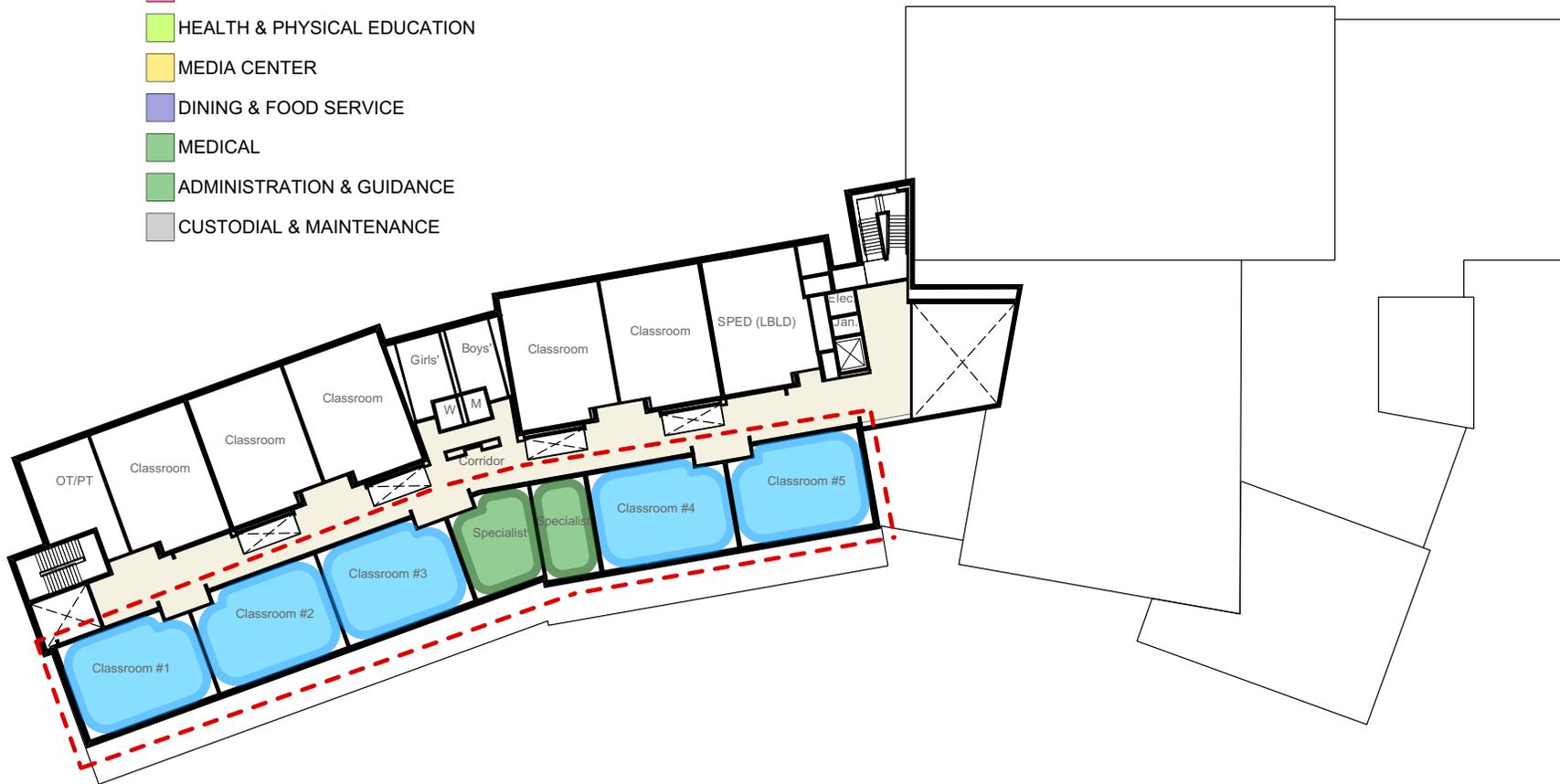
Winchester Flood Mitigation Project 10 is a flood improvement project at the MBTA railroad crossing on the Aberjona River behind the Muraco Elementary School. Currently the railroad crossing consists of two 4-ft x 7-ft box culverts. Project 10 consists of the installation of two additional 8-ft diameter culverts to supplement the existing box culverts and provide more flow capacity under the crossing. The project will reduce 100-year flood levels in the vicinity of the Muraco School from the effective elevation of 28.5 Ft-NAVD88 to 25 ft-NAVD88, thereby reducing floodplain areas and flood depths around the Muraco School. Based on the Winchester’s town-wide topographic survey the school will be removed from the 100-year floodplain, as shown on the attached figure. During construction some temporary laydown space will be required in the rear of the property adjacent to the Aberjona River.

**OPTION ES-8 - Vinson-Owen Elementary School - Third Floor Built-Out**

**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE

<b>OPTION ES-8</b>	
NEW ADDITION	6,200 SF
# STORIES	1
# CLASSROOMS	24E+5 N
MAX. ENROLLMENT	580



# Grades K-5 Options for 2026-2027 School Year

	Lynch Elementary School	Muraco Elementary School	Vinson-Owen Elementary School
<i>Cost of Construction</i>	\$34,658,000 to \$38,124,000s	\$30,326,000 to \$33,359,000	\$2,280,000 to \$2,400,000
<i>Construction Contingency</i>	\$3,466,000 to \$3,812,000	\$3,033,000 to \$3,366,000	\$228,000 to \$240,000
<i>Soft Cost</i>	\$10,397,000 to \$11,437,000	\$9,098,000 to \$10,008,000	\$684,000 to \$720,000
<b><i>Probable Cost Range</i></b>	<b>\$48,521,000 to \$53,373,000</b>	<b>\$42,457,000 to \$46,733,000</b>	<b>\$3,192,000 to \$3,360,000</b>

Based on Enrollment Numbers

Current Enrollment: 2,136 Students  
 2026-2027 Enrollment: 2,434 Students  
 Enrollment Increase:  $240 + 58 = 298$  Students

# Grades 6-8 Options for 2026-2027 School Year

McCall Middle School	Phase I: Youth Center Renovation, 3 Classrooms & Specialist's Space	Phase II: (6) New Classrooms, Cafeteria Expansion, Team Room Fit-Out
<i>Current Enrollment - 1,134</i>	1,194	1,314
<i>Projected Enrollment</i>	60 Additional Students	120 Additional Students
<i>Current Classrooms - 51</i>	51 Classrooms	54 Classrooms
<i>Required Classrooms</i>	54 Total Classrooms	60 Total Classrooms

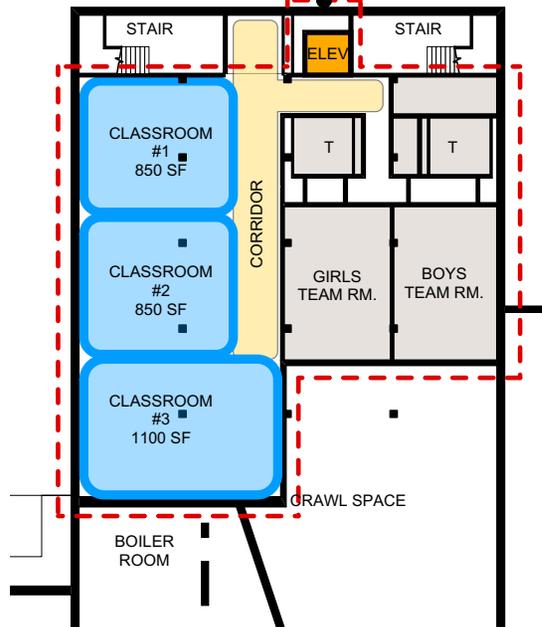
**Based on Enrollment Numbers**

*Current Enrollment:* 1,134 Students  
*2026-2027 Enrollment:* 1,309 Students  
*Enrollment Increase:* +175 Students  
*Classrooms Required:* 9 Total

**McCALL MIDDLE SCHOOL - Phase I, Conceptual Plan**

**EXTENT OF RENOVATED AREA**

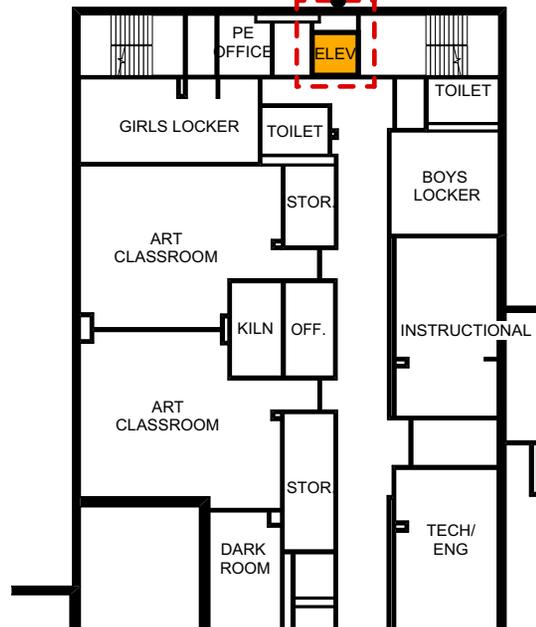
- New Elevator
- Three Classrooms at 745 sf
- Toilets and Team Rooms Remain



**BASEMENT LEVEL PLAN**

**EXTENT OF RENOVATED AREA**

- New Elevator Connection



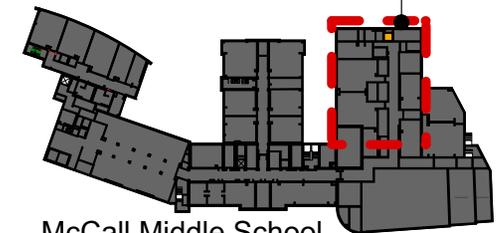
**FIRST FLOOR PLAN**

**PROJECT SUMMARY:**

The lower level area, currently utilized for the "Youth Center Program", will be reconfigured to accommodate three classrooms. Classrooms will have natural light with views to the exterior. Team Rooms will remain to support field activities. A new elevator will connect the lower level to the first floor in the area adjacent to the existing egress stair.

**EXTENSIVE RENOVATION**

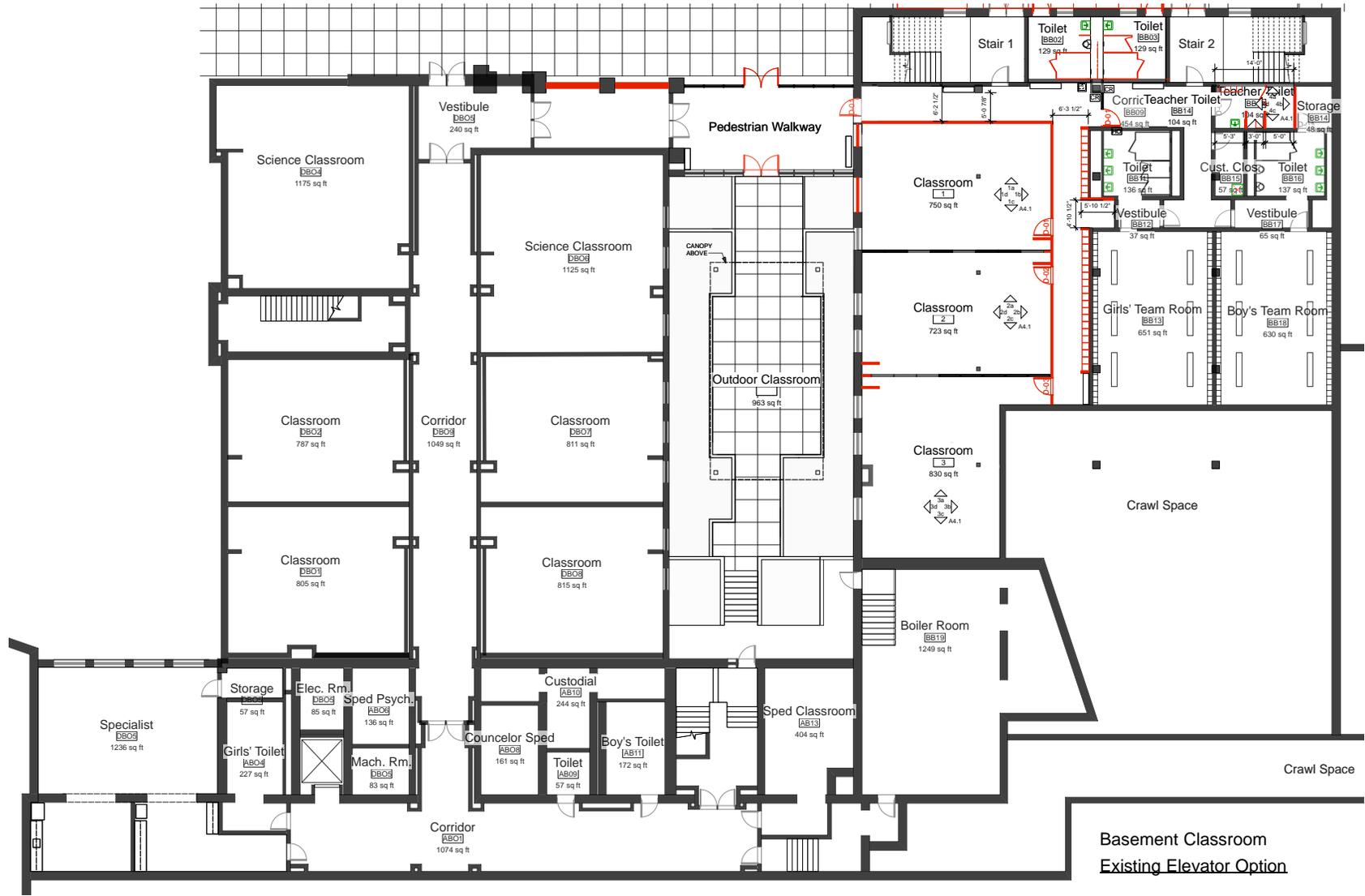
Lower Level Area: 5,500 square feet  
 First Floor Area: 300 square feet  
 Total Area: 5,800 square feet



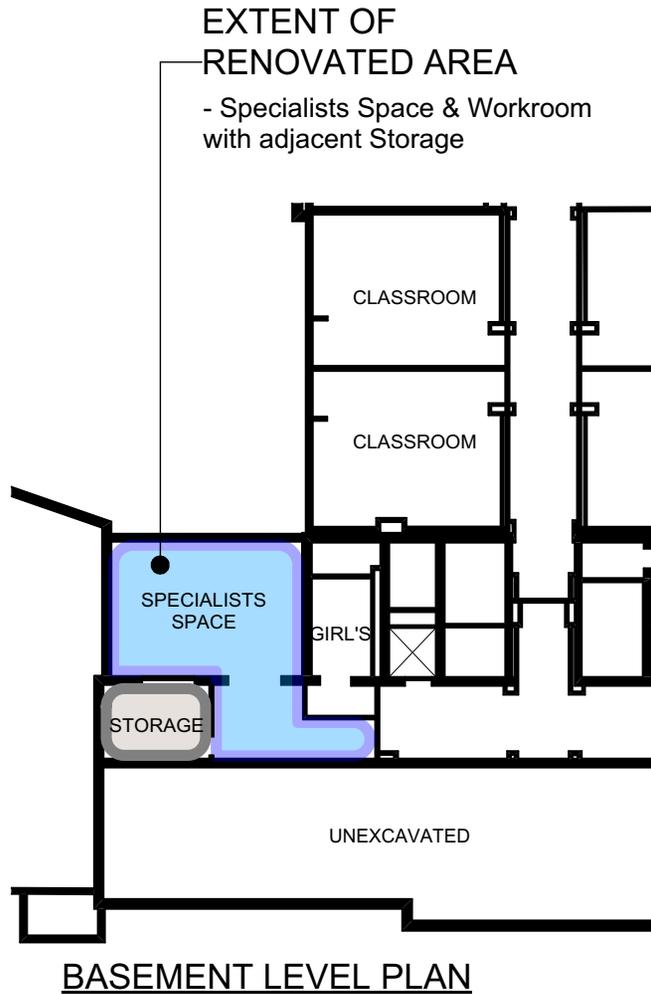
**McCall Middle School  
KEYPLAN**



**MCCALL MIDDLE SCHOOL - Phase I Preferred Option with Pedestrian Walkway, No New Elevator**

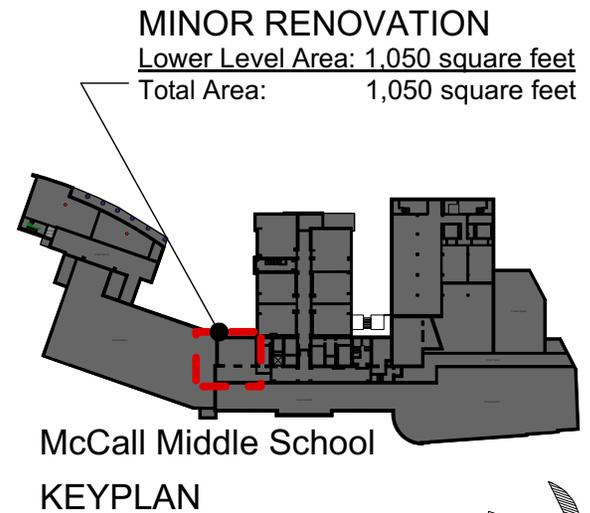


**McCALL MIDDLE SCHOOL - Phase I**



**PROJECT SUMMARY:**

The lower level area, currently utilized for Building Storage, will be reconfigured to accommodate a new Specialists Space & Workroom with adjacent Storage



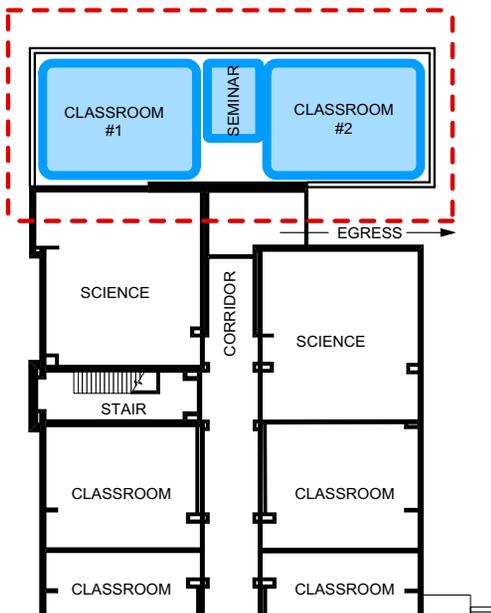
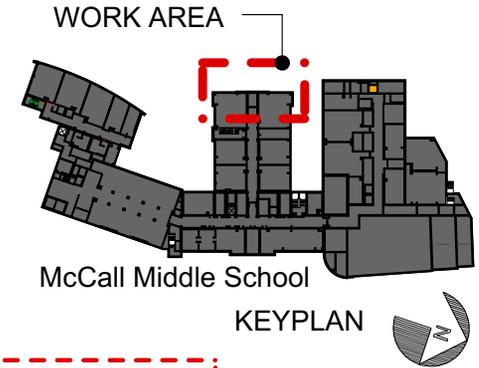
**McCALL MIDDLE SCHOOL - Phase II**

**McCall Middle School - Classroom Addition**

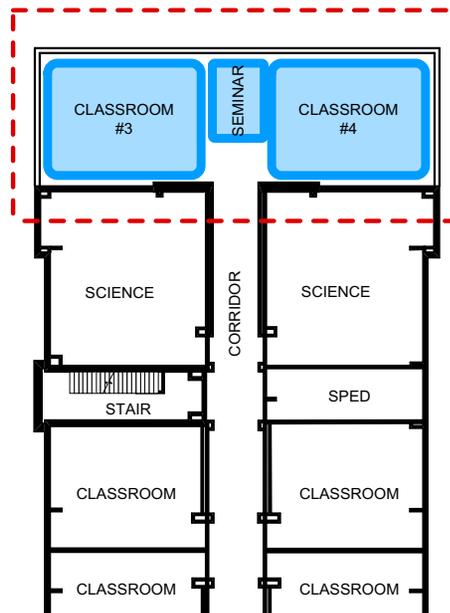
**PROJECT SUMMARY:**

A new building addition will be located on the west side of the existing school. The new addition will accommodate two classrooms per floor on the lower and first floors. The library will have the support of two new resource rooms on the second floor.

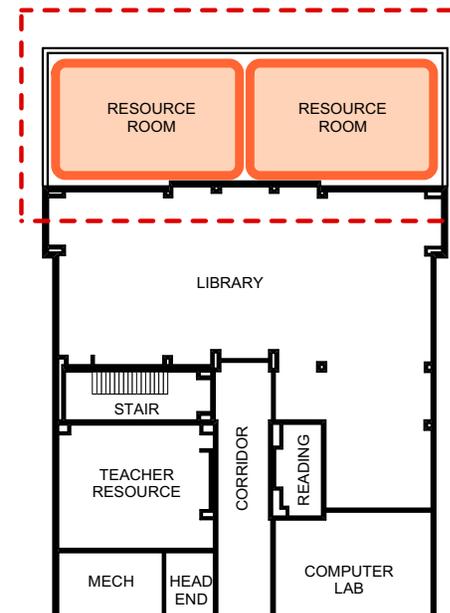
Areas by Floor  
 Lower Level Area: 2,400 square feet  
 First Floor Area: 2,400 square feet  
Second Floor Area: 2,400 square feet  
 Total Area: 7,200 square feet



**BASEMENT LEVEL PLAN**

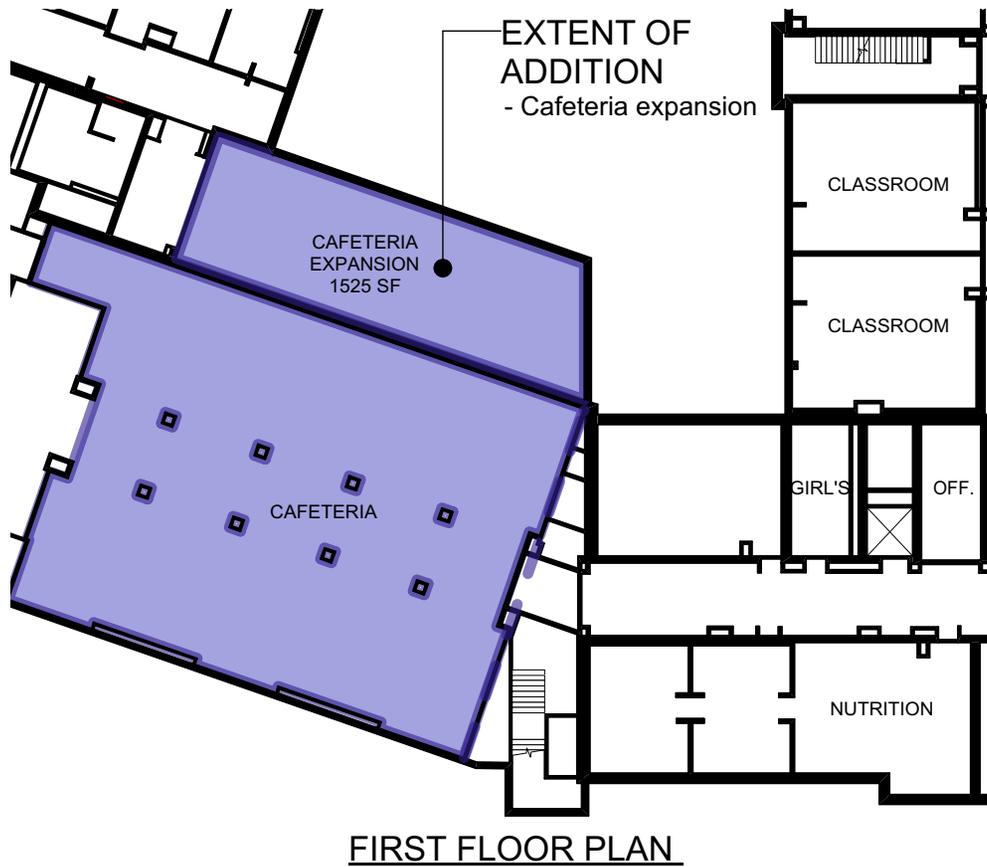


**FIRST FLOOR PLAN**



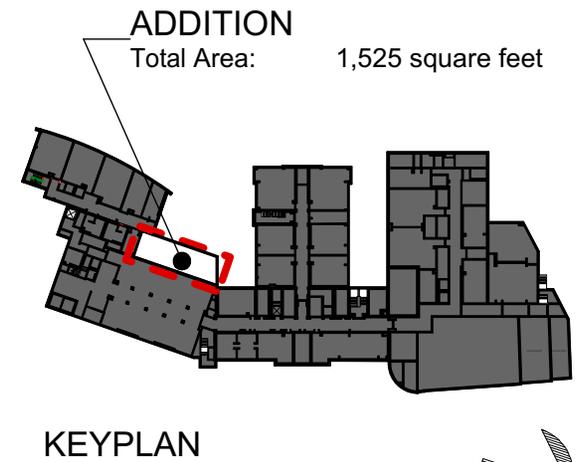
**SECOND FLOOR PLAN**

McCALL MIDDLE SCHOOL - Phase II

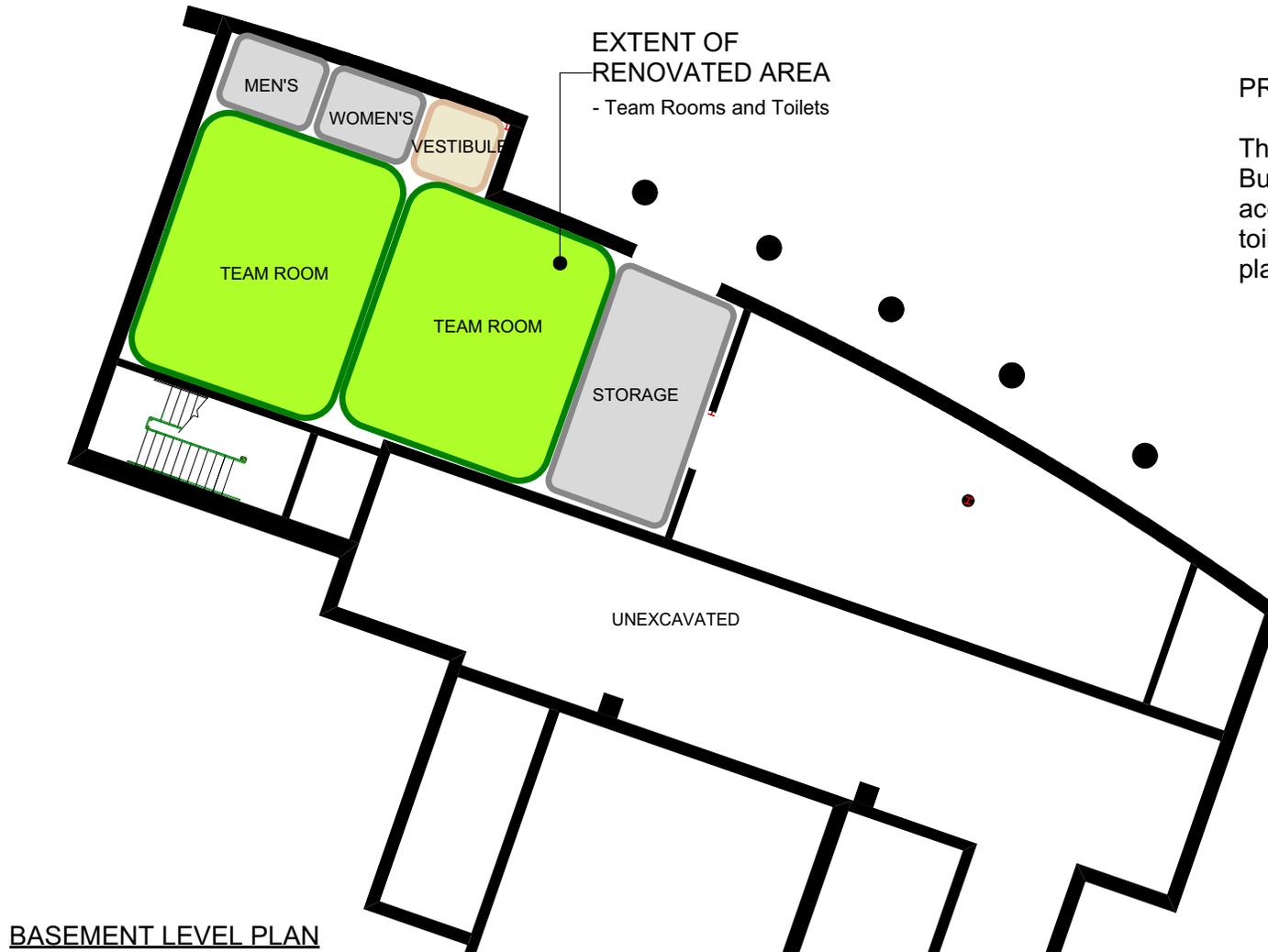


PROJECT SUMMARY:

The first floor plan expands the cafeteria onto the exterior terrace.



McCALL MIDDLE SCHOOL - Phase II

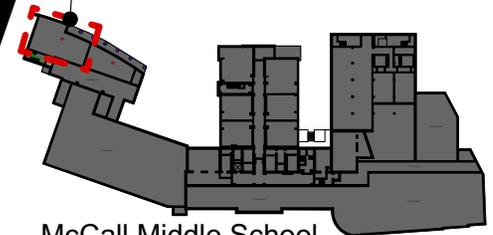


EXTENT OF RENOVATED AREA  
- Team Rooms and Toilets

PROJECT SUMMARY:

The lower level area, currently utilized for Building Storage, will be reconfigured to accommodate new Team Rooms and toilets rooms with access to the adjacent playing field.

MINOR RENOVATION  
Lower Level Area: 1,770 square feet  
Total Area: 1,770 square feet



McCall Middle School  
KEYPLAN



BASEMENT LEVEL PLAN

# Grades 6-8 Options for 2026-2027 School Year

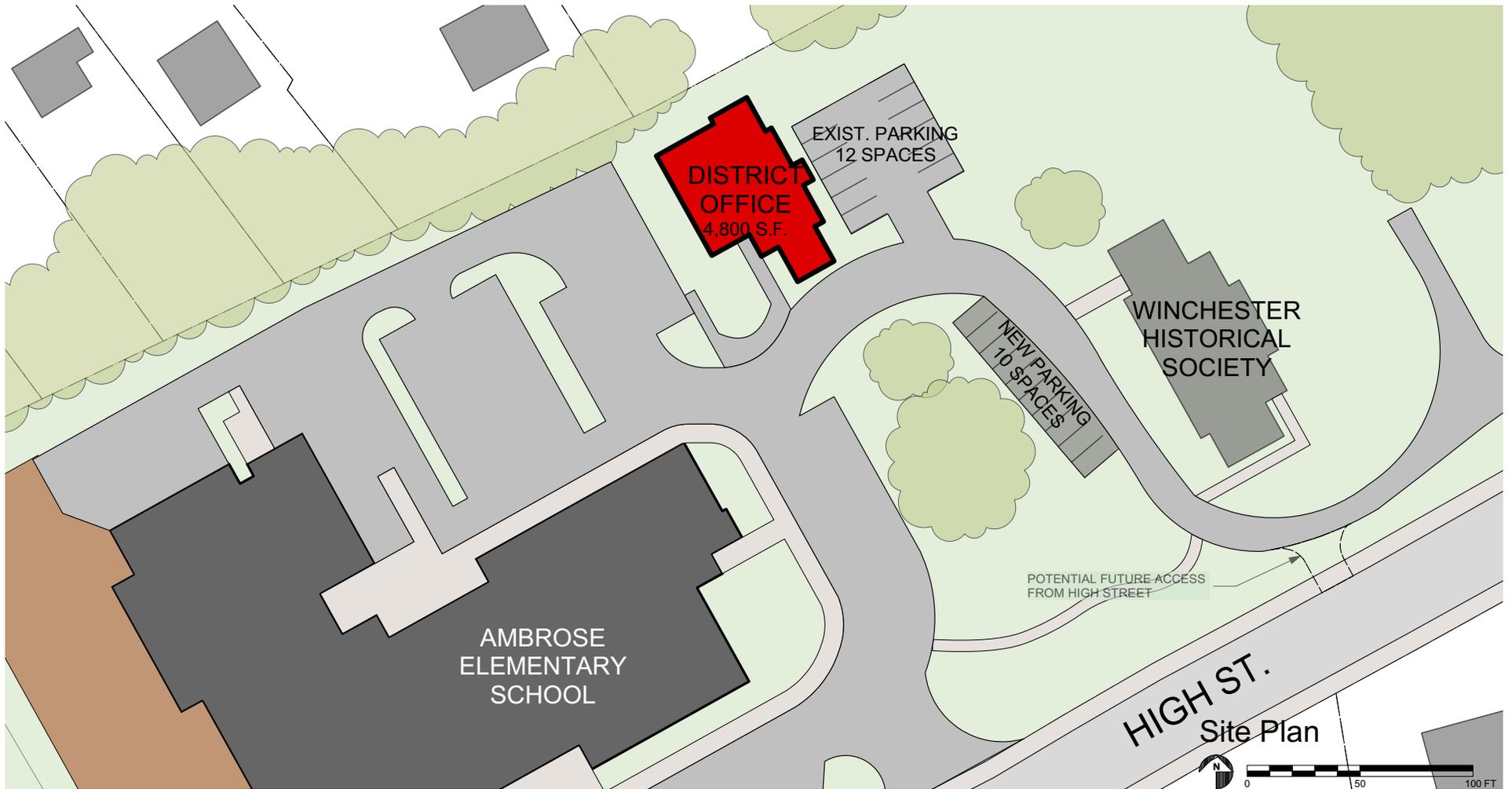
	Phase I: Youth Center Renovation, 3 Classrooms & Specialist's Space	Phase II: New Classrooms, Cafeteria Expansion, Team Room Fit-Out
<i>Cost of Construction</i>	\$1,000,000* to \$1,100,000*	\$3,976,320 to \$4,373,952
<i>Construction Contingency</i>	\$100,000 to \$110,000	\$397,632 to \$437,395
<i>Soft Cost</i>	\$300,000 to \$330,000	\$1,192,896 to \$1,312,186
<b><i>Probable Cost Range</i></b>	<b><i>\$1,400,000 to \$1,540,000</i></b>	<b><i>\$5,566,848 to \$6,123,533</i></b>

\* Add alternates for Outdoor Classroom, entry portico at pedestrian walkway and Teacher's Toilet will add approximately \$200,000 to the cost of construction.

**Based on Enrollment Numbers**

<i>Current Enrollment:</i>	<i>1,134 Students</i>
<i>2026-2027 Enrollment:</i>	<i><u>1,309 Students</u></i>
<i>Enrollment Increase:</i>	<i>+175 Students</i>

**WPS-6 - District Office in the Carriage House at Ambrose Elementary School**



# District Office Relocation

## WPS-6

<i>Cost of Construction</i>	\$1,990,000 to \$2,189,000
<i>Construction Contingency</i>	\$199,000 to \$219,000
<i>Soft Cost</i>	\$657,000 to \$722,000
<b><i>Probable Cost Range</i></b>	<b>\$2,846,000 to \$3,130,000</b>

---

## **Section 2 | Existing Conditions**

2.1 Ambrose Elementary School

2.2 Lincoln Elementary School

2.3 Lynch Elementary School

2.4 McCall Middle School

2.5 Muraco Elementary School

2.6 Mystic Elementary School

2.7 Parkhurst Elementary School

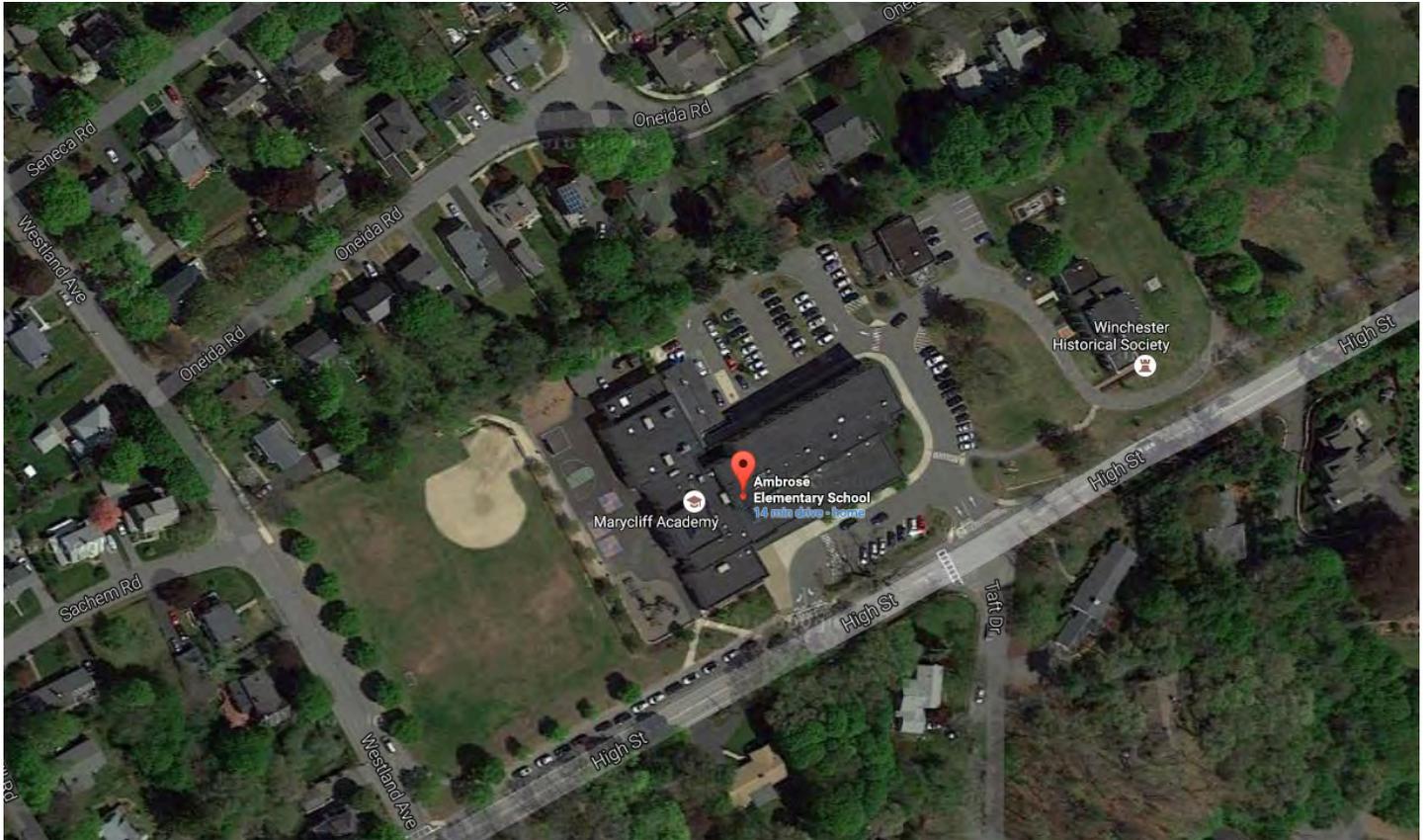
---



## 2.1 | Ambrose Elementary School

Architecture

Section 2 | Ambrose Elementary School Existing Conditions



**Unofficial Property Record Card - Winchester, MA**  
**General Property Data**

Parcel ID **2110**  
 Prior Parcel ID **-**  
 Property Owner **AMBROSE SCHOOL**  
 Mailing Address **27 HIGH STREET**  
 City **WINCHESTER**  
 Mailing State **MA** Zip **01890**  
 ParcelZoning **SCI**

Account Number  
 Property Location **27 HIGH ST**  
 Property Use **MUNICPL**  
 Most Recent Sale Date **9/30/1969**  
 Legal Reference **11745-468**  
 Grantor **RELIGIOUS OF CHRISTIAN ED**  
 Sale Price **0**  
 Land Area **0.000 acres**

**Current Property Assessment**

Card 2 Value	Building Value <b>31,212,700</b>	Xtra Features Value <b>0</b>	Land Value <b>0</b>	Total Value <b>31,212,700</b>
Total Parcel Value	Building Value <b>33,901,700</b>	Xtra Features Value <b>16,500</b>	Land Value <b>1,216,100</b>	Total Value <b>35,134,300</b>

**Building Description**

Building Style **SCHOOL**  
 # of Living Units **1**  
 Year Built **2005**  
 Building Grade **VERY GOOD**  
 Building Condition **Very Good**  
 Finished Area (SF) **83375**  
 Number Rooms **0**  
 # of 3/4 Baths **0**

Foundation Type **CONCRETE**  
 Frame Type **STEEL**  
 Roof Structure **OTHER**  
 Roof Cover **TAR+GRAVEL**  
 Siding **BRICK**  
 Interior Walls **PLASTER**  
 # of Bedrooms **0**  
 # of 1/2 Baths **6**

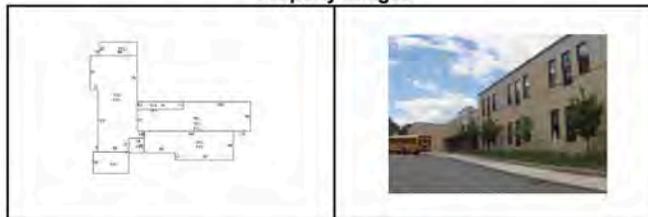
Flooring Type **LINO/VINYL**  
 Basement Floor **CONCRETE**  
 Heating Type **FORCED H/A**  
 Heating Fuel **GAS**  
 Air Conditioning **100%**  
 # of Bsmt Garages **0**  
 # of Full Baths **0**  
 # of Other Fixtures **0**

**Legal Description**

**Narrative Description of Property**

This property contains 0.000 acres of land mainly classified as MUNICPL with a(n) SCHOOL style building, built about 2005, having BRICK exterior and TAR+GRAVEL roof cover, with 1 unit(s), 0 room(s), 0 bedroom(s), 0 bath(s), 6 half bath(s).

**Property Images**



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.





**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE



Third Floor Plan



SPACE SUMMARY				
Room #	Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>				
23		23	20808	23
144	Classroom		854	1
145	Classroom		854	1
146	Classroom		864	1
214	Classroom		865	1
215	Classroom		879	1
216	Classroom		852	1
217	Classroom		854	1
218	Classroom		862	1
242	Classroom		866	1
243	Classroom		860	1
244	Classroom		850	1
301	Classroom		860	1
302	Classroom		868	1
303	Classroom		850	1
304	Classroom		851	1
305	Classroom		849	1
306	Classroom		867	1
A-01	Classroom		883	1
A-02	Classroom		883	1
163	Kindergarten		1107	1
167	Kindergarten		1094	1
170	Kindergarten		1135	1
140	Pre-Kindergarten		1101	1
<b>SPECIAL EDUCATION</b>				
5		5	1755	5
134	OT/PT		501	1
221	Sped Office		159	1
315	Sped Office		231	1
219	Sped Res. Classroom		653	1
224	Speech/Lang.		211	1
<b>ART &amp; MUSIC</b>				
7		7	3351	7
241	Art		1348	1
234	Kiln		72	1
111	Music		1029	1
106	Platform		761	1
112	Practice		83	1
107	Storage		28	1
108	Storage		30	1
<b>VOCATIONS &amp; TECHNOLOGY</b>				
0		0	0	0
<b>HEALTH &amp; PHYSICAL EDUCATION</b>				
0		0	0	0
<b>MEDIA CENTER</b>				
4		4	2748	4
208	Library		2171	1
207	Office		124	1
201	Reading Room		432	1
206	Storage		21	1
<b>DINING &amp; FOOD SERVICE</b>				
4		4	3079	4
127	Cafeteria		2351	1
126	Kitchen		270	1
118	Lounge		364	1
123	Storage		94	1
<b>MEDICAL</b>				
3		3	597	3
162	Exam		132	1
159	Health		316	1
178	Toilet		149	1
<b>ADMINISTRATION &amp; GUIDANCE</b>				
10		10	2826	10
155	Administration		463	1
157	Conference		251	1
133	Office		219	1
161	Principal's Office		270	1
223	Psych.		208	1
132	Storage		17	1
120	Workroom		217	1
130	Workroom		586	1
156	Workroom		143	1
239	Workroom		452	1
<b>CUSTODIAL &amp; MAINTENANCE</b>				
12		12	1248	12
125	Cust.		116	1
138	Cust.		89	1
212	Cust.		45	1
230	Cust.		71	1
308	Cust.		45	1
202	Data		190	1
231	Data		60	1
104	Office		172	1
311	Radio		38	1
203	Storage		254	1
209	Storage		75	1
131	Tel.		93	1
<b>OTHER</b>				
1		1	754	1
211	Computer Lab		754	1
<b>TOTAL BUILDING GROSS FLOOR AREA</b>				
		3	65796	3
	Floor 1		33285	1
	Floor 2		22206	1
	Floor 3		10305	1

SPACE SUMMARY				
Room #	Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>				
1		3	20808	23
---	Classroom		16371	19
---	Kindergarten		3336	3
140	Pre-Kindergarten		1101	1
<b>SPECIAL EDUCATION</b>				
3		4	1755	5
134	OT/PT		501	1
---	Sped Office		390	2
219	Sped Res. Classroom		653	1
224	Speech/Lang.		211	1
<b>ART &amp; MUSIC</b>				
5		6	3351	7
241	Art		1348	1
234	Kiln		72	1
111	Music		1029	1
106	Platform		761	1
112	Practice		83	1
---	Storage		58	2
<b>VOCATIONS &amp; TECHNOLOGY</b>				
0		0	0	0
<b>HEALTH &amp; PHYSICAL EDUCATION</b>				
0		0	0	0
<b>MEDIA CENTER</b>				
4		4	2748	4
208	Library		2171	1
207	Office		124	1
201	Reading Room		432	1
206	Storage		21	1
<b>DINING &amp; FOOD SERVICE</b>				
4		4	3079	4
127	Cafeteria		2351	1
126	Kitchen		270	1
118	Lounge		364	1
123	Storage		94	1
<b>MEDICAL</b>				
3		3	597	3
162	Exam		132	1
159	Health		316	1
178	Toilet		149	1
<b>ADMINISTRATION &amp; GUIDANCE</b>				
10		10	2826	10
155	Administration		463	1
157	Conference		251	1
133	Office		219	1
161	Principal's Office		270	1
223	Psych.		208	1
132	Storage		17	1
120	Workroom		217	1
130	Workroom		586	1
156	Workroom		143	1
239	Workroom		452	1
<b>CUSTODIAL &amp; MAINTENANCE</b>				
3		6	1248	12
---	Cust.		366	5
---	Data		250	2
104	Office		172	1
311	Radio		38	1
---	Storage		329	2
131	Tel.		93	1
<b>OTHER</b>				
1		1	754	1
211	Computer Lab		754	1
<b>TOTAL BUILDING GROSS FLOOR AREA</b>				
		3	65796	3
	Floor 1		33285	1
	Floor 2		22206	1
	Floor 3		10305	1

**ARCHITECTURE**

*Organization*

The Ambrose School was built in early 2006 and is approximately 765,000 square feet, excluding the modular classrooms added on in 2010. The building contains classrooms, a cafetorium, a gymnasium, and offices.

*Circulation*

The building is a three (3) story double loaded corridor T-shaped structure. The gym and cafeteria are at the west end of the building. The second level includes a library, an art room, and general classrooms. The third floor consists of classrooms along a single loaded corridor.

*Program and Space Issues*

The Ambrose School includes approximately 23 classroom spaces of various square feet from 800 – 1,200. Comparisons with current MSBA space standards indicate that classrooms and core academic spaces are undersized. See the chart below.

	Ambrose Elementary	MSBA Standards
Classroom	860 square feet	950 square feet
Music	1,029 square feet	1,200 square feet
Library	2,171 square feet	2,020 square feet
Art	1,348 square feet	1,000 square feet
Gymnasium	4,136 square feet	6,000 square feet

*Physical Condition of Exterior Envelope - Walls*

The building is faced with beige brick in a running bond pattern, no roof overhangs, and large areas of window walls. Generally, the exterior is in good condition. The exterior requires minor maintenance items to ensure longevity of the facade. Refinishing of the wood facade and benches at the main entrance is recommended. See the charts below.

Representative R-Values (2006 Walls)	
4" Brick	0.44
2" Air Space	0.44
Insulation	2.02
Sheathing	1.32
Study Activity	4.38
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>8.56</b>
<b>WINDOW DOUBLE PANE R-VALUE</b>	<b>0.91</b>
2006: 4" exterior brick, 6" masonry cavity wall	

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
Face Brick	0.39
Air Space	2.02
Air & Vapor Barrier	0.15
1/2" Gypsum Sheathing	0.45
Insulation	22.00
Vapor Barrier	0.15
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>25.61</b>
<b>WINDOW TRIPLE PANE R-VALUE</b>	<b>5.00</b>

#### *Physical Condition of Exterior Envelope - Windows*

The windows are all originally aluminum windows with double glazing. The windows are in good condition require minimal maintenance to ensure years of operation.

#### *Physical Condition of Exterior Envelope - Roof*

The roofing is membrane and original to the building. Generally, the roofing appears to be in good condition. See the charts below.

<i>Ambrose Existing Roof Condition</i>	
Rubber Membrane	0.40
3" Insulrock Insulation	7.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>12.40</b>

<i>Roof Construction - Today's Minimum Standard</i>	
Rubber/PVC	0.40
4" Polyisocyanurate	30.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>35.40</b>

#### *Interior*

Finishes are well suited for school use, but are worn and many areas need to be replaced. Light quality is generally good.

#### *Interior Partitions*

In general, all interior partitions appear to be in good condition. The type of partition varies throughout the building as follows:

- Painted concrete masonry units
- Painted drywall

#### *Flooring*

In general, the flooring is VCT and has minor damage in multiple locations. The flooring in the cafeteria has minor damage and should be repaired. The type of flooring that exists is as follows:

## Section 2 | Ambrose Elementary School Existing Conditions



*Roof conditions*



*Windows at exterior*



*Typical flooring in hallways*



*Typical stairway*

- Vinyl Composition tile (12x12)
- Wood floor at gymnasium
- Sheet vinyl in the cafeteria

### *Wall Base*

The wall base is rubber of various sizes. All base material appear to be in fair to good condition.

### *Ceilings*

The ceilings are a combination of 2x4 acoustical tile, and drywall, and are generally in good condition. The existing ceilings consist of the following types:

- Suspended acoustical tile
- Drywall

### *Doors and Frames*

Doors are generally wood are in good condition. The conditions are fair to good. Door hardware meets accessibility guidelines.

### *Fire Extinguishers*

Fire extinguishers are in compliance with codes.

***Tackboards and Markerboards***

Tackboards and markerboards are existing throughout and appear to be in good condition. Fire code regulations do not allow for tackboards to be within 5 feet of egress doors.

***Regulations***

The existing facility as a whole is in compliance with the original code, however, this does not mean it meets every standard of the current code. In accordance with the current code, an existing building is presumed to have met the codes and regulations in effect at the time of its construction and is allowed to continue in its use, provided it is maintained per the original code. Current building codes are applicable to any alteration or addition or change in use of the structure in accordance with 780 CMR 34.

***Code Classification 780 CMR 302.1***

The occupancy of the facility is non-separated mixed use with assembly and educational uses as follows:

Classrooms, Offices	E-Educational
Auditorium	A3-Assemble

***Construction Classification***

Based upon the definitions in the current code, the minimum classification of the building is as follows:

3B Noncombustible

***Chapter 34: Repair, Alteration, Addition and Change of Use of Existing Buildings***

A renovation project is governed by Chapter 34. This chapter is “intended to maintain or increase public safety, health, and general welfare, without requiring full compliance with the code for new construction.”

- i. Building renovation – For continuation of the same use groups the building shall comply with 780 CMR 3404.0.
- ii. New Building Systems – Any new building system or portion thereof shall conform to 780 CMR for new construction to the fullest extent practical.
- iii. Alterations and Repairs – Alterations of repairs to existing buildings, which maintain or improve the performance of the building may be made with like material, unless required otherwise under 780 CMR 3408 – Structural Requirements for Existing Buildings.
- iv. Number of Means of Egress – Egress for the existing facility is sufficient in accordance with the current building code.
- v. Capacity of Exits – There is sufficient egress capacity to meet current codes at the doors throughout the facility.
- vi. Length of Access Travel – Shall not exceed 200 feet, in building without a sprinkler system. All areas of the existing building are within 200 feet of an exit.
- vii. Exit Signs and Lights – For notes on the existing system, refer to the Electrical Existing Conditions Report.
- viii. Means of Egress Lighting – Refer to the Electrical Existing Conditions Report.
- ix. Height and Area Limitations – Under Chapter 34, the building is in conformance with applicable height and area limitations, so long as there is no change in use. Additions may be made to the structure.
- x. Fire Protection Systems – Fire protections systems must be provided for existing building that are “substantially” altered or “substantially” renovated where required for the specific use group.
- xi. Enclosure of Stairways – open egress stairways are prohibited. There shall be no minimum fire resistance rating required for an existing enclosure of a stairway.
- xii. Assembly Use Groups – Any alteration within an assembly use group shall comply with the code for new construction. This applies to the cafeteria, auditorium and gymnasium

## Section 2 | Ambrose Elementary School Existing Conditions

- xiii. Accessibility for Persons with Disabilities – Accessibility for persons with disabilities shall be provided in accordance with the regulations of the Architectural Access Board.
- xiv. Energy Provisions for Existing Buildings – Alterations to components affecting energy conservation performance shall comply with 780 CMR 13 generally, and 780 CMR 1304.2 or 780 CMR 1304.5 or 780 CMR 1309 specifically. Existing components may remain.
- xv. Evaluation of Existing Building – The structural engineer shall make a structural evaluation of the existing building to determine the adequacy of all structural systems that are affected by alteration or damage to be repaired.
- xvi. Existing Lateral Load Capacity (Refer to Structural Existing Conditions Report for further information) – Alterations shall not be made to elements or systems contributing to the lateral load resistance unless the altered lateral load resisting system conforms to 780 CMR 1611.0 and 1612.0; or there is no reduction in the lateral capacity to the building as a whole. Existing elements of systems may be reinforced or replaced with new elements or systems of equivalent strength and stiffness.
- xvii. Earthquake Loads (Refer to Structural Existing Conditions Report for further information) – For no change in use groups, but alterations exceeding 50% of the assessed valuation of the building, the project is defined as Seismic Hazard Category 2.
- xviii. Earthquake resistance shall comply with the requirements of 780 CMR 3408.3.5
- xix. The provisions of 780 CMR 34 govern Fire Resistant Materials – Fire resistance construction systems.

### *Interior Finishes 780 CMR 8*

Interior trim and finishes altered as a part of a renovation shall conform to the requirements of 780 CMR 801. Flame spread of Interior Finishes for the E and A-3 use groups, shall conform to Table 803.4. Existing finishes are code compliant.

The State Fire Marshall introduced regulations in 2003 restricting display of paper in egress areas. The provisions are as follows:

- i. Paper display in classrooms shall not exceed 20% of the wall area. Measurement of wall area shall include windows and doors.
- ii. Paper display in corridors shall not exceed 10% of the wall area and shall not be placed within 5 feet of an egress door. It shall be applied directly to the wall and shall not be grouped in areas bigger than 6 feet by 12 feet.

### *Handicap Accessibility*

The building is in compliance with Massachusetts Architectural Access Board (MAAB) regulations.

### *Mechanical Engineering*

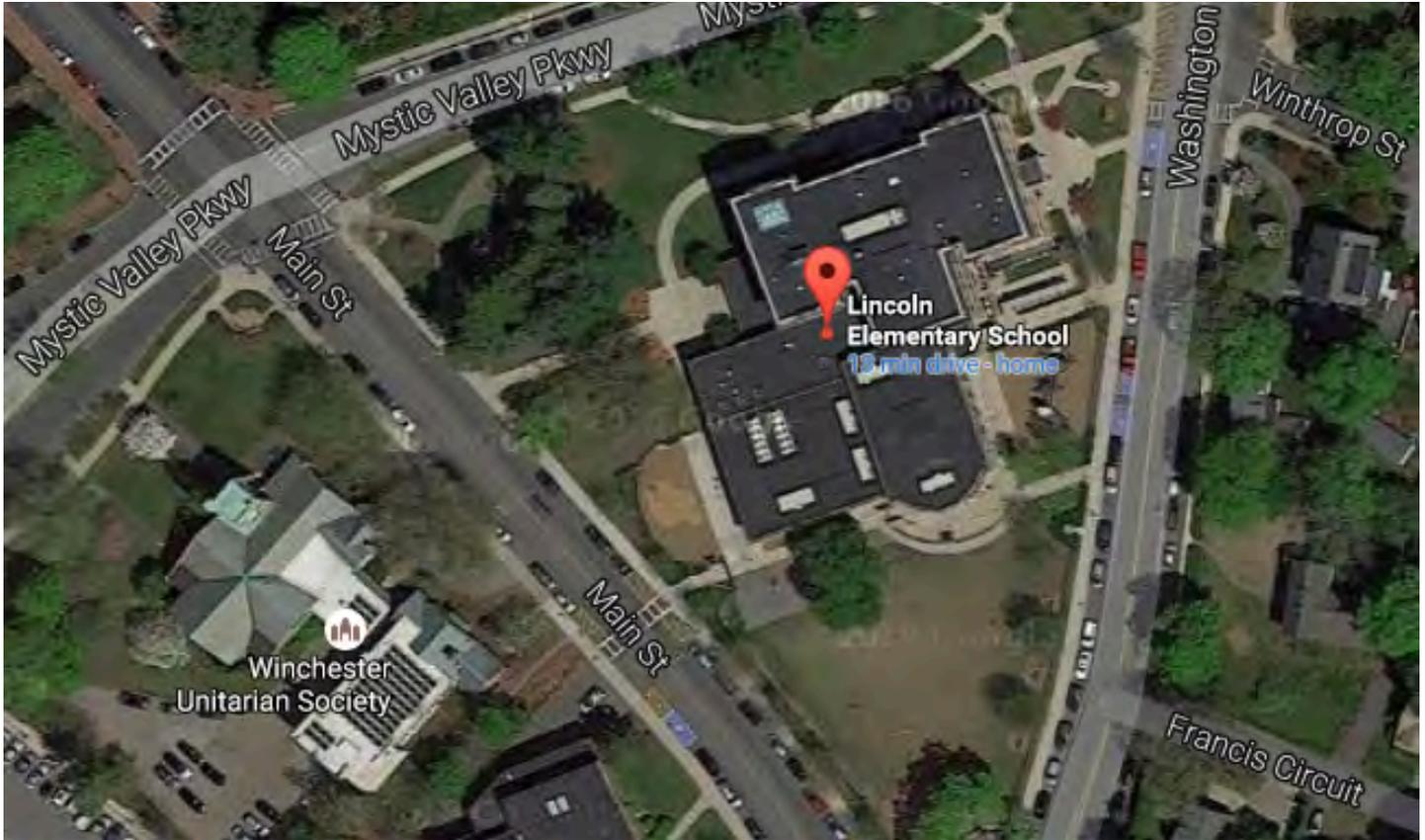
Overall the Ambrose Elementary School systems are in good condition. The school was opened in 2005, so the mechanical, electrical and fire protection systems are only eleven years old.

Systems require normal maintenance.



## 2.2 | Lincoln Elementary School

Architecture



**Unofficial Property Record Card - Winchester, MA**

**General Property Data**

Parcel ID **9 3 0**  
 Prior Parcel ID **-**  
 Property Owner **LINCOLN SCHOOL**  
 Mailing Address **161 MYSTIC VALLEY RD**  
 City **WINCHESTER**  
 Mailing State **MA** Zip **01890**  
 ParcelZoning **RDB**

Account Number  
 Property Location **161 MYSTIC VALLEY PW**  
 Property Use **PSCHOOL**  
 Most Recent Sale Date **2/6/1963**  
 Legal Reference **N/A**  
 Grantor **LINCOLN SCH**  
 Sale Price **0**  
 Land Area **3.006 acres**

**Current Property Assessment**

Card 1 Value      Building Value **20,461,900**      Xtra Features Value **0**      Land Value **1,094,700**      Total Value **21,556,600**

**Building Description**

Building Style **SCHOOL**  
 # of Living Units **1**  
 Year Built **1920**  
 Building Grade **VERY GOOD**  
 Building Condition **Good**  
 Finished Area (SF) **50810**  
 Number Rooms **30**  
 # of 3/4 Baths **0**

Foundation Type **CONCRETE**  
 Frame Type **WOOD**  
 Roof Structure **FLAT**  
 Roof Cover **TAR+GRAVEL**  
 Siding **BRICK VENR**  
 Interior Walls **DRYWALL**  
 # of Bedrooms **0**  
 # of 1/2 Baths **6**

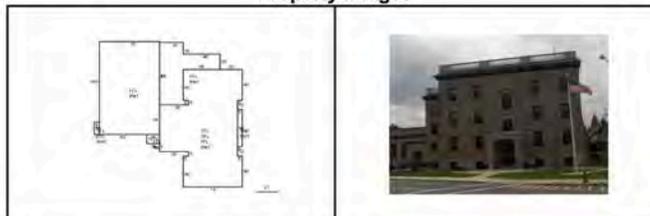
Flooring Type **LINO/VINYL**  
 Basement Floor **N/A**  
 Heating Type **FORCED HW**  
 Heating Fuel **GAS**  
 Air Conditioning **0%**  
 # of Bsmt Garages **0**  
 # of Full Baths **0**  
 # of Other Fixtures **4**

**Legal Description**

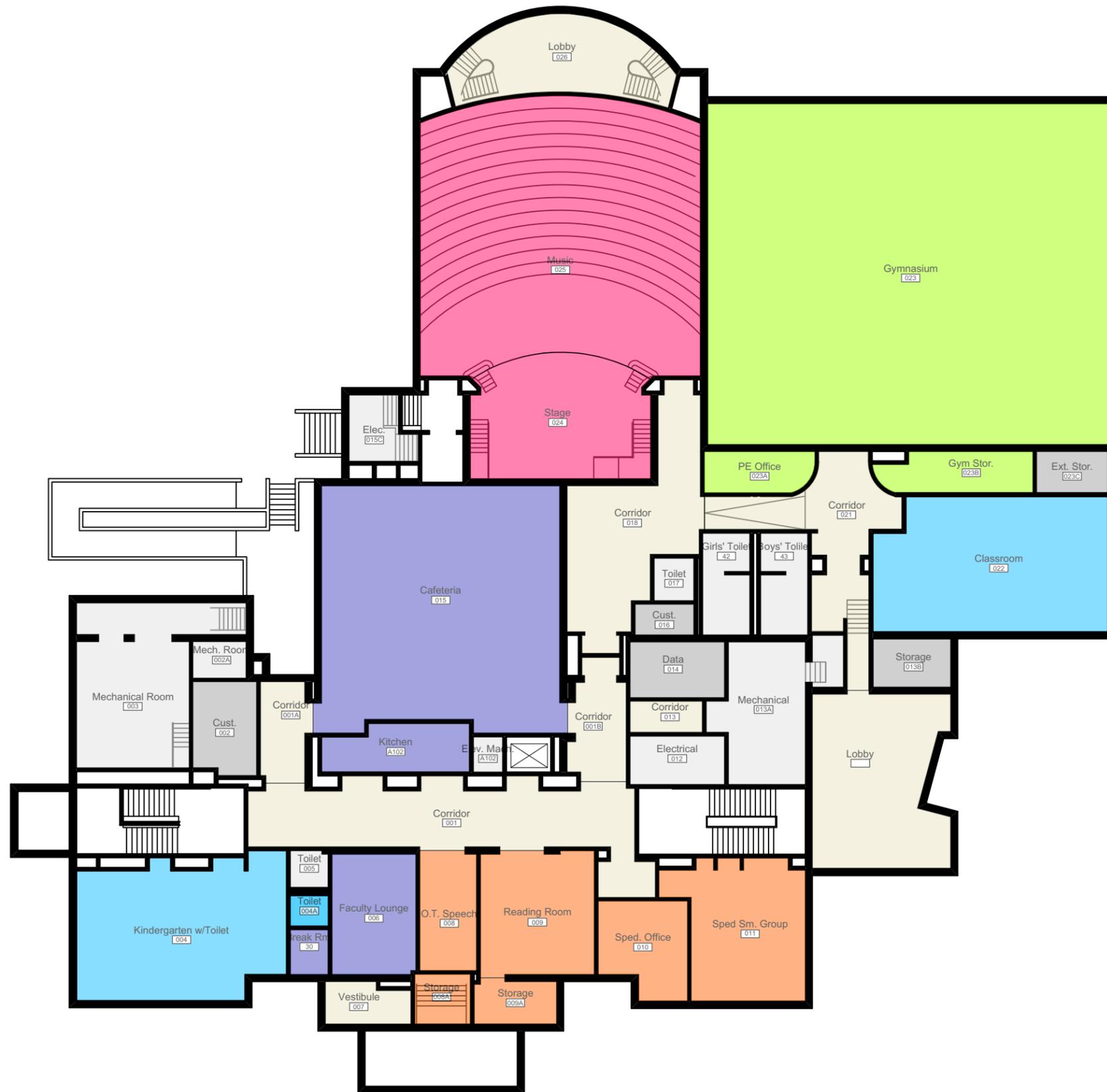
**Narrative Description of Property**

This property contains 3.006 acres of land mainly classified as PSCHOOL with a(n) SCHOOL style building, built about 1920, having BRICK VENR exterior and TAR+GRAVEL roof cover, with 1 unit(s), 30 room(s), 0 bedroom(s), 0 bath(s), 6 half bath(s).

**Property Images**



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

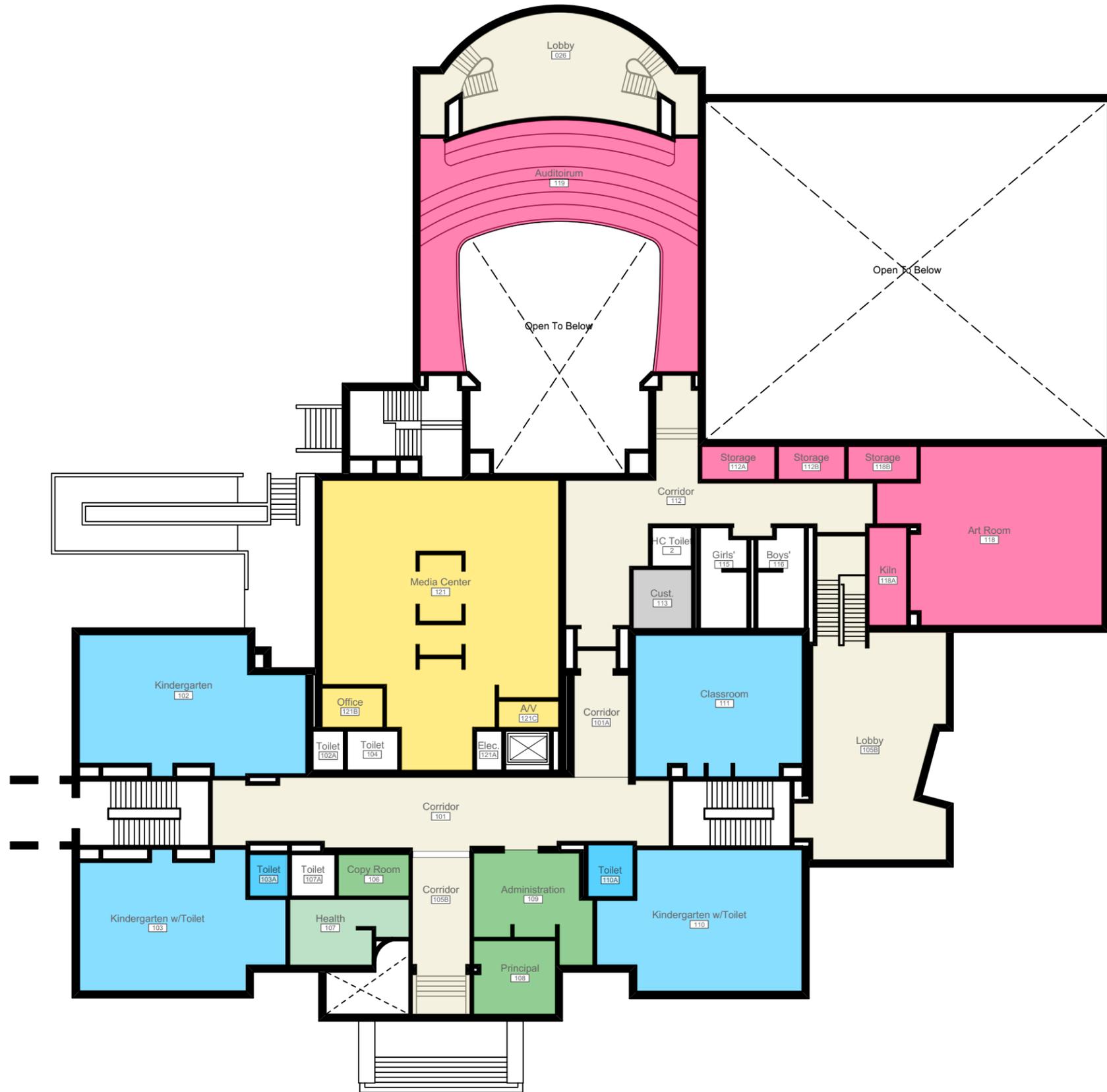


**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE

Basement Floor Plan

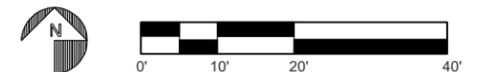




**SPACE SUMMARY LEGEND**

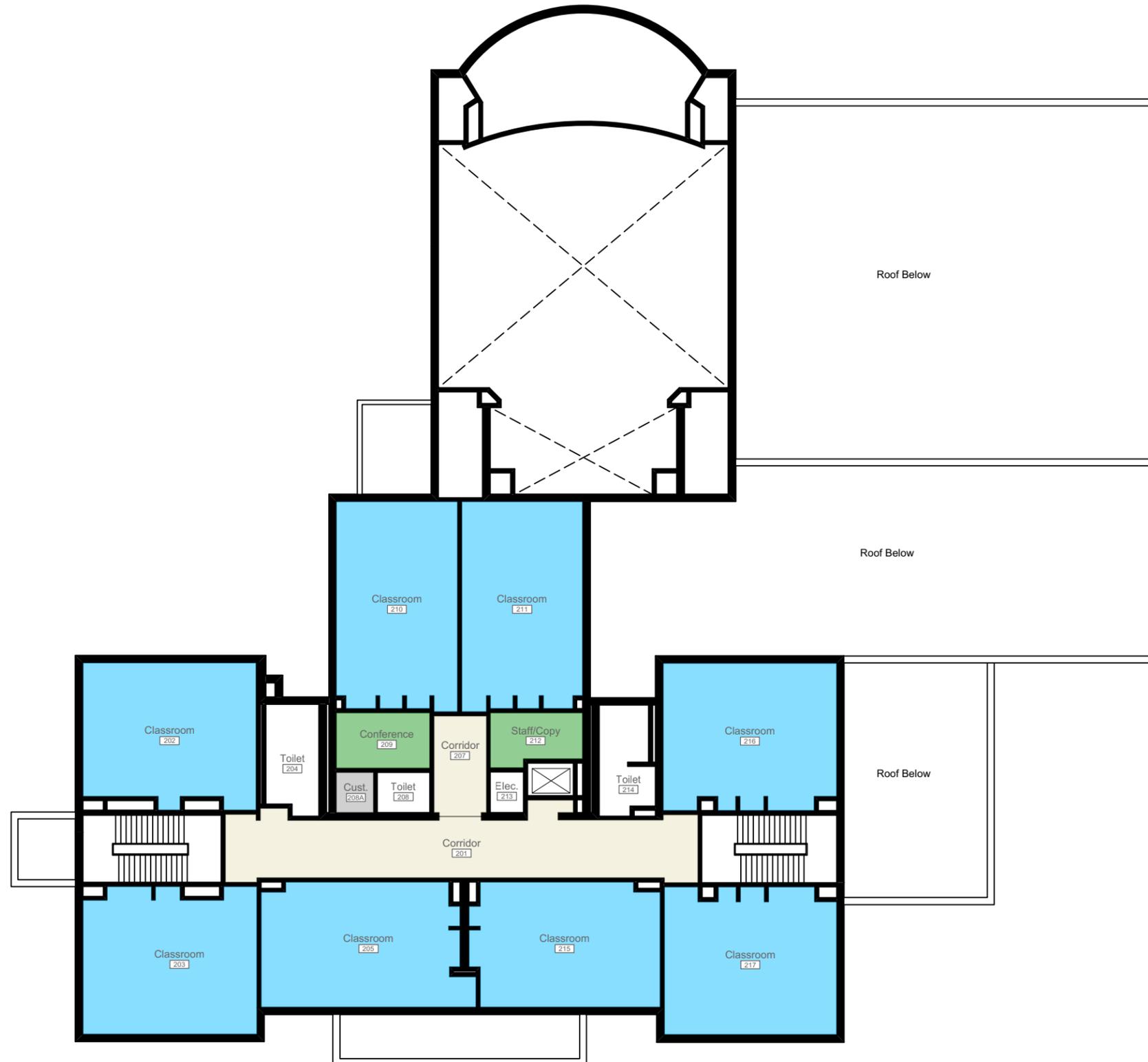
- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE

First Floor Plan

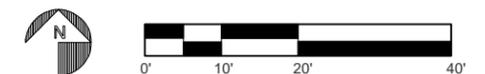


**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE



## Second Floor Plan





**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE

Third Floor Plan



SPACE SUMMARY				
Room #	Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>				
22		22	20630	22
022	Classroom	1181	1	
111	Classroom	902	1	
202	Classroom	868	1	
203	Classroom	897	1	
205	Classroom	898	1	
210	Classroom	903	1	
211	Classroom	901	1	
215	Classroom	831	1	
216	Classroom	901	1	
217	Classroom	898	1	
302	Classroom	868	1	
303	Classroom	897	1	
305	Classroom	898	1	
310	Classroom	883	1	
311	Classroom	869	1	
315	Classroom	837	1	
316	Classroom	901	1	
317	Classroom	898	1	
102	Kindergarten	1104	1	
004	Kindergarten w/Toilet	1120	1	
103	Kindergarten w/Toilet	1046	1	
110	Kindergarten w/Toilet	1129	1	
<b>SPECIAL EDUCATION</b>				
7		7	2199	7
008	O.T. Speech	264	1	
009	Reading Room	546	1	
011	Sped.Sm. Group	654	1	
010	Sped. Office	306	1	
312	Speech	182	1	
008A	Storage	108	1	
009A	Storage	139	1	
<b>ART &amp; MUSIC</b>				
8		8	6981	8
118	Art Room	1375	1	
119	Auditorium	1543	1	
118A	Klin	146	1	
025	Music	2835	1	
024	Stage	812	1	
112A	Storage	95	1	
112B	Storage	86	1	
118B	Storage	89	1	
<b>VOCATIONS &amp; TECHNOLOGY</b>				
0		0	0	0
<b>HEALTH &amp; PHYSICAL EDUCATION</b>				
3		3	5743	3
023B	Gym Stor.	233	1	
023	Gymnasium	5339	1	
023A	PE Office	171	1	
<b>MEDIA CENTER</b>				
3		3	2350	3
121C	A/V	62	1	
121	Media Center	2194	1	
121B	Office	94	1	
<b>DINING &amp; FOOD SERVICE</b>				
4		4	2955	4
30	Break Rm.	67	1	
015	Cafeteria	2239	1	
006	Faculty Lounge	392	1	
A102	Kitchen	257	1	
<b>MEDICAL</b>				
1		1	264	1
107	Health	264	1	
<b>ADMINISTRATION &amp; GUIDANCE</b>				
6		6	1315	6
109	Administration	409	1	
209	Conference	190	1	
106	Copy Room	115	1	
108	Principal	234	1	
309	School Psych.	200	1	
212	Staff/Copy	167	1	
<b>CUSTODIAL &amp; MAINTENANCE</b>				
8		8	1010	8
002	Cust.	225	1	
016	Cust.	70	1	
113	Cust.	135	1	
208A	Cust.	55	1	
306	Cust.	62	1	
014	Data	204	1	
023C	Ext. Stor.	114	1	
013B	Storage	145	1	
<b>OTHER</b>				
0		0	0	0
<b>TOTAL BUILDING GROSS FLOOR AREA</b>				
		4	74309	4
	Basement		28456	1
	Floor 1		22629	1
	Floor 2		11612	1
	Floor 3		11612	1

SPACE SUMMARY				
Room #	Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>				
1		3	20630	22
---	Classroom		16231	18
102	Kindergarten		1104	1
---	Kindergarten w/Toilet		3295	3
<b>SPECIAL EDUCATION</b>				
5		6	2199	7
008	O.T. Speech		264	1
009	Reading Room		546	1
011	Sped.Sm. Group		654	1
010	Sped. Office		306	1
312	Speech		182	1
---	Storage		247	2
<b>ART &amp; MUSIC</b>				
5		6	6981	8
118	Art Room		1375	1
119	Auditorium		1543	1
118A	Klin		146	1
025	Music		2835	1
024	Stage		812	1
---	Storage		270	3
<b>VOCATIONS &amp; TECHNOLOGY</b>				
0		0	0	0
<b>HEALTH &amp; PHYSICAL EDUCATION</b>				
3		3	5743	3
023B	Gym Stor.		233	1
023	Gymnasium		5339	1
023A	PE Office		171	1
<b>MEDIA CENTER</b>				
3		3	2350	3
121C	A/V		62	1
121	Media Center		2194	1
121B	Office		94	1
<b>DINING &amp; FOOD SERVICE</b>				
4		4	2955	4
30	Break Rm.		67	1
015	Cafeteria		2239	1
006	Faculty Lounge		392	1
A102	Kitchen		257	1
<b>MEDICAL</b>				
1		1	264	1
107	Health		264	1
<b>ADMINISTRATION &amp; GUIDANCE</b>				
6		6	1315	6
109	Administration		409	1
209	Conference		190	1
106	Copy Room		115	1
108	Principal		234	1
309	School Psych.		200	1
212	Staff/Copy		167	1
<b>CUSTODIAL &amp; MAINTENANCE</b>				
3		4	1010	8
---	Cust.		547	5
014	Data		204	1
023C	Ext. Stor.		114	1
013B	Storage		145	1
<b>OTHER</b>				
0		0	0	0
<b>TOTAL BUILDING GROSS FLOOR AREA</b>				
		4	74309	4
	Basement		28456	1
	Floor 1		22629	1
	Floor 2		11612	1
	Floor 3		11612	1

**ARCHITECTURE**

*Organization*

The Lincoln School was originally built in 1904, renovated and added onto in 2002, and is approximately 71,920 square feet. The building contains classrooms, a cafetorium, a gymnasium, and offices.

*Circulation*

The building is a three (3) story building with a basement and is a compact footprint. The gym and auditorium are to the north of the building. The cafeteria is centralized on the basement level with Lincoln classrooms on the perimeter. The first, second, and third floors are double loaded corridors with classrooms and offices on both sides.

*Program and Space Issues*

The Lincoln School includes approximately 20 classroom spaces of various square feet from 800 – 1,200. Comparisons with current MSBA space standards indicate that classrooms and core academic spaces are undersized. See the chart below.

	Lincoln Elementary	MSBA Standards
Classroom	880 square feet	950 square feet
Music	2,835 square feet	1,200 square feet
Library	2,194 square feet	2,020 square feet
Art	1,375 square feet	1,000 square feet
Gymnasium	5,339 square feet	6,000 square feet

*Physical Conditions of Exterior Envelope - Walls*

The building is faced with beige brick in a running bond pattern, with minimal roof overhangs and large areas of double hung window walls. Generally, the exterior is in good condition. Precast elements are cracked and should be repaired, cleaned, and sealed. See Figures 2 and 3.

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
4" Brick	0.44
2" Air Space	2.02
1/2" Fiberboard Sheathing	1.32
2x4 Study Activity	4.38
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>8.56</b>
<b>WINDOW DOUBLE PANE R-VALUE</b>	<b>0.91</b>

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
Face Brick	0.39
Air Space	2.02
Air & Vapor Barrier	0.15
1/2" Gypsum Sheathing	0.45
Insulation	22.00
Vapor Barrier	0.15
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>25.61</b>
<b>WINDOW TRIPLE PANE R-VALUE</b>	<b>5.00</b>

#### *Physical Conditions of Exterior Envelope - Windows*

The windows are replacement aluminum double hung windows with single glazing. The windows are in good condition and should have routine maintenance to keep them operational.

#### *Physical Conditions of Exterior Envelope- Roof*

The roofing is membrane and no active roof leaks or damages were observed. Generally, the roofing appears to be in good condition. See the charts below.

<i>Lincoln Existing Roof Condition</i>	
Rubber Membrane	0.40
3" Insulrock Insulation	7.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>12.40</b>

<i>Roof Construction - Today's Minimum Standard</i>	
Rubber/PVC	0.40
4" Polyisocyanurate	30.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>35.40</b>

#### *Interior*

Finishes are well suited for school use, but are worn and many areas need to be replaced.

Light quality is generally good.

#### *Interior Partitions*

In general, all interior partitions appear to be in good condition. The type of partition varies throughout the building as follows:

- Painted concrete masonry units
- Painted plaster
- Painted drywall
- Glass wall windows
- Exposed brick

## Section 2 | Lincoln Elementary School Existing Conditions

In a renovation, various existing plaster walls to remain could be cut open to accommodate new electrical, plumbing and technology systems. All walls should have acoustical batt insulation to improve acoustical performance.

### *Flooring*

In general, the flooring is VCT and minor damage was observed. The type of flooring that exists is as follows:

- Vinyl composition tile (12x12)
- Wood floor at gymnasium
- Carpet
- Rubber

### *Wall Base*

The wall base is rubber of various sizes. All base material appear to be in good condition.

### *Ceilings*

The ceilings are a combination of 2x4 acoustical tile and plaster, and are generally in good condition. The existing ceilings consist of the following types:

- Suspended Acoustical tile
- Plaster



*Lincoln School exterior*



*Typical flooring in hallway*



*Roof conditions*



*Gymnasium*

***Doors and Frames***

Doors are generally wood and some are chipped. The conditions of the doors and frames are good. Lever handle hardware to meets accessibility guidelines.

***Fire Extinguishers***

Fire extinguishers appear to meet code.

***Tackboards and Markerboards***

Tackboards and markerboards are existing throughout and appear to be in good condition. Fire code regulations do not allow for tackboards to be within 5 feet of egress doors.

***Regulations***

The existing facility as a whole is in compliance with the original code, however, this does not mean it meets every standard of the current code. In accordance with the current code, an existing building is presumed to have met the codes and regulations in effect at the time of its construction and is allowed to continue in its use, provided it is maintained per the original code. Current building codes are applicable to any alteration or addition or change in use of the structure in accordance with 780 CMR 34.

***Code Classification 780 CMR 302.1***

The occupancy of the facility is non-separated mixed use with assembly and educational uses as follows:

Classrooms, Offices	E-Educational
Auditorium	A3-Assemble

***Construction Classification***

Based upon the definitions in the current code, the minimum classification of the building is as follows:

3B Noncombustible

***Chapter 34: Repair, Alteration, Addition and Change of Use of Existing Buildings***

A renovation project is governed by Chapter 34. This chapter is “intended to maintain or increase public safety, health, and general welfare, without requiring full compliance with the code for new construction.”

- i. Building renovation – For continuation of the same use groups the building shall comply with 780 CMR 3404.0.
- ii. New Building Systems – Any new building system or portion thereof shall conform to 780 CMR for new construction to the fullest extent practical.
- iii. Alterations and Repairs – Alternations of repairs to existing buildings, which maintain or improve the performance of the building may be made with like material, unless required otherwise under 780 CMR 3408 – Structural Requirements for Existing Buildings.
- iv. Number of Means of Egress – Egress for the existing facility is sufficient in accordance with the current building code.
- v. Capacity of Exits – There is sufficient egress capacity to meet current codes at the doors throughout the facility.
- vi. Length of Access Travel – Shall not exceed 200 feet, in building without a sprinkler system. All areas of the existing building are within 200 feet of an exit.
- vii. Exit Signs and Lights – For notes on the existing system, refer to the Electrical Existing Conditions Report.
- viii. Means of Egress Lighting – Refer to the Electrical Existing Conditions Report.
- ix. Height and Area Limitations – Under Chapter 34, the building is in conformance with applicable height and area limitations, so long as there is no change in use. Additions may be made to the structure.

## Section 2 | Lincoln Elementary School Existing Conditions

- x. Fire Protection Systems – Fire protection systems must be provided for existing building that are “substantially” altered or “substantially” renovated where required for the specific use group.
- xi. Enclosure of Stairways – open egress stairways are prohibited. There shall be no minimum fire resistance rating required for an existing enclosure of a stairway.
- xii. Assembly Use Groups – Any alteration within an assembly use group shall comply with the code for new construction. This applies to the cafeteria, auditorium and gymnasium
- xiii. Accessibility for Persons with Disabilities – Accessibility for persons with disabilities shall be provided in accordance with the regulations of the Architectural Access Board.
- xiv. Energy Provisions for Existing Buildings – Alterations to components affecting energy conservation performance shall comply with 780 CMR 13 generally, and 780 CMR 1304.2 or 780 CMR 1304.5 or 780 CMR 1309 specifically. Existing components may remain.
- xv. Evaluation of Existing Building – The structural engineer shall make a structural evaluation of the existing building to determine the adequacy of all structural systems that are affected by alteration or damage to be repaired.
- xvi. Existing Lateral Load Capacity (Refer to Structural Existing Conditions Report for further information) – Alterations shall not be made to elements or systems contributing to the lateral load resistance unless the altered lateral load resisting system conforms to 780 CMR 1611.0 and 1612.0; or there is no reduction in the lateral capacity to the building as a whole. Existing elements of systems may be reinforced or replaced with new elements or systems of equivalent strength and stiffness.
- xvii. Earthquake Loads (Refer to Structural Existing Conditions Report for further information) – For no change in use groups, but alterations exceeding 50% of the assessed valuation of the building, the project is defined as Seismic Hazard Category 2.
- xviii. Earthquake resistance shall comply with the requirements of 780 CMR 3408.3.5
- xix. The provisions of 780 CMR 34 govern Fire Resistant Materials – Fire resistance construction systems.

### ***Interior Finishes 780 CMR 8***

Interior trim and finishes altered as a part of a renovation shall conform to the requirements of 780 CMR 801. Flame spread of Interior Finishes for the E and A-3 use groups, shall conform to Table 803.4. Existing finishes are code compliant.

The State Fire Marshall introduced regulations in 2003 restricting display of paper in egress areas. The provisions are as follows:

- i. Paper display in classrooms shall not exceed 20% of the wall area. Measurement of wall area shall include windows and doors.
- ii. Paper display in corridors shall not exceed 10% of the wall area and shall not be placed within 5 feet of an egress door. It shall be applied directly to the wall and shall not be grouped in areas bigger than 6 feet by 12 feet.

### ***Handicap Accessibility***

The building complies with the Massachusetts Architectural Access Board (MAAB) regulations.

### ***Mechanical Engineering***

Overall the Lincoln Elementary School systems are in good condition. The school was completely renovated in 2002, so the mechanical, electrical and fire protection systems are only 14 years old. Systems have received normal maintenance.



## 2.3 | Lynch Elementary School

Landscape Architecture

Civil Architecture

Architecture

Structural Engineering

Mechanical Engineering

Electrical Engineering

Plumbing Engineering

Fire Protection

Data/Communications



**Unofficial Property Record Card - Winchester, MA**

**General Property Data**

Parcel ID **14 320 0**  
 Prior Parcel ID **--**  
 Property Owner **LYNCH ELEMENTARY SCHOOL**  
 Mailing Address **10 BRANTWOOD RD**  
 City **WINCHESTER**  
 Mailing State **MA** Zip **01890**  
 ParcelZoning **SCI**

Account Number  
 Property Location **154 HORN POND BROOK RD**  
 Property Use **MUNICPL**  
 Most Recent Sale Date **2/6/1963**  
 Legal Reference **N/A**  
 Grantor **LYNCH ELEME**  
 Sale Price **0**  
 Land Area **17.980 acres**

**Current Property Assessment**

Card 1 Value      Building Value **31,111,700**      Xtra Features Value **0**      Land Value **855,000**      Total Value **31,966,700**

**Building Description**

Building Style **SCHOOL**  
 # of Living Units **1**  
 Year Built **1963**  
 Building Grade **VERY GOOD**  
 Building Condition **Average**  
 Finished Area (SF) **77481**  
 Number Rooms **12**  
 # of 3/4 Baths **0**

Foundation Type **CONCRETE**  
 Frame Type **WOOD**  
 Roof Structure **GABLE**  
 Roof Cover **ASPHALT**  
 Siding **BRICK**  
 Interior Walls **DRYWALL**  
 # of Bedrooms **0**  
 # of 1/2 Baths **6**

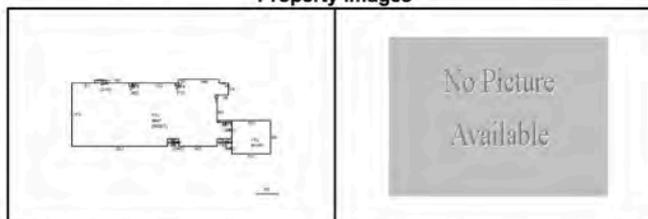
Flooring Type **CARPET**  
 Basement Floor **N/A**  
 Heating Type **FORCED H/A**  
 Heating Fuel **OIL**  
 Air Conditioning **0%**  
 # of Bsmt Garages **0**  
 # of Full Baths **0**  
 # of Other Fixtures **2**

**Legal Description**

**Narrative Description of Property**

This property contains 17.980 acres of land mainly classified as MUNICPL with a(n) SCHOOL style building, built about 1963, having BRICK exterior and ASPHALT roof cover, with 1 unit(s), 12 room(s), 0 bedroom(s), 0 bath(s), 6 half bath(s).

**Property Images**



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

**Unofficial Property Record Card - Winchester, MA**

**General Property Data**

Parcel ID <b>14 320 0</b>	Account Number
Prior Parcel ID <b>--</b>	Property Location <b>154 HORN POND BROOK RD</b>
Property Owner <b>LYNCH ELEMENTARY SCHOOL</b>	Property Use <b>MUNICPL</b>
Mailing Address <b>10 BRANTWOOD RD</b>	Most Recent Sale Date <b>2/6/1963</b>
City <b>WINCHESTER</b>	Legal Reference <b>N/A</b>
Mailing State <b>MA</b> Zip <b>01890</b>	Grantor <b>LYNCH ELEME</b>
ParcelZoning <b>SCI</b>	Sale Price <b>0</b>
	Land Area <b>17.980 acres</b>

**Current Property Assessment**

Card 1 Value	Building Value <b>31,111,700</b>	Xtra Features Value <b>0</b>	Land Value <b>855,000</b>	Total Value <b>31,966,700</b>
--------------	----------------------------------	------------------------------	---------------------------	-------------------------------

**Building Description**

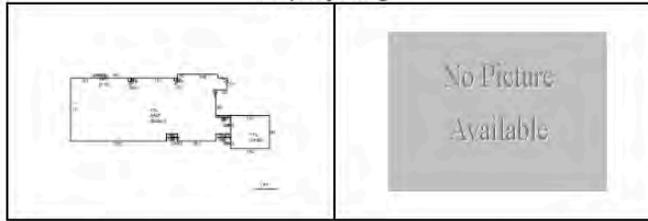
Building Style <b>SCHOOL</b>	Foundation Type <b>CONCRETE</b>	Flooring Type <b>CARPET</b>
# of Living Units <b>1</b>	Frame Type <b>WOOD</b>	Basement Floor <b>N/A</b>
Year Built <b>1963</b>	Roof Structure <b>GABLE</b>	Heating Type <b>FORCED H/A</b>
Building Grade <b>VERY GOOD</b>	Roof Cover <b>ASPHALT</b>	Heating Fuel <b>OIL</b>
Building Condition <b>Average</b>	Siding <b>BRICK</b>	Air Conditioning <b>0%</b>
Finished Area (SF) <b>77481</b>	Interior Walls <b>DRYWALL</b>	# of Bsmt Garages <b>0</b>
Number Rooms <b>12</b>	# of Bedrooms <b>0</b>	# of Full Baths <b>0</b>
# of 3/4 Baths <b>0</b>	# of 1/2 Baths <b>6</b>	# of Other Fixtures <b>2</b>

**Legal Description**

**Narrative Description of Property**

This property contains 17.980 acres of land mainly classified as MUNICPL with a(n) SCHOOL style building, built about 1963, having BRICK exterior and ASPHALT roof cover, with 1 unit(s), 12 room(s), 0 bedroom(s), 0 bath(s), 6 half bath(s).

**Property Images**



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

**SPACE SUMMARY LEGEND**

-  CORE ACADEMIC SPACES
-  SPECIAL EDUCATION
-  ART & MUSIC
-  HEALTH & PHYSICAL EDUCATION
-  MEDIA CENTER
-  DINING & FOOD SERVICE
-  MEDICAL
-  ADMINISTRATION & GUIDANCE
-  CUSTODIAL & MAINTENANCE



**Basement Floor Plan**



**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE

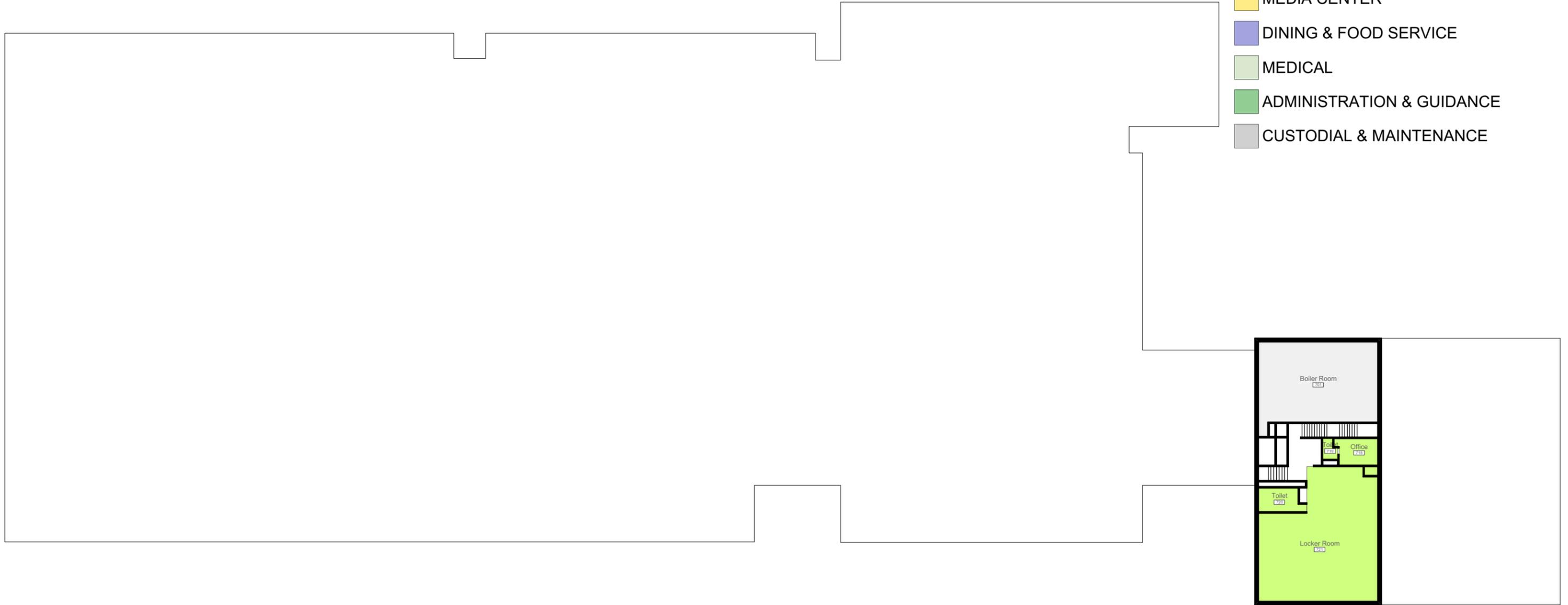


First Floor Plan



**SPACE SUMMARY LEGEND**

- CORE ACADEMIC SPACES
- SPECIAL EDUCATION
- ART & MUSIC
- HEALTH & PHYSICAL EDUCATION
- MEDIA CENTER
- DINING & FOOD SERVICE
- MEDICAL
- ADMINISTRATION & GUIDANCE
- CUSTODIAL & MAINTENANCE



**Second Floor Plan**



SPACE SUMMARY			
Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>			
36	27602	36	
Classroom	849	1	
Classroom	719	1	
Classroom	807	1	
Classroom	814	1	
Classroom	832	1	
Classroom	1167	1	
Classroom	742	1	
Classroom	1172	1	
Classroom	837	1	
Classroom	1174	1	
Classroom	903	1	
Classroom	852	1	
Classroom	1329	1	
Classroom	827	1	
Classroom	857	1	
Classroom	844	1	
Classroom	891	1	
Classroom	888	1	
Classroom	842	1	
Classroom	845	1	
Classroom	844	1	
Classroom	852	1	
Kindergarten	853	1	
Kindergarten	1257	1	
Pre-K	867	1	
Pre-K	831	1	
Pre-K	734	1	
Pre-K	871	1	
Pre-K	1111	1	
Storage	198	1	
Storage	114	1	
Storage	85	1	
Storage	166	1	
Storage	201	1	
Storage	262	1	
Storage	165	1	
<b>SPECIAL EDUCATION</b>			
2	1141	2	
OT/PT	288	1	
OT/PT	853	1	
<b>ART &amp; MUSIC</b>			
3	1994	3	
Art Room	1122	1	
Art Storage	145	1	
Music	727	1	
<b>VOCATIONS &amp; TECHNOLOGY</b>			
0	0	0	
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			
12	8762	12	
Gymnasium	5365	1	
Locker Room	1554	1	
Locker Room	851	1	
Office	122	1	
Office	84	1	
Shower	340	1	
Storage	141	1	
Storage	57	1	
Toilet	29	1	
Toilet	114	1	
Toilet	68	1	
Toilet	37	1	
<b>MEDIA CENTER</b>			
8	5870	8	
A/V	91	1	
Conference	128	1	
Conference	264	1	
Library	1923	1	
Storage	362	1	
Storage	299	1	
Visual Education	2582	1	
Work Room	221	1	
<b>DINING &amp; FOOD SERVICE</b>			
11	7540	11	
Cafeterium	3956	1	
Chair Storage	136	1	
Cooler	65	1	
Dish Wash	171	1	
Kitchen	1224	1	
Stage	1079	1	
Storage	281	1	
Storage	115	1	
Storage	108	1	
Storage	148	1	
Teachers Dining	257	1	
<b>MEDICAL</b>			
1	343	1	
Nurse	343	1	
<b>ADMINISTRATION &amp; GUIDANCE</b>			
13	2547	13	
Admin.	155	1	
Copier	112	1	
Corridor	211	1	
Gen. Office	467	1	
Office	77	1	
Office	100	1	
Principal	143	1	
Records	77	1	
Teacher's Workroom	396	1	

SPACE SUMMARY			
Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>			
0	4	27602	36
---	Classroom	19887	22
---	Kindergarten	2110	2
---	Pre-K	4414	5
---	Storage	1191	7
<b>SPECIAL EDUCATION</b>			
0	1	1141	2
---	OT/PT	1141	2
<b>ART &amp; MUSIC</b>			
3	3	1994	3
309	Art Room	1122	1
311	Art Storage	145	1
507	Music	727	1
<b>VOCATIONS &amp; TECHNOLOGY</b>			
0	0	0	0
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			
2	6	8762	12
702	Gymnasium	5365	1
---	Locker Room	2405	2
---	Office	206	2
705	Shower	340	1
---	Storage	198	2
---	Toilet	248	4
<b>MEDIA CENTER</b>			
4	6	5870	8
204	A/V	91	1
---	Conference	392	2
406	Library	1923	1
---	Storage	661	2
110	Visual Education	2582	1
407	Work Room	221	1
<b>DINING &amp; FOOD SERVICE</b>			
7	8	7540	11
601	Cafeterium	3956	1
508	Chair Storage	136	1
605	Cooler	65	1
602	Dish Wash	171	1
604	Kitchen	1224	1
510	Stage	1079	1
---	Storage	652	4
614	Teachers Dining	257	1
<b>MEDICAL</b>			
1	1	343	1
631	Nurse	343	1
<b>ADMINISTRATION &amp; GUIDANCE</b>			
13	13	2547	13
621	Admin.	155	1
626	Copier	112	1
628	Corridor	211	1
629	Gen. Office	467	1
622	Office	77	1
623	Office	100	1
625	Office	100	1
627	Principal	143	1
624	Records	77	1
209	Teacher's Workroom	396	1
305	Teacher's Workroom	393	1
617	Toilet	188	1
616	Toilet	134	1
<b>CUSTODIAL &amp; MAINTENANCE</b>			
2	3	1751	4
609	Custodian	118	1
608	Receiving	213	1
---	Storage	1420	2
<b>OTHER</b>			
1	1	1018	1
312	Tech Lab	1018	1
<b>Gross</b>			
17	17	11873	17
801C	Vestibule	89	1
810	Corridor	755	1
811	Corridor	876	1
512	Corridor	1048	1
414	Lobby	988	1
633	Corridor	912	1
413	Corridor	707	1
415	Corridor	595	1
219	Corridor	1328	1
220	Corridor	374	1
114	Corridor	376	1
113	Corridor	543	1
319	Corridor	1420	1
317	Corridor	293	1
318	Corridor	711	1
221	Corridor	428	1
115	Corridor	430	1
<b>Gross</b>			
11	11	2283	11
806B	Bldg. Support	229	1
214	Toilet	127	1
213	Toilet	136	1
701	Boiler Room	1229	1
303	Toilet	153	1
304	Toilet	153	1
320	Toilet	51	1
611	Incinerator	92	1

Section 2 | Lynch Elementary School Existing Conditions

Teacher's Workroom	396	1
Teacher's Workroom	393	1
Toilet	180	1
Toilet	134	1
<b>CUSTODIAL &amp; MAINTENANCE</b>		
	4	4
Custodian	118	1
Receiving	213	1
Storage	1281	1
Storage	139	1
<b>OTHER</b>		
	1	1018
Tech Lab		1018
<b>TOTAL BUILDING GROSS FLOOR AREA</b>		
	3	90521
Basement		9498
First Floor		77247
Second Floor		3776

611	Incinerator	92	1
606	Toilet	41	1
607	Toilet	45	1
307	Toilet	28	1
<b>TOTAL BUILDING GROSS FLOOR AREA</b>			
		3	90521
	Basement		9498
	First Floor		77247
	Second Floor		3776

## LANDSCAPE ARCHITECTURE

### *General*

The Lynch Elementary School is located between two residential neighborhoods and is bounded to the east by the Horn Pond Brook and to the south-east by woods. Formerly a junior high school, the facility now houses a Preschool and grades K-5. The Winchester School of Chinese Culture rents the school on Sundays. The site slopes down from Pond Street at the higher elevation to Horn Pond Brook Road and from the wooded area to the front of the building. These slopes are significant enough that the building has multiple levels of access.

### *Vehicular Access & Circulation*

There are three separate vehicular access points to the site. The primary entrance (the school's address) is the perpendicular leg of Brantwood Road off Pond Street that leads directly in to a drop-off loop to the right and parking lot to the left. The school sign for this entrance is located on Pond Street facing north-bound traffic and is not visible when approaching from the south. Pavement throughout is marked for one-way circulation and there are no directional signs for visitors. The drop-off loop ("Turning Circle") is ringed with "No Parking" signs. The parking lot includes a "Bus Drop Off" sign (presumably for the adjacent playing fields) but no other dedicated parking spots.

The second access point is off Horn Brook Pond Road. After crossing a short bridge over the brook, this drive splits in two. Straight ahead is a second drop-off loop with a smaller number of parking spaces and vehicle access to the field level. To the left is staff parking along the east side of the building. There is a school sign at the bridge.

The third access point is further along Brantwood Road, leading directly to the service area which also includes parking spaces.

None of these three routes is connected to the others; they each require entry and exit via a single point. There is granite curbing at the outer edge of the main drop-off loop and asphalt curbing at the inner islands of both loops. Asphalt pavement quality is poor throughout, particularly at the un-curbed edges.

### *Parking Location, Arrangement & Quantity*

Striping at the Brantwood Road lot is confusing. There is a combination of 30 angled and perpendicular parking spaces, none of them marked accessible. There are what appear to be two painted walkways, presumably for pedestrian circulation and there are other line paint markings that appear to be within the circulation route. Only the bus drop-off is marked with a sign. The pavement is in reasonable condition with some unevenness and cracks. There is no curbing.

At the Horn Pond Brook access drive, the turn-around loop is marked for 8 one-hour Visitor Parking spaces, although the spaces marked are much less than the width of a car and the pavement is too narrow for another vehicle to pass a parked



*Poor quality of pavement at drop-off loop*



*Bus drop-off at Brantwood parking lot*

## Section 2 | Lynch Elementary School Existing Conditions

car. There is one van-accessible space by the entry plaza, 2 HP spaces along the curb by the building and 16 lined spaces off the drive, 10 of which are marked for Staff. There is also a yellow-striped area and vehicular gate at the wooded edge for access to the playing fields. All pavement is in poor condition, especially at the un-curbed edge. Concrete curb stops have been plowed up on to the adjacent embankment. Asphalt curbing at the loop is damaged. There is granite curbing along the building walkway.

The parking spur to the east of the building contains 19 lined spaces marked “Staff Parking Only”. None of them is marked for handicap use. There are a series of sign posts missing their signs at the head of some of the spaces. The “turn-around” area at the end of this parking lot is merely an extension of the asphalt, all of which is in poor condition, particularly the un-curbed edge along the Horn Pond Brook. Granite curbing continues along the building sidewalk.

The last parking area and the one where the pavement is in the best condition, is at the service area off Brantwood Road. There are faded markings for 14-16 spaces and an additional HP space adjacent to an accessible door. This un-curbed area is used for teacher and custodian parking.



*One-way circulation at Brantwood lot*



*Confusing pavement graphics at Brantwood lot*

### ***Pedestrian Circulation***

There is no pedestrian route completely around the school but it is possible to walk from the drop-off loop at Brantwood Road east and around the building to the back of the old loading dock on a variety of sidewalks and paths. The building has a curbed sidewalk along its north and east faces that is broken by the front plaza but otherwise, provides a continuous pedestrian route along the building with access to various doorways. There is a concrete sidewalk along Brantwood Road from Pond Street to the drop-off loop and walkers can cross the south side of the bridge over Horn Pond Brook to enter the site from the east. The playing fields are reached via a pathway originating at the corner of the Brantwood parking lot and there are informal access points to the fields from the surrounding neighborhood. There are no marked crosswalks where pedestrians have to cross vehicular routes. Walkways on the site are primarily asphalt with concrete at the wide “plaza” in front of Door #2 and a small section of sidewalk across from Door #3. All pavement is in poor condition.

### ***Pedestrian Accessibility & Code Compliance***

Some doorways at the building have been made accessible with recent updates. The front entrance (two double doors #1) is flush with the adjacent pavement, as is Door #2, which has a recently-poured concrete slab at the threshold. It is unclear whether the slope of the asphalt ramp at Door #3 meets code but it is possible. Door #22 (the Gym) is 6 steps below the grade of the drop-off loop sidewalk. The new-looking pedestrian ramp is code-compliant except that the top of the wall along the highest section requires a guard rail. Door #17 at the service area and Doors #11 & #12 at the back of the building have ramps up to their thresholds. Other doors have high (no accessible) thresholds, including Doors #5 & #6 (the Pre-School main entrance) and Doors #10 and #13-15 at the back of the building.

There are several steep changes in grade where the pathway slopes are in excess of 5%. One of these areas is around the retaining wall at the back of the school and another is at the path leading to the playing fields which dead-ends several feet above field level. There are no accessible paths leading to the backstops or other areas within the fields.

There is one code-compliant curb cut on the site. Other curb cuts are either not to code or entirely absent. The Brantwood drop-off loop has no curb cuts while the HPB drop-off loop has dropped curbs that do not comply with codes. There is no curb cut at the sidewalk in front of the pre-school entrance. The single compliant curb cut is located by the two HP spaces along the curb at the HPB entrance. However, the condition of the roadway is so poor that an additional asphalt “ramp” has been patched in to meet the edge of the concrete, rendering the path to the curb cut uneven and not compliant. The asphalt ramp from the van-accessible space is not built to code.



*Staff parking on east side of building with broken edges*



*Curbed asphalt sidewalk along the front of the building*

For a total of roughly 125 parking spaces on the site, there should be a minimum of 5 accessible spaces and this site is one space short. Given that the parking areas are disconnected, the accessible spaces should be divided amongst the three parking areas. There are none in the largest lot (Brantwood), 3 in the HPB parking area and one at the service area. The condition of the van-accessible spot is very poor, with severely warped and cracked pavement.

### ***Service Areas***

The service area is located off Brantwood Avenue, and slopes downward from the roadway. The old loading dock is no longer in use. That area houses a cardboard recycling dumpster that is emptied once a week. As mentioned above, the space is used for additional parking. The building’s oil tank, screened by evergreens, is located here.

### ***Courtyards / Exterior Student Gathering Spaces***

The Lynch School has a prominent plaza flanking its two main doorways that incorporates seating, picnic tables, a shade structure, trees, boulders, and the flagpole. This area, which faces the play areas is not particularly unified in design. There is a mixture of furnishings (see “Site Furnishings” below) and pavements including asphalt, concrete, brick and flagstone. Furnishings are located in the lawn where they are inaccessible and the ground is trampled. There is no seating beneath the shade structure. A few older crabapples and a large honeylocust provide some shade to the picnic tables and one bench. The newer play areas are in good condition but the design of improvements over time in this area seems uncoordinated.

### ***Recreational Spaces***

The site has two separate play structure areas, basketball nets at the larger parking lot and an extensive fields. The large, un-fenced play area contains an older children’s Landscape Structures modular play structure, a 3-bay swing with one bucket seat and an arched climber. Timber edges retain accessible wood chip mulch surfacing which looks recently replenished. The younger children’s play area is fenced and contains a Gametime play structure, a spring-mounted “bus” and a single bench.

## Section 2 | Lynch Elementary School Existing Conditions

Surfacing under the Gametime structure is poured-in-place polyurethane, while the remainder of the surfacing is wood chip mulch. All the play components and surfacing are in good condition.

The Brantwood Road parking lot doubles as a basketball “court” when all vehicles are gone. While the three poles with hoops (2 fixed, 1 adjustable) are in good condition, the pavement is cracked and buckled.

The fields, laid out for soccer and baseball, are at the site’s lower elevation and their pedestrian entrance, as described above, is not accessible. There are some sections of wear to the turf but it is flat and in largely good condition. The backstop and players benches at the baseball field look new and the infield is well-maintained. Along the edges of the field that abut the Horn Pond Brook the turf is wet and saturated in spots with some small wetland species visible. This likely affects the playability of some areas of the field, depending on the season and the weather. At the far end of the field, there is an opening in the woods leading to the back of the University Apartments, a possible security risk as visibility is low and there is debris in the wooded connection. Neither the residential edges nor the embankment of the brook are fenced.



*Wood ramp at Doors 7-9, asphalt path slopes steeply*



*Asphalt ramp to Door 3 may or may not be compliant*

### **Site Lighting**

The site is lit by a combination of floodlights on the face of the building and pole-mounted lights at the outer edges of the parking areas. Pole styles vary from timber utility poles to steel light fixture poles. There is no lighting at the athletic fields.

### **Site Furnishing**

We noted five (5) styles of bench and two (2) styles of trash receptacle, along with picnic tables, barrel planters and a flagpole in front of the school. Some of these benches are dedicated to individuals, which may explain the mixture of styles. All are in good condition (including the “Buddy Bench” in the playground). Across from the main door stands a 1960s or ‘70s era shade structure which, while outdated, does offer shade. Unfortunately, there are no benches beneath it. The flagpole is located within a field of brick within what was once lawn with flagstones leading to it. Neither the flagpole nor the adjacent benches are ADA or MAAB accessible. Benches connected to the larger pavement areas or within the play areas are accessible, but the steel bench inside the curbed drop-off loop island is not. There are some newer trash and recycling receptacles in the plaza areas. And wood stave barrels are scattered about for planting, although they do not seem to have been filled for the current season. Boulders are used for play area edging or are scattered in seemingly random locations.

The fence framework around the younger play area is in good condition, but newer fabric has been poorly attached and there is no bottom cross-rail. At the back of the building, a concrete retaining wall with bluestone cap takes up the grade between the staff parking lot and the upper floor elevation. Portions of the cap are missing and the concrete beneath is crumbling where it meets the wood handicap ramp.

*Trees, Planting, & Other Vegetation*

Lynch Elementary School is set within what was probably once a wooded area, and remnants of the natural woodlands remain at the periphery of the site. Woodland edges along the Horn Pond Brook have been left intact and are connected to a large section of woods at the back of the building, where ivy has been planted along the natural edge. Stands of enormous pines surround the Brantwood Road drop-off and parking areas and continue to form a separating line between the playgrounds and the playing fields. There are also several large shade trees closer to the school building which were probably there when the school was built and were preserved during construction. They seem in good condition considering their age. Mature flowering crabapples and other smaller scale flowering trees are planted along the front of the building. New trees have been planted in the drop-off island at Brantwood Road.

Foundation plantings are visible along the east façade of the school where rhododendrons and other evergreen shrubs flank the pre-school entrance and there is evidence of a small garden by the door.

Lawns, where they are away from foot traffic (such as along the building face by the roadway) are in reasonable condition. But the lawns surrounding the plaza are heavily trampled and compacted.



*Van accessible space off HPR dro-off loop in poor condition*



*Playground for younger children*



*Playground for older children*



*Picnic table on trampled lawn beneath crabapple trees*

## CIVIL ARCHITECTURE

### *General Site Conditions*

The site is bordered to the east by Horn Pond Brook. There is no fence separating the site from the brook. A bituminous path that is in fair condition runs around the school. Generally there is positive drainage away from the building. At one point the bituminous path is adjacent to the dumpster in the mechanical area. There is a three to four foot drop from the path to the dumpster area with no rail or other fall protection.

There is a large above-grade steel fuel oil tank in the mechanical/service area of the school off of Brantwood Road. The fuel tank is immediately adjacent to the building screened by landscaping along its outside edge. A series of concrete filled steel bollards are located inside the line of landscaping. There is no containment berm or walls around the tank.

Grass coverage in the high volume assembly/play areas at the front of the school is in poor condition. The play structure appear to be modern and in good condition. The surface of the large children's play structure area is mulch and the smaller children's play structure area is a resilient surface. The two play areas are adjacent to each other and there is no curb or other separation of the two materials.

There are athletic fields to the north of the school site with fair grass coverage. The majority of the athletic fields are within the 100-year flood plain of Horn Pond Brook. Within the school site itself the 100-year flood is contained within the banks of Horn Pond Brook. Approximately the eastern 1/3 of the building and the eastern end of the school site are within the 200-foot Riverfront Area of Horn Pond Brook. Any work within the Riverfront Area would be subject to Town of Winchester Conservation Commission approval and would need to comply with MA DEP regulations for work within a Riverfront Area.

### *Parking and Circulation*

There are two primary entrances to the Lynch School, one from Brantwood Road and one from Horn Pond Brook Road, each with a small roundabout and associated parking areas. The pavement is in poor condition with extensive cracking and settling. The roundabouts are separated by a play area and there is no vehicle circulation through the site. Grades within the accessible parking areas do not appear to meet accessibility guidelines (less than 2% slope in any direction). Access to the site from Horn Pond Brook Road is via a small bridge over Horn Pond Brook. The bituminous sidewalk in front of the school is in poor condition with severe cracking and uneven settlement.

Striping in the Brantwood Road driveway and parking area appears to be a combination of circulation, cross-walks, parking and play area striping. There is no parking lot lighting.



*Path adjacent to dumpster in mechanical area*



*No containment berm or walls around fuel tank*

*Utilities*

There is a closed drainage system on site that serves the front parking areas, west side of the school (mechanical yard) and the rear of the school. Roof drains and downspouts tie into this system. There is no closed drainage system along the eastern side of the school. Runoff from the parking area on that side of the school sheet flows directly into Horn Brook. The school is tied into the town's sanitary sewer system and there is no evidence of an external grease trap. No gas service was observed.



*No separation between two playgrounds*



*Roof drains and downspouts*

**ARCHITECTURE**

*Organization*

The Lynch School was built in the early 1960s and is approximately 83,300 square feet. The Building contains classrooms, a cafetorium, a gymnasium, and offices.

*Circulation*

The building is a one (1) story sprawling structure. The gym at the west end of the building is set a few feet lower and there is a second level where the girls locker room is located. An accessible lift was added to transition to the lower gym. However, the girls locker room is no longer used due to accessibility issues.

*Program and Space Issues*

The Lynch School includes approximately 28 classroom spaces of various square feet from 800 – 1,200. Comparisons with current MSBA space standards indicate that classrooms and core academic spaces are undersized. See the chart below.

	Lynch Elementary	MSBA Standards
Classroom	840 square feet	950 square feet
Music	727 square feet	1,200 square feet
Library	1,923 square feet	2,020 square feet
Art	1,122 square feet	1,000 square feet
Gymnasium	5,365 square feet	6,000 square feet

*Physical Conditions of Exterior Envelope - Walls*

The building is faced with beige brick in a running bond pattern, with minimal roof overhangs and large areas of steel window walls. Generally, the exterior is in fair to poor condition. Leaking has occurred at the south side of the building where the grade is raised above the finished floor. It appears that water from the roof was introduced to the ground near the leak areas. The interior of the gym shows areas of rot at the leak areas along the south wall, however, there do not appear to be any active leaks. See the charts below.

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
4" Brick	0.44
2" Air Space	2.02
1/2" Fiberboard Sheathing	1.32
2x4 Study Activity	4.38
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>8.56</b>
<b>WINDOW DOUBLE PANE R-VALUE</b>	<b>0.91</b>
<i>1960s: 4" exterior brick, 6" masonry cavity wall</i>	

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
Face Brick	0.39
Air Space	2.02
Air & Vapor Barrier	0.15
1/2" Gypsum Sheathing	0.45
Insulation	22.00
Vapor Barrier	0.15
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>25.61</b>
<b>WINDOW TRIPLE PANE R-VALUE</b>	<b>5.00</b>

#### *Physical Conditions of Exterior Envelope - Windows*

The windows are all originally steel windows with single glazing. The windows are in poor condition and should be replaced. New windows would increase energy efficiency.

#### *Physical Conditions of Exterior Envelope - Roof*

The roofing is membrane and gravel coated membrane. Generally, the roofing appears to be in fair condition. See the charts below.

<i>Lynch Existing Roof Condition</i>	
Rubber Membrane	0.40
3" Insulrock Insulation	7.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>12.40</b>

<i>Roof Construction - Today's Minimum Standard</i>	
Rubber/PVC	0.40
4" Polyisocyanurate	30.00
Structure/Ceiling	5.00
<b>TOTAL R-VALUE</b>	<b>35.40</b>

#### *Interior*

Finishes are well suited for school use, but are worn and many areas need to be replaced. Light quality is generally good.

#### *Interior Partitions*

In general, all interior partitions appear to be in good condition. The type of partition varies throughout the building as follows:

- Painted concrete masonry units
- Painted plaster
- Painted drywall
- Glass wall windows
- Exposed brick

In a renovation, various existing plaster walls to remain could be cut open to accommodate new electrical, plumbing and technology systems. All walls should have acoustical batt insulation to improve acoustical performance.

## Section 2 | Lynch Elementary School Existing Conditions



*Drinking fountain on exposed brick wall*



*Typical flooring*



*Typical storage*



*Typical classroom*

### ***Flooring***

In general, the flooring is VCT and ACT and is damaged in multiple locations. At the main entry there is damaged VCT that should be replaced. The flooring in the cafeteria is cracking along cracks within the concrete slab below. The type of flooring that exists is as follows:

- Asbestos containing tile (9x9)
- Vinyl Composition tile (12x12)
- Wood floor at gymnasium

### ***Wall Base***

The wall base is rubber of various sizes. All base material appear to be in fair to good condition.

### ***Ceiling***

The ceilings are a combination of 2x4 acoustical tile, plaster, and tectum, and are generally in fair to good condition. The existing ceilings consist of the following types:

- Suspended acoustical tile
- Tectum
- Plaster

***Doors and Frames***

Doors are generally wood and many are chipped and damaged. The conditions are fair to good. There are metal doors at the former shops in the area formerly used for shop classes and at the exterior. Most doors still have knob handle hardware which should be replaced to meet accessibility guidelines.

***Fire Extinguishers***

Fire extinguishers were not observed.

***Tackboards and Markerboards***

Tackboards and markerboards are existing throughout and appear to be in good condition. Fire code regulations do not allow for tackboards to be within 5 feet of egress doors.

***Regulations***

The existing facility as a whole is in compliance with the original code, however, this does not mean it meets every standard of the current code. In accordance with the current code, an existing building is presumed to have met the codes and regulations in effect at the time of its construction and is allowed to continue in its use, provided it is maintained per the original code. Current building codes are applicable to any alteration or addition or change in use of the structure in accordance with 780 CMR 34.

***Code Classification 780 CMR 302.1***

The occupancy of the facility is non-separated mixed use with assembly and educational uses as follows:

Classrooms, Offices	E-Educational
Auditorium	A3-Assemble

***Construction Classification***

Based upon the definitions in the current code, the minimum classification of the building is as follows:

1960s (Original)	3B Noncombustible
------------------	-------------------

***Chapter 34: Repair, Alteration, Addition and Change of Use of Existing Buildings***

A renovation project is governed by Chapter 34. This chapter is “intended to maintain or increase public safety, health, and general welfare, without requiring full compliance with the code for new construction.”

- i. Building renovation – For continuation of the same use groups the building shall comply with 780 CMR 3404.0.
- ii. New Building Systems – Any new building system or portion thereof shall conform to 780 CMR for new construction to the fullest extent practical.
- iii. Alterations and Repairs – Alterations of repairs to existing buildings, which maintain or improve the performance of the building may be made with like material, unless required otherwise under 780 CMR 3408 – Structural Requirements for Existing Buildings.
- iv. Number of Means of Egress – Egress for the existing facility is sufficient in accordance with the current building code.
- v. Capacity of Exits – There is sufficient egress capacity to meet current codes at the doors throughout the facility.
- vi. Length of Access Travel – Shall not exceed 200 feet, in building without a sprinkler system. All areas of the existing building are within 200 feet of an exit.
- vii. Exit Signs and Lights – For notes on the existing system, refer to the Electrical Existing Conditions Report.
- viii. Means of Egress Lighting – Refer to the Electrical Existing Conditions Report.
- ix. Height and Area Limitations – Under Chapter 34, the building is in conformance with applicable height and area

## Section 2 | Lynch Elementary School Existing Conditions

limitations, so long as there is no change in use. Additions may be made to the structure.

- x. Fire Protection Systems – Fire protections systems must be provided for existing building that are “substantially” altered or “substantially” renovated where required for the specific use group.
- xi. Enclosure of Stairways – open egress stairways are prohibited. There shall be no minimum fire resistance rating required for an existing enclosure of a stairway.
- xii. Assembly Use Groups – Any alteration within an assembly use group shall comply with the code for new construction. This applies to the cafeteria, auditorium and gymnasium
- xiii. Accessibility for Persons with Disabilities – Accessibility for persons with disabilities shall be provided in accordance with the regulations of the Architectural Access Board.
- xiv. Energy Provisions for Existing Buildings – Alterations to components affecting energy conservation performance shall comply with 780 CMR 13 generally, and 780 CMR 1304.2 or 780 CMR 1304.5 or 780 CMR 1309 specifically. Existing components may remain.
- xv. Evaluation of Existing Building – The structural engineer shall make a structural evaluation of the existing building to determine the adequacy of all structural systems that are affected by alteration or damage to be repaired.
- xvi. Existing Lateral Load Capacity (Refer to Structural Existing Conditions Report for further information) – Alterations shall not be make to elements or systems contributing to the lateral load resistance unless the altered lateral load resisting system conforms to 780 CMR 1611.0 and 1612.0; or there is no reduction in the lateral capacity to the building as a whole. Existing elements of systems may be reinforced or replaced with new elements or systems of equivalent strength and stiffness.
- xvii. Earthquake Loads (Refer to Structural Existing Conditions Report for further information) – For no change in use groups, but alterations exceeding 50% of the assessed valuation of the building, the project is defined as Seismic Hazard Category 2.
- xviii. Earthquake resistance shall comply with the requirements of 780 CMR 3408.3.5
- xix. The provisions of 780 CMR 34 govern Fire Resistant Materials – Fire resistance construction systems.

### *Interior Finishes 780 CMR 8*

Interior trim and finishes altered as a part of a renovation shall conform to the requirements of 780 CMR 801. Flame spread of Interior Finishes for the E and A-3 use groups, shall conform to Table 803.4. Existing finishes are code compliant.

The State Fire Marshall introduced regulations in 2003 restricting display of paper in egress areas. The provisions are as follows:

- i. Paper display in classrooms shall not exceed 20% of the wall area. Measurement of wall area shall include windows and doors.
- ii. Paper display in corridors shall not exceed 10% of the wall area and shall not be placed within 5 feet of an egress door. It shall be applied directly to the wall and shall not be grouped in areas bigger than 6 feet by 12 feet.

### *Handicap Accessibility*

Some improvements have been made over the years to comply with the Massachusetts Architectural Access Board (MAAB) regulations. For the most part the building is not in compliance with the accessibility code. The regulations require that any building undergoing a renovation where the costs exceed 30% of its assessed value must comply with the requirements of the MAAB. It is anticipated that renovation costs will exceed the 30% assessed value and would require the building to be brought up to full compliance with MAAB.

**STRUCTURAL ENGINEERING**

The Lynch School is a sprawling, mostly one story building, with both flat and sloped roof areas, constructed in the early 1960's. The building is framed with light steel columns and beams, supporting tectum roof panels. Interior corridor walls, and the walls of the gymnasium are infilled concrete masonry.

Along the rear classrooms, on the south elevation, and east wall of the gym, exterior grade is about 30" above the first floor. Some water leakage into the classrooms and gym is occurring. At the east wall of the gym, long term leakage has caused deterioration in the gym floor adjacent to the east wall. Water likely enters the wall thru open control joints in the recesses for the gym roof downspouts.

The exposed steel columns on the exterior of the classrooms are buried in a bluestone cap on the foundation wall. There is some rusting of the flanges occurring where they enter the masonry. The columns should be maintained to delay major repairs to the steel. This would include removing and replacing the bluestone, painting the steel, and resealing the stone cap.

The exterior wall components are generally appear to be in fair to poor condition. There is rusting and deterioration of the metal door and window frames, especially on the rear elevation. Site walls at the rear preschool area are in poor condition.

## **MECHANICAL ENGINEERING**

### *Heating Plant*

The boiler room houses two cast iron sectional boilers of which are #2 oil fired with gas pilots. The boilers are HB Smith; the newer one is a model 4500A-W-11, the older one a Mills 640. Both boilers are used, the older boiler coming on when the newer one can no longer meet the building demand. The older boiler still retains what appears to be an asbestos insulation jacket wrapped around the boiler. The burners are Industrial Combustion Model BVB, "D" series. The boilers are feed from a 10,000 gallon double-walled tank located above ground adjacent to the boiler room within a protective enclosure. We heard no reports of these boilers having trouble maintaining building temperatures in the winter yet the boilers are either past or approaching the average service life and should be targeted for future replacement. New gas-fired boilers are much more efficient and should be considered when renovating the HVAC systems in the school.

### *Air Systems*

This building is served primarily by unit ventilators. These units provide the heating and ventilation for the classrooms and other miscellaneous spaces. These units are varying in age, some looking to be 30+ years old while others may be 10 years or so old. These units have had some user complaints of uneven heat and noise. The console units have been used as shelves in the majority of the classrooms further exacerbating noise and heating issues. The classrooms are exhausted using ducted systems terminating with roof exhaust fans. These fans have all displayed issues and have required increased maintenance to keep them operating. Like the unit ventilators, the exhaust fans have mostly eclipsed the expected service life and replacement parts will become an issue. Central air handling units serve the gym and Cafetorium which are ducted to large grilles to provide the ventilation for the spaces. It was noted that the gym air handling unit is rather loud and it is unclear if this creates any issues for this space. Finned-tube radiation, installed in enclosures, serves these spaces (for heating) as well as miscellaneous spaces such as corridors, bathrooms and storage rooms. Bathrooms are generally exhausted using ductwork routing up to exhaust fans located on the roof.

### *Piping Systems*

Hot water is circulated using primary and secondary pumps located in the boiler room. The secondary pumps have been retrofitted with Variable Frequency Drives (VFD's) to allow for energy savings when the building does not require full hot water flow for heating (during the warmer heating season days). These pumps are of different vintages noting that occasional motor and/or pump head replacements have been performed in the past. Piping networks run from the boiler room and routes to the various heating equipment in the building. There were no reports of piping failures but this piping may be approaching the end of the average service life of +/- 50 years.

### *Air Conditioning*

The building has no central air conditioning equipment. It was noted that many of the perimeter classrooms and offices have residential window/wall mounted air conditioning units installed. These all have standard unit mounted controls/thermostats and must be manually turned on and off by the space occupants. Electrical circuits were not designed for these units and may have issues when all of the units are operating during hot days.

### *Automatic Temperature Controls*

The automatic temperature controls for the entire school have been converted to Direct Digital Controls (DDC) on 2/2008. The control system is a Johnson Controls Metasys platform with a computer located in the custodian's office adjacent to the boiler room. Thermostats were also replaced at that time. These controls appear to be operating satisfactorily yet there have been reports of uneven heat in some spaces. These controls replaced the original building pneumatic controls. An abandoned air compressor, which had supported these control systems, remains in the boiler room.

## **ELECTRICAL ENGINEERING**

### *Main Electric Services*

The main electric service is rated 208/120V, 600A, three-phase, four-wire. The distribution equipment is primarily manufactured by Schneider Square D. Eversource electric services appear to originate from Verizon street pole number 25/6 along Brantwood Road. The service route is underground from the street pole to a small building structure behind the school containing electric utility service transformers. The secondary service conductors are installed underground from the transformer structure to the main electric service located in the main school mechanical room. Based on the Eversource electric meter number 5063802 and the metering transformer ratios of 600:5, the maximum demand recorded on the date of survey is 92.4 kW.

### *Emergency Electric Services*

The school main mechanical room contains a natural gas fired emergency generator located adjacent to the main electric service equipment. The generator is manufactured by Kohler and is rated 10 kW, 12.5 kVA at 0.8 power-factor, 208/120V. The general appearance of the generator and its associated components (i.e. oil filter, air filter, ignition system and control panel) appear to indicate that the generator does not operate or has not operated for quite some time. The Zenith emergency automatic transfer switch appears to be connected but not fully operational due to the indication of zero ampere output charging rate to the generator starting battery.

Emergency lighting throughout the school appears to be provided by local battery pack luminaires. Multiple manufacturers appear to be used for these luminaires. Exit signs also appear to include battery backup.

### *Fire Alarm*

The fire alarm system is manufactured by Notifier and appears to be a relatively new addressable system with voice evacuation. The system indicates most recent testing was performed on August 19, 2015 based on service contractor labeling. The fire alarm system includes full smoke detection coverage throughout the school, since no fire protection systems appears evident. Manual initiation and notification devices are installed throughout the school and at all egresses. The fire alarm is integrated with the security system in connection with the magnetic door holders throughout the school. The fire alarm is connected to a Digitize panel number 543 assumed to signal the local fire department. Most all classroom spaces include multiple steel beams across the ceilings. Classrooms with steel beams 12 inches or less apply one smoke detector per room. Rooms with steel beams greater than 12 inches apply a smoke detector within each beam pocket. Typically, rooms that have steel beams deeper than 12" have multiple smoke detectors in the room, but rooms that have beams less than 12"exposed only have one detector in the room.

A remote annunciator, drill switch and firefighter phone is located in the main administrative offices.

### *Lighting and Lighting Controls*

Luminaires and lighting controls appear to be updated in most locations throughout the school. Occupancy sensors are located in administrative, classroom and gymnasium areas. Exterior lighting was minimal. No emergency lighting was observed at exterior of building egresses.

### *Clock System*

There appears to be a partially functional clock system used in the school. The main clock control panel, located in the main administration offices, appears to be original to the school with a more modern digital controller installed in the same cabinet. The newer controller is manufactured by American Time and Signal Company. The existing cabinet and original clock control hardware still in the cabinet was manufactured by Edwards Company. Not all clocks in the school appear to be synchronized with the updated controller.

### *Audio-Visual (AV)*

Aside from the select intelligent classroom presentation boards, there is voice communication system divided into three

## Section 2 | Lynch Elementary School Existing Conditions

distinct categories for Cafeteria, Corridors and Classrooms. It includes three Radio Shack 100 Watt amplifiers and appears to include UPS backup power support. The voice communications appears to use some of the existing infrastructure contained within a Kellogg Select-O-Phone cabinet. The Gymnasium includes what appears to be sound equipment, located within the Gymnasium, but it is unclear whether or not it is functional.

### *Telephones*

There was no staff to confirm operation, but telephones appear to be voice over Internet protocol (VoIP). This is assumed due to the tracing of the network cabling to voice and data wall outlets.

### *Security*

Access control is provided with the use of Keri Systems hardware and appears relatively new. Unless well hidden, there were not many security cameras. The main front entrance included two separated double doors and only one double door appeared to have a camera and it did not include pan-tilt-zoom capability. All entrances are monitored with status indicating devices.

### *IT Network*

The main distribution frame (MDF) was located in a meeting room or office and not ventilated adequately for this type of equipment. Wireless access points (WAP) were observed throughout the school and assumed to provide adequate wireless coverage to satisfy occupant needs. Network cabling is installed in plain sight throughout the school for all network needs.

### *General Conditions*

Electrical code clearances and proximity to non-electric systems and components is not met in many locations. Part of the main electric service is behind heating fuel piping. Storage of supplies and debris is impeding access to electrical panel boards in many locations throughout the school. There did not appear to be any sign of main electric service equipment testing.

The emergency generator appears to be in disrepair and if operational, it and its distribution are not located within a 2-hour fire-rated separation from other systems.

Spaces associated with daycare, preschool, kindergarten and early childhood education are required to include tamper proof receptacles and none were observed anywhere in the school.

Emergency luminaires with battery backup were not functional anywhere where a test switch was operated. One battery backup emergency luminaire was observed in the active 'on' state indicating that the internal bypass device failed and was using the normal 120V circuit via the battery charger to remain illuminated.

Many exterior egress luminaires were broken or out of service.

Signs of circuit overloading were identified in the administrative areas when using space heaters. The elimination of the kitchen food preparation services allows the former kitchen panel boards to support additional circuit needs for the administrative areas, since it is located nearby.

The Auditorium/Cafeteria stage panel board appears to be in need of maintenance or replacement. Some of the circuit breakers will not remain 'on'.

A review is recommended for the proscenium of the stage for additional smoke detection.

One classroom installed a significant quantity of 2 inch by 6 inch planks between a pair of steel beams. This adds a foreign combustible to the space not intended for its installation.

Some sink locations include close proximity receptacles without ground-fault protection. Original central communications board located in administration area appears abandoned in place. Luminaires are relatively efficient, but not as much as current market products and controls.

## **PLUMBING ENGINEERING**

### *Domestic Water System*

A buried 4 inch service, assumed to be connected to the main in Brantwood Road, enters the Boiler Room from the west. The water entry includes full-size iron gate valves and a 4 inch compound, municipal meter that appears to be original to the building (1959). The condition of existing iron and copper water piping is fair considering its age. Some piping, in good condition, has been repaired or replaced. Insulation condition, where visible, varies with age and is showing signs of wear.

### *Domestic Hot Water Plant*

The entire building is served by a 50 gallon, gas-fired storage heater, noted to have been installed in February of 2014. There is a circulator pump and aquastat but a master mixing valve is not evident. Hot water delivery at remote fixtures is fair. A large, horizontal, stand-mounted storage tank with a steam-to-water heat exchanger, abandoned in place in the boiler room, appears to be the building's original hot water plant.

### *Plumbing Fixtures and Fittings*

Boiler room plumbing fixtures and trim are generally in good to very good condition, some recent replacement fixtures are accessible. The locker/shower rooms adjacent to the gym are currently being used for general storage. Showers and toilet room fixtures, fittings and piping in that location have all been abandoned in place. Casework sinks and fittings are in fair condition; those viewed were not accessible. Accessibility and fixture counts for students and staff require review.

### *Natural Gas Service*

The gas service enters the boiler room from Brantwood Road adjacent to the domestic service. Two meters are located just inside the boiler room. One gas line directly feeds the generator; the other feeds the domestic water heater and the oil-fired boiler pilot. Gas piping is in good condition.

### *Sanitary, Waste and Vent Systems*

The location of building sanitary exit(s) could not be determined by this survey. Cast iron piping, visible in the boiler room and several custodial closets, appears to be original to the building and is in fair to good condition. Below fixture copper drainage piping is in fair condition; non-code compliant PVC piping was noted at several casework sinks. Also noted was the lack of a solids interceptor at the art room sink.

### *Building Storm Drainage*

The location of building storm exit(s) could not be determined by this survey. PVC and cast iron downspouts were noted on the building exterior. Piping is in fair to good condition.

### *General Condition*

The building plumbing systems are in fair to good condition overall and, according to staff, there have been no recent major problems.

**FIRE PROTECTION**

There is no water-based fire protection within the building.

**DATA/COMMUNICATION, TECHNOLOGY**

The telephone system is an older WIN 440CT, located in the Main Office. It is the same system that is installed at the Muraco Elementary School. The intercom system is an antiquated key switch system. Many speakers are not working and there are many areas of the school where the volume of announcements is too low. There is a mix of several different clock manufacturers. Dakota appears to be the most prevalent. Many are not synchronizing to the main system. Any future project should include an upgrade of the phone system to the district standard NEC VoIP and a replacement of the intercom system.

The Cafeteria is equipped with a portable sound system. There are also several local audio systems used in classrooms. These are lightpseed RedCat systems, mostly wall mounted. Any future project should include local AV systems for large group gathering and instructional spaces.

Distribution of cabling is achieved with wall mounted racks and patch panels. Cabling is Category 5. A significant amount of the cabling has been run exposed. Much of the wiremold is run loosely.

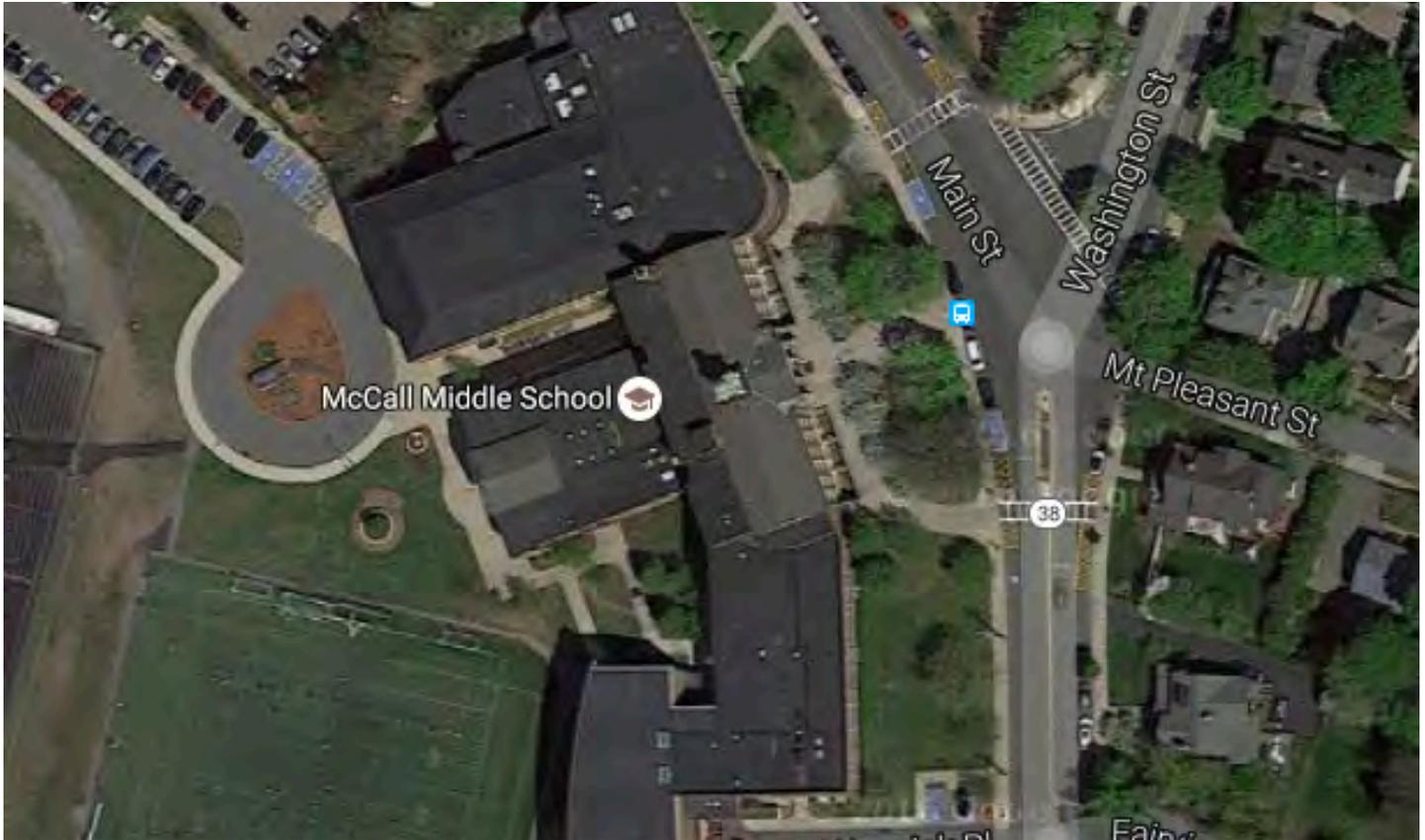
There are typically either two or three data jacks per classroom plus one for a wireless access point. Many classrooms have wireless. Wireless APs are Aruba AP105. Many classrooms are equipped with projectors. The projectors are a combination of Epson 480i and 410W. Teachers are equipped with Dell laptops and port replicators and Lumens DC-170 document cameras. Any future project should include an upgrade of all cabling to the current TAI/EIA standard at the time.

There is one surveillance camera located at the front door. This camera is monitored from the front office on a computer workstation and monitor. There is no other site or exterior video surveillance. There is an access control system and an alarm keypad at the back door of the school. The access control system is a relative new Kerisystem with multiple panels. Any future project should include an integrated security system inclusive of building and site surveillance, intrusion detection and access control.



## 2.4 | McCall Middle School

Architecture



**Unofficial Property Record Card - Winchester, MA**  
**General Property Data**

Parcel ID **8 176 0**  
 Prior Parcel ID **-**  
 Property Owner **MCCALL JUNIOR HIGH SCHOOL**  
 Mailing Address **452 MAIN ST**  
 City **WINCHESTER**  
 Mailing State **MA** Zip **01890**  
 ParcelZoning **SCI**

Account Number  
 Property Location **458 MAIN ST**  
 Property Use **MUNICPL**  
 Most Recent Sale Date **2/6/1963**  
 Legal Reference **N/A**  
 Grantor **MCCALL JUNI**  
 Sale Price **0**  
 Land Area **12.500 acres**

**Current Property Assessment**

Card 1 Value      Building Value **63,463,500**      Xtra Features Value **0**      Land Value **731,000**      Total Value **64,194,500**

**Building Description**

Building Style **SCHOOL**  
 # of Living Units **1**  
 Year Built **1940**  
 Building Grade **V GOOD-**  
 Building Condition **Excellent**  
 Finished Area (SF) **153732**  
 Number Rooms **44**  
 # of 3/4 Baths **0**

Foundation Type **CONCRETE**  
 Frame Type **WOOD**  
 Roof Structure **FLAT**  
 Roof Cover **TAR+GRAVEL**  
 Siding **BRICK**  
 Interior Walls **PLASTER**  
 # of Bedrooms **0**  
 # of 1/2 Baths **18**

Flooring Type **LINO/VINYL**  
 Basement Floor **N/A**  
 Heating Type **FORCED HW**  
 Heating Fuel **GAS**  
 Air Conditioning **0%**  
 # of Bsmt Garages **0**  
 # of Full Baths **6**  
 # of Other Fixtures **12**

**Legal Description**

**Narrative Description of Property**

This property contains 12.500 acres of land mainly classified as MUNICPL with a(n) SCHOOL style building, built about 1940, having BRICK exterior and TAR+GRAVEL roof cover, with 1 unit(s), 44 room(s), 0 bedroom(s), 6 bath(s), 18 half bath(s).

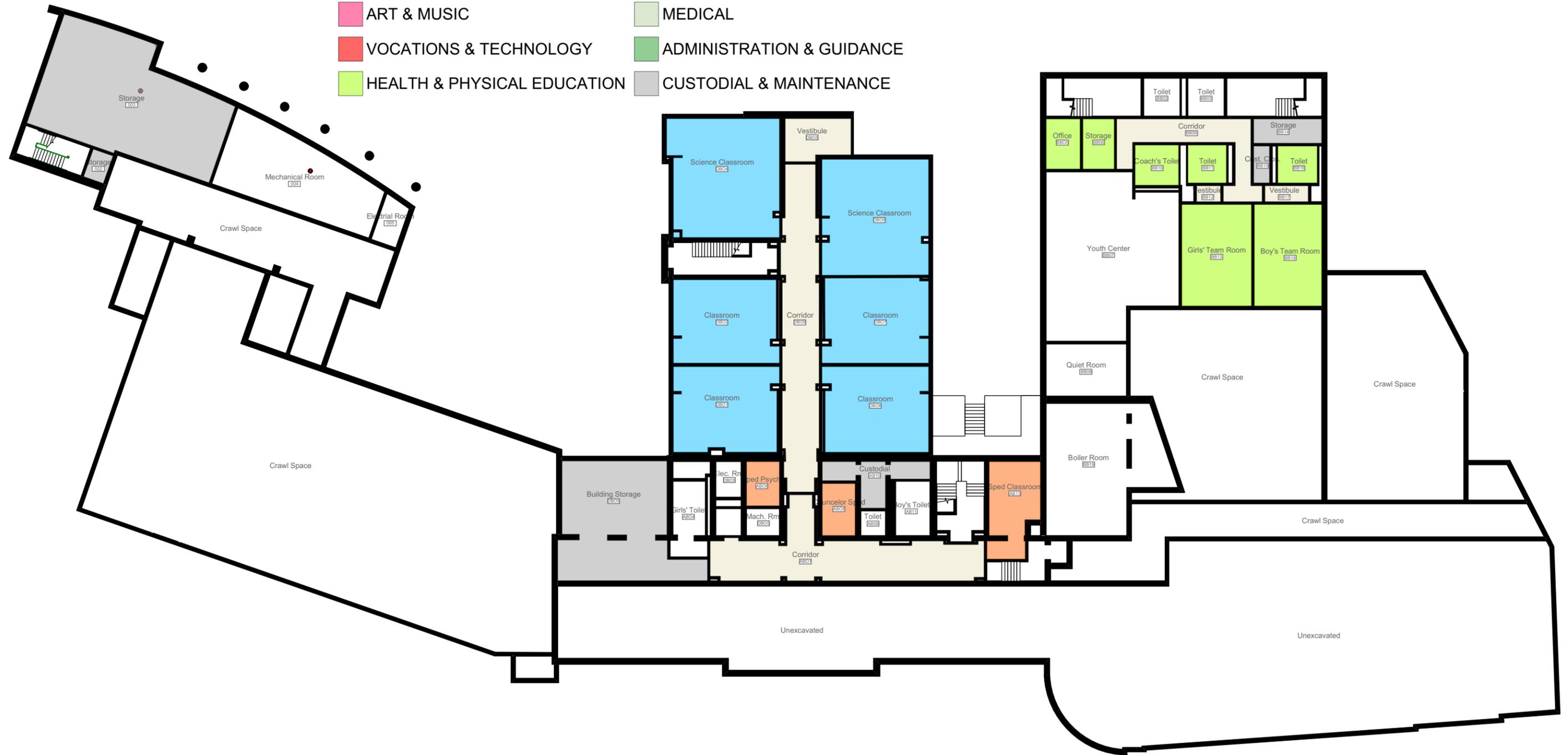
**Property Images**



Disclaimer: This information is believed to be correct but is subject to change and is not warranted.

**SPACE SUMMARY LEGEND**

- |  |  |
|--|--|
| <span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> CORE ACADEMIC SPACES        | <span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> MEDIA CENTER             |
| <span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> SPECIAL EDUCATION              | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> DINING & FOOD SERVICE    |
| <span style="display:inline-block; width:15px; height:15px; background-color:pink; border:1px solid black;"></span> ART & MUSIC                      | <span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> MEDICAL              |
| <span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> VOCATIONS & TECHNOLOGY            | <span style="display:inline-block; width:15px; height:15px; background-color:green; border:1px solid black;"></span> ADMINISTRATION & GUIDANCE |
| <span style="display:inline-block; width:15px; height:15px; background-color:limegreen; border:1px solid black;"></span> HEALTH & PHYSICAL EDUCATION | <span style="display:inline-block; width:15px; height:15px; background-color:gray; border:1px solid black;"></span> CUSTODIAL & MAINTENANCE    |

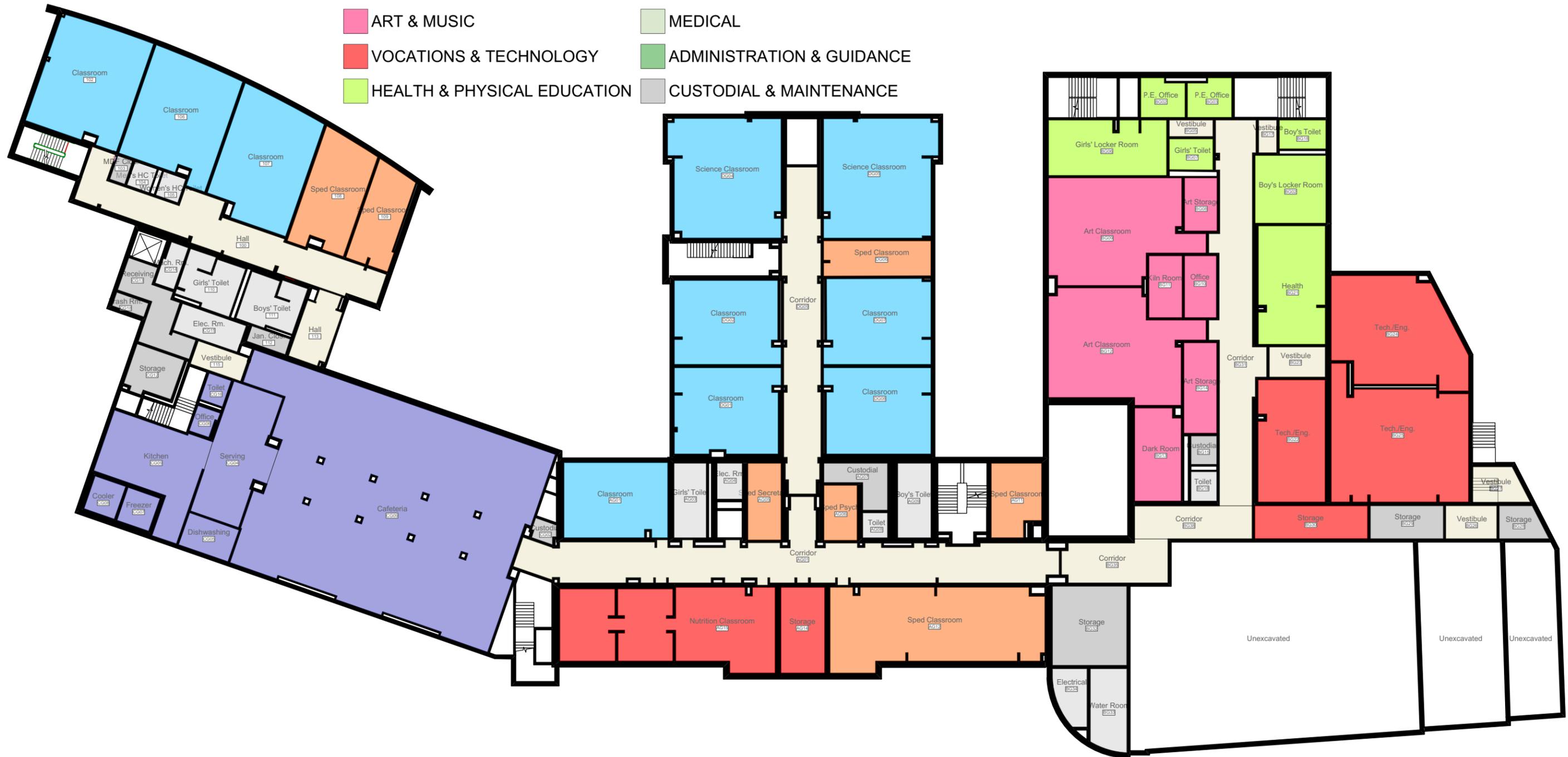


Basement Floor Plan



**SPACE SUMMARY LEGEND**

- |  |  |
|--|--|
| <span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> CORE ACADEMIC SPACES          | <span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> MEDIA CENTER                 |
| <span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> SPECIAL EDUCATION                | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> DINING & FOOD SERVICE        |
| <span style="display:inline-block; width:15px; height:15px; background-color:pink; border:1px solid black;"></span> ART & MUSIC                        | <span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> MEDICAL                  |
| <span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> VOCATIONS & TECHNOLOGY              | <span style="display:inline-block; width:15px; height:15px; background-color:limegreen; border:1px solid black;"></span> ADMINISTRATION & GUIDANCE |
| <span style="display:inline-block; width:15px; height:15px; background-color:lightyellow; border:1px solid black;"></span> HEALTH & PHYSICAL EDUCATION | <span style="display:inline-block; width:15px; height:15px; background-color:gray; border:1px solid black;"></span> CUSTODIAL & MAINTENANCE        |



First Floor Plan



**SPACE SUMMARY LEGEND**

- |  |  |
|--|--|
| <span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> CORE ACADEMIC SPACES        | <span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> MEDIA CENTER             |
| <span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> SPECIAL EDUCATION              | <span style="display:inline-block; width:15px; height:15px; background-color:purple; border:1px solid black;"></span> DINING & FOOD SERVICE    |
| <span style="display:inline-block; width:15px; height:15px; background-color:pink; border:1px solid black;"></span> ART & MUSIC                      | <span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> MEDICAL              |
| <span style="display:inline-block; width:15px; height:15px; background-color:red; border:1px solid black;"></span> VOCATIONS & TECHNOLOGY            | <span style="display:inline-block; width:15px; height:15px; background-color:green; border:1px solid black;"></span> ADMINISTRATION & GUIDANCE |
| <span style="display:inline-block; width:15px; height:15px; background-color:limegreen; border:1px solid black;"></span> HEALTH & PHYSICAL EDUCATION | <span style="display:inline-block; width:15px; height:15px; background-color:gray; border:1px solid black;"></span> CUSTODIAL & MAINTENANCE    |



Second Floor Plan



SPACE SUMMARY			
Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>			
19	19	16281	19
A125 AP		193	1
302 Classroom		961	1
306 Classroom		954	1
307 Classroom		964	1
A103 Classroom		703	1
AG01 Classroom		702	1
C104 Classroom		748	1
C105 Classroom		748	1
C112 Classroom		710	1
C113 Classroom		699	1
DB01 Classroom		805	1
DB02 Classroom		787	1
DB07 Classroom		811	1
DB08 Classroom		815	1
308 Science Classroom		977	1
C107 Science Classroom		1076	1
C110 Science Classroom		1310	1
DB04 Science Classroom		1175	1
DB06 Science Classroom		1125	1
<b>SPECIAL EDUCATION</b>			
16	16	5796	16
AB08 Counselor Sped		161	1
311 OT/PT		108	1
C106 Reading Room		225	1
108 Sped Classroom		586	1
109 Sped Classroom		380	1
A107 Sped Classroom		440	1
AB13 Sped Classroom		404	1
AG11 Sped Classroom		313	1
AG12 Sped Classroom		1461	1
DC06 Sped Classroom		345	1
AB06 Sped Psych.		138	1
AG06 Sped Psych.		169	1
AG05 Sped Secretary		234	1
310 Sped Speech/Lang.		288	1
A110 Sped Supervisor		311	1
C103 Speech/Lang.		239	1
<b>ART &amp; MUSIC</b>			
16	16	11592	16
BG09 Art Classroom		1219	1
BG12 Art Classroom		1280	1
BG08 Art Storage		159	1
BG14 Art Storage		272	1
B122 Auditorium		4716	1
BG13 Dark Room		387	1
B111 Instrument Storage		488	1
BG11 Kiln Room		187	1
B112 Music		1611	1
B116 Music Office		153	1
B113 Music Storage		67	1
B114 Music Storage		75	1
B115 Music Storage		176	1
BG10 Office		181	1
B126 Stage Storage		96	1
B127 Stage Storage		525	1
<b>VOCATIONS &amp; TECHNOLOGY</b>			
6	6	5451	6
AG14 Storage		345	1
AG15 Nutrition Classroom		1440	1
BG22 Tech/Eng.		741	1
BG24 Tech/Eng.		1166	1
BG25 Tech/Eng.		1418	1
BG30 Storage		341	1
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			
15	15	12906	15
BG02 Boy's Locker Room		437	1
BB18 Boy's Team Room		630	1
BG18 Boy's Toilet		123	1
BB10 Coach's Toilet		162	1
BG06 Girls' Locker Room		582	1
BB13 Girls' Team Room		651	1
BG07 Girls' Toilet		124	1
B104 Gymnasium		8467	1
BG21 Health		713	1
BG02 P.E. Office		152	1
BG03 P.E. Office		152	1
B102 Storage		399	1
B113 Storage		411	1
BB11 Toilet		138	1
BB16 Toilet		137	1
<b>MEDIA CENTER</b>			
3	3	4501	3
D105 Library		3542	1
D106 Reading		164	1
D103 Teacher Resource Room		795	1
<b>DINING &amp; FOOD SERVICE</b>			
9	9	8235	9
CG09 Cafeteria		5148	1
CG08 Cooler		104	1
CG05 Dishwashing		162	1
CG07 Freezer		108	1
CG09 Kitchen		706	1
CG06 Office		54	1
CG04 Serving		677	1
B123 Stage		1216	1
CG16 Toilet		60	1
<b>MEDICAL</b>			
3	3	522	3
A122 Cot		80	1
A119 Nurse		386	1
A120 Toilet		56	1
<b>ADMINISTRATION &amp; GUIDANCE</b>			
12	12	2292	12
M-07 Assist. Princ. Office		211	1
A111 General Office		547	1
A112 Mail		180	1
A125 Office		110	1
A127 Office		121	1
A125 Office		159	1
A117 Principal Office		201	1
A123 Reception		285	1
A124 Student Services		195	1
A115 Toilet		60	1
A116 Waiting Room		109	1
A113 Workroom		114	1
<b>CUSTODIAL &amp; MAINTENANCE</b>			
7	11	6338	24
DB05 Building Storage		1227	1
BB15 Cust. Clos.		57	1
--- Custodial		752	5
BG15 Custodian		69	1
D101 Head-End Room		235	1
--- Jan. Clos.		91	2
103 MDF Clos.		36	1
BB05 Office		160	1
--- Receiving		439	2
--- Storage		3207	8
CG18 Trash Rm.		45	1
<b>OTHER</b>			
3	3	3284	3
A125 Computer Lab		1090	1
BB08 Quiet Room		389	1
BB07 Youth Center		1805	1
<b>TOTAL BUILDING GROSS FLOOR AREA</b>			
	4	136953	4
Basement		22154	1
Basement 2		3604	1

SPACE SUMMARY			
Room Type	Room NFA	# of Rooms	Area Total
<b>CORE ACADEMIC SPACES</b>			
1	3	16281	19
A125 AP		193	1
--- Classroom		10425	13
--- Science Classroom		5663	9
<b>SPECIAL EDUCATION</b>			
7	9	5796	16
AB08 Counselor Sped		161	1
311 OT/PT		106	1
C106 Reading Room		225	1
--- Sped Classroom		3929	7
--- Sped Psych.		305	2
AG05 Sped Secretary		234	1
310 Sped Speech/Lang.		288	1
A110 Sped Supervisor		311	1
C103 Speech/Lang.		239	1
<b>ART &amp; MUSIC</b>			
7	11	11592	16
--- Art Classroom		2499	2
--- Art Storage		431	2
B122 Auditorium		4716	1
BG13 Dark Room		387	1
B111 Instrument Storage		488	1
BG11 Kiln Room		187	1
B112 Music		1611	1
B116 Music Office		153	1
--- Music Storage		318	3
BG10 Office		181	1
--- Stage Storage		621	2
<b>VOCATIONS &amp; TECHNOLOGY</b>			
6	6	5451	6
AG15 Nutrition Classroom		1440	1
AG14 Storage		345	1
BG22 Tech/Eng.		741	1
BG24 Tech/Eng.		1166	1
BG25 Tech/Eng.		1418	1
BG30 Storage		341	1
<b>HEALTH &amp; PHYSICAL EDUCATION</b>			
9	12	12906	15
BG02 Boy's Locker Room		437	1
BB18 Boy's Team Room		630	1
BG18 Boy's Toilet		123	1
BB10 Coach's Toilet		162	1
BG06 Girls' Locker Room		582	1
BB13 Girls' Team Room		651	1
BG07 Girls' Toilet		124	1
B104 Gymnasium		8467	1
BG21 Health		713	1
--- P.E. Office		304	2
--- Storage		440	2
--- Toilet		273	2
<b>MEDIA CENTER</b>			
3	3	4501	3
D105 Library		3542	1
D106 Reading		164	1
D103 Teacher Resource Room		795	1
<b>DINING &amp; FOOD SERVICE</b>			
9	9	8235	9
CG09 Cafeteria		5148	1
CG08 Cooler		104	1
CG05 Dishwashing		162	1
CG07 Freezer		108	1
CG09 Kitchen		706	1
CG06 Office		54	1
CG04 Serving		677	1
B123 Stage		1216	1
CG16 Toilet		60	1
<b>MEDICAL</b>			
3	3	522	3
A122 Cot		80	1
A119 Nurse		386	1
A120 Toilet		56	1
<b>ADMINISTRATION &amp; GUIDANCE</b>			
12	12	2292	12
M-07 Assist. Princ. Office		211	1
A111 General Office		547	1
A112 Mail		180	1
A125 Office		110	1
A127 Office		121	1
A125 Office		159	1
A117 Principal Office		201	1
A123 Reception		285	1
A124 Student Services		195	1
A115 Toilet		60	1
A116 Waiting Room		109	1
A113 Workroom		114	1
<b>CUSTODIAL &amp; MAINTENANCE</b>			
7	11	6338	24
DB05 Building Storage		1227	1
BB15 Cust. Clos.		57	1
--- Custodial		752	5
BG15 Custodian		69	1
D101 Head-End Room		235	1
--- Jan. Clos.		91	2
103 MDF Clos.		36	1
BB05 Office		160	1
--- Receiving		439	2
--- Storage		3207	8
CG18 Trash Rm.		45	1
<b>OTHER</b>			
3	3	3284	3
A125 Computer Lab		1090	1
BB08 Quiet Room		389	1
BB07 Youth Center		1805	1
<b>TOTAL BUILDING GROSS FLOOR AREA</b>			
	4	136953	4
Basement		22154	1
Basement 2		3604	1

**ARCHITECTURE**

*Organization*

The McCall Middle School was originally built in 1932 with four additions with the most recent being in 2009. The school is approximately 153,000 square feet and contains classrooms, a cafeteria, an auditorium, a gymnasium, and offices.

*Circulation*

The building is a two-story sprawling structure with a basement level. The composition is due to multiple additions. The gym and auditorium are at the east wing, and the remaining classrooms and offices are mixed through the double load corridors with the most recent classroom addition and cafeteria to the west.

*Program and Space Issues*

The McCall Middle School includes approximately 28 classroom spaces of various square feet from 800–1,200. Comparisons with current MSBA space standards indicate that classrooms and core academic spaces are undersized. See the chart below.

	McCall Middle	MSBA Standards
Classroom	770 square feet	950 square feet
Music	1,611 square feet	1,200 square feet
Library	3,542 square feet	2,020 square feet
Art	1,250 square feet	1,000 square feet
Gymnasium	8,467 square feet	6,000 square feet

*Physical Conditions of Exterior Envelope - Walls*

The building is faced with red brick in a running bond pattern, with ornate roof overhangs and large double hung window walls. Generally, the exterior is in good condition. Cleaning of the brick and painting trim doors and soffits is recommended. The exterior precast elements are cracking repair, sealing, and cleaning. See the charts below.

<i>Typical Exterior Walls - Today's Minimum Requirements</i>	
4" Brick	0.44
2" Air Space	2.02
1/2" Fiberboard Sheathing	1.32
2x4 Study Activity	4.38
Interior Gypsum Board	0.45
<b>TOTAL R-VALUE</b>	<b>8.56</b>
<b>WINDOW DOUBLE PANE R-VALUE</b>	<b>0.91</b>