GREENWICH PUBLIC SCHOOLS



Aging Buildings, Accessibility Compliance, Improve Air Quality & Air Conditioning, Increasing Enrollment, Current Capacity Issues, Model Programs for Next Generation Learning, Concept Designs for Program Improvements, Budget Development, Prioritization – Opportunities to re-create Excellent Schools!

FACILITIES MASTER PLAN - 2018

REVISED & UPDATED 9/26/19

KG+D listen imagine build

ACKNOWLEDGMENTS

This Facilities Master Plan was created through a collaborative process between the Planning Team lead by KG+D Architects and the Greenwich Public Schools. The key individuals involved are listed below:

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EXECUTIVE SUMMARY

Executive Summary

This Facilities Master Plan for the Greenwich Public Schools assesses the public school buildings in Town and identifies a range of improvements necessary to preserve them as assets and to improve their ability to appropriately accommodate the next generation of students. The horizon for planning improvements is 15 years and it is expected that the Board of Education will finalize priorities for implementing the projects based on the information provided in this Plan. This Plan was assembled primarily in 2017 and 2018 with the building assessment work done first in early 2017. Final edits and revisions were added to this version in Fall of 2019.

There are 15 principal school buildings totaling approximately 1.5 Million square feet of space on 236 acres of land that accommodate over 9,000 students in grades Pre-Kindergarten through 12th grade. The average date of the original construction for these school buildings is 1953 for an average age of 64 years old. The projected replacement cost of these buildings with related site improvements is approximately $1 Billion Dollars. This cost does not include sale or demolition of existing buildings or the purchase of any new land for new buildings.

In parallel with the Facilities Master Plan a set of enrollment projections for the District was completed by Statistical Forecasting LLC. The population of the District is projected to be relatively stable with 4.1% of overall growth predicted resulting in an additional 368 students. The Elementary age group is projected to remain at approximately its current enrollment with Middle School showing an increase of 101 students and the High School showing growth of 257 students or an approximate 10% increase over 2017 figures.

There have been recent studies on racial imbalance and as a response some magnet schools were created to in part address some of the inequities in a strictly neighborhood approach. Any changes to attendance zones or grade level configurations across Greenwich are not within the scope of this Plan.

The ability of the current structures to appropriately accommodate the current and projected population is a critical part of the assessment and planning process. Building capacity was analyzed in two distinct ways:

- *Current Use* - This method takes into account actual room sizes, how they are currently used, district class size guidelines, normal efficiency factors in filling classes and room use rates for secondary schools with rotating schedules. This method shows a number of buildings are over capacity at the Elementary Division totaling a shortage of 243 seats. The Middle Schools are showing some additional capacity shortages totaling approximately 216 seats. The largest shortage is at the High School which shows a shortfall of 314 seats.

- *Model Program* - This method goes beyond the classrooms and includes all related support, special subject and common areas. To assist with prioritization this process analyzed both the “core” spaces required to deliver the educational program and the “goal” spaces that would allow for the ideal way to deliver the program. Developments in educational pedagogy related to “Next Generation” schools were included in the development of these model programs. Many of these developments are already being implemented in the Greenwich Public Schools so it is important to plan for these types of programs as part of a long range planning process. This method shows a significant shortage of square footage across the District. The core spaces for the elementary schools alone show a shortage of approximately 96,000 net square feet which is roughly equivalent to the useable space in two full elementary buildings. The Middle Schools show a minor shortage of goal spaces of 5,700 net square feet. The High School is significantly short of core instructional space totaling 30,000 net square feet.

Assessments and recommendations for improvements are presented in two broad categories. Infrastructure for the purpose of this plan is defined as the improvements that are necessary or expected for the schools to function as good buildings in the context of today’s expectations for accessibility, indoor air quality, life safety, water tightness, security, energy efficiency and overall appearance. Program related improvements respond to capacity issues as well as other upgrades required to appropriately deliver an educational program. The infrastructure of the buildings was reviewed by a large team of professionals including Architects, Landscape Architects, HVAC Engineers, Plumbing and Fire Protection Engineers, Electrical Engineers, Roof Consultants and Construction Inspectors.

Overall the buildings are well maintained but due to their age there are many systems and materials that already have exceeded their expected useful life or will during the 15 year interval of this Plan. Two issues surface in a number of buildings; improving indoor air quality including cooling and fully providing access for the disabled. There are also significant costs associated with paving at all school sites as the expected useful life of paving is 15 years so basically the complete re-paving of the District’s drives and parking areas is included in the Plan. The initial total budget for infrastructure and site improvements (projected to 2020) is $366 Million.

Some level of program related improvements are needed at all buildings. The largest need for program improvements are at the buildings that show the largest shortfalls of classroom capacity and are missing core elements of the model program. Generally these improvements can be accomplished through strategic renovations and building additions. The only building that is being recommended for eventual demolition and substantial replacement is Central Middle School. Conceptual designs for renovations, additions and replacement buildings are included in the Plan. The model program was used as a guide and the concepts included in the Plan explore one potential method for improving each school. Additional design studies will be necessary prior to committing funding to any specific project but these concepts are typically adequate to define overall needs and budgets as part of a Master Facilities Plan.

While it is generally assumed that all grade levels and facilities will remain as they are today there was one alternative explored which represents a significant change. This alternative proposes to consolidate the Middle School population into Eastern and Western Middle School by renovating and building additions at both sites and then demolishing Central Middle School. Once this is complete a new building which would accommodate a “Freshman Academy” could be built on the footprint of Central Middle School. This would then reduce the amount of improvements necessary at the High School. While many agreed that this alternative was worth exploring, it is disruptive to existing attendance patterns and has many educational and operational impacts. As a result it was not selected to be a part of this Master Plan.



CENTRAL MIDDLE SCHOOL

A summary of the proposed program related changes is included below:

- Cos Cob Elementary, Glenville School, Hamilton Avenue School & New Lebanon School – Since these buildings have all been (or are in the process of being) replaced or significantly renovated there are few if any improvements being proposed at these sites.

- Parkway School – Given that there is significant additional capacity at this site there are only minor renovations recommended to update portions of the existing building.

- Julian Curtiss School, Riverside School and Old Greenwich School – These buildings are all in need of significant additions and renovations to resolve capacity, accessibility, core common area shortfalls and modernization issues.

- North Mianus School and the International School at Dundee – These two buildings also need to be significantly expanded to resolve undersized classrooms, circulation and safety issues as well core common area shortfalls.

- North Street School – This building needs a small addition to resolve under sized areas.

- Eastern & Western Middle Schools – Limited renovations to update instructional and common areas.

- Central Middle School – As mentioned earlier this building is recommended to be replaced with the exception of the new wing that was built in 2000. This building has a number of intrinsic structural issues and its exterior wall configuration and overall height make it very challenging to cost effectively renovate. A replacement building is proposed parallel to the current building on the north side (which is currently part of the playing field) so that the existing building can stay in service while the new one is constructed.

- Greenwich High School – Two major modifications to this building are proposed, one to provide additional instructional space and the other to provide additional athletic and physical education facilities. The technique to provide additional instructional space is to convert the current Library space back into classrooms and to locate a new two story learning commons near the main entrance. The physical education space is proposed to be a two story addition at the rear of the school that will include a new double sized gymnasium, team locker rooms, fitness and dance rooms and a jogging track. Changes to the front entrance will provide a new lobby a two story connecting corridor and an improved security configuration.

The District Administration Building, Havemeyer is also included in the scope of the Facilities Master Plan. The Plan recommends a significant renovation of this facility to resolve accessibility issues, preserve the building envelope, restore the Auditorium as a performance and meeting space and reconfigure administrative areas to an updated arrangement suitable for the leadership of a progressive major Public School District.

The total preliminary estimated budget for all program related improvements is (projected to 2020) $399 Million. When added to the Infrastructure the Master Plan total budget (projected to 2020) is $765 Million. The result would be a completely renewed set of public school buildings fully updated to address all health, safety and accessibility concerns and appropriately configured to serve the next generation of students in Greenwich for years to come.



OLD GREENWICH SCHOOL

PROCESS

Process

The goal of completing this Plan is to work towards anticipating the scope and budget of necessary and desirable improvements for school buildings and properties district-wide for the next 15 years. This process is consistent with the Board of Education's approved Facilities Standards which are re-stated below:

1. CODE COMPLIANCE – All School Facilities will conform to the latest safety and building codes.

2. ACCESSIBILITY – All students and staff will have access to school facilities of a similar standard, and all schools will be ADA compliant wherever feasible across the District.

3. EDUCATIONAL SPACE – All school facilities will contain sufficient classroom space to accommodate class size guidelines and the curriculum, as well as the programmatic needs and policies approved by the Board of Education.

4. CORE FACILITIES – Each school building will contain core facilities space sufficient for that school's student and staff population and to support the current educational programs of the District.

5. ATHLETIC AND PLAY FACILITIES – Outdoor athletic and play facilities at each school will be sufficient to support its student population and programmatic needs, and will be equitable across the District.

6. AIR QUALITY – All school facilities will adhere to the requirements of current State law on Indoor Air Quality in Schools (IAQ) including air conditioning.

7. ELECTRICAL CAPACITY – Each school facility will be supplied with electrical capacity sufficient to service all its technology, air quality, communications, and illumination needs.

8. TECHNOLOGY– All school facilities will contain technology equipment necessary for classroom instruction.

9. COMMUNICATIONS– Each school facility will contain all necessary components for internal and external school communications.

10. MAINTENANCE – All schools will be maintained regularly and on schedule to protect the taxpayers' investment. The District will develop and enforce Maintenance Standards that will include, but will not be limited to, building system elements, inspection repair cycles and replacement cycles.

In the past few years prior to this Plan Greenwich has been focused on critical major capital projects such as the High School Performing Arts Center and the replacement of the New Lebanon School and so they have absorbed most of the attention and significant funding. While these projects have provided substantial community benefit it is also important to identify what is needed elsewhere to bring all facilities as close as possible to a uniform standard of condition and educational adequacy within a reasonable time frame. The proposed improvements included in this Plan are in response to:

- The condition of the existing buildings,
- The current and projected student enrollments and
- The quantity and quality of the spaces required to deliver an educational program suitable for the next generation of Greenwich students.



EASTERN MIDDLE SCHOOL

This Plan was assembled by the planning team with considerable input and review from key constituents in the Greenwich Public Schools Community.

A summary of the meetings and reviews with topics is included below to better understand the extent of the interactive process that was completed during the assembly of this Plan:

- Kickoff Meeting with key Administrative Leaders.
- Building Conditions Survey of each building and site by the full team of professionals including Architects, Landscape Architects, Construction Inspectors, HVAC Engineers, Plumbing Engineers, Electrical Engineers and Roof Specialists.
- Site Visit to each school building and interview with building principals to discuss capacity, building use and key issues.
- Focus Group discussion with District Leadership Council (All District Administrators and Building Principals).
- Review Master Plan work to date with the Superintendent.
- Review of all Infrastructure work with Administration.
- Public BOE presentation of all infrastructure work.
- Discussion of Model Program and Next Generation Schools with Administration, BOE and Leadership Council.
- Review Meeting with BOE Master Plan Committee.
- Community Input Meetings at all three Middle Schools.
- Master Plan Review and Input meeting with Town Departments.
- Public BOE update on Master Plan focused on site amenities.
- Public BOE update on Master Plan including Demographics, Capacity and Model Programs.
- Public BOE update on Infrastructure work and Capital Plan.
- Master Plan progress review with Leadership Council including Demographics, Capacity and Model Programs.
- Public BOE meeting on final Capacity and Model Programs that define required Program Improvements.
- Review of Master Plan with Town BET Committee.
- Review of Master Plan progress to date with PTA Council.
- Review of required Program Improvements with Administrators.
- Review of required Program Improvements with Leadership Council.
- Public BOE meeting to review required Program Improvements.
- Review of Final Master Plan with BET and Town representatives.

It is also important to understand the limits of a 15 year Facilities Master Plan. This plan was assembled over the course of the past year (4/17 – 4/18) based on a set of standards and priorities developed in collaboration with the Greenwich Public Schools and related stakeholders. It should be expected that these priorities and standards will evolve and budgets will need to change to reflect the new concepts. While many of the aspects of this Plan were formulated to meet Core requirements and minimum goals it is typical that once implementation is underway more aspirational or inspiring features will be incorporated, particularly to major projects.

It should also be expected that there will continue to be a variety of methods for funding and completing the work outlined in this plan including:

- Annual capital projects to improve building infrastructure,
- Routine site maintenance and capital projects that may continue to be completed by the Parks Department and
- Major capacity creating or program related projects that may be funded separately from the annual capital work.

With that in mind, it is helpful to think of this Plan as an overall guide for district-wide improvements that will need to be updated at least every five years. Each individual project will also need to be reviewed in more detail, through a design study phase, prior to fixing the funding and schedule for a defined scope of work.

EXISTING CONDITIONS

Existing Conditions

The Greenwich Public School Buildings have been adequately maintained and are in overall good condition. There is however a wide range of conditions and building types among the 15 buildings that comprise the District's Educational Facilities. As earlier stated the average age of the original construction is 64 years old with an original build date of 1953. During early presentations of the Plan a photo of the best-selling car in America in 1953 was shown to provide some cultural and design context for the average age of the facilities.

The majority of the work identified in this report is due to the age of the buildings or systems. The expected useful life of building elements and systems is predominantly less than 64 years old with many in the 20 – 30 year range. In general when the building element or system is beyond its expected useful life it is included in the list of work to be completed during this plan. There are also many issues related to the design standards that were in place during the time when the buildings were originally designed. Energy requirements for building envelopes (insulation), window glazing, instructional technology, doors and hardware, interior finishes, toilet and plumbing fixtures have all undergone very significant changes in the last 64 years and reasonable expectations are that these features should all be brought up to current standards.

There are two key categories of work needed that seem to be more prevalent than others:

- Americans with Disabilities Act (ADA) Compliance
- Updated Ventilation Systems including cooling

ADA compliance originated with the Federal Civil Rights legislation of the same name that was enacted in 1990. Although originally there were many buildings that would not have to immediately comply due to the "undue burden" it would place on the Owner financially, it is increasingly difficult to make this argument as we approach 30 years from the date of the original legislation. Building codes have now incorporated much of the original ADA legislation and older buildings are required to be brought into compliance when other significant renovations occur. Since this Plan does include many renovations of this nature it is also necessary to address the ADA compliance issues. These improvements will provide equal access to all disabled individuals. The most egregious lack of compliance is that four multi-story buildings have no elevators (a.k.a. an interior accessible route). There are other issues with lack of access to main entrances as well as less evident issues such as lack of accessible toilet rooms, accessible play structures, door clearances, appropriate plumbing fixtures, faucets, door hardware and signage.

Indoor air quality is also an issue in many of the buildings that were surveyed. There are limited ventilation systems in place in many of the older buildings with little or no mechanically introduced fresh air, or powered exhaust or mechanical cooling. While the building code mandate is to comply with the code that was in place at the time of construction, it is no longer a reasonable expectation nor is it energy efficient that the only way to provide fresh air in a space is to open a window. Given the many benefits to occupants' health, especially for younger children, of providing the appropriate amount of properly conditioned fresh air, these systems are proposed to be provided for all buildings across the District.

After each building was surveyed the areas that needed improvement were assigned a scope of work and budget. This itemized approach to budget development is not intended to be translated directly into an implementation plan. Some items can be addressed individually but it is generally more beneficial to bundle a number of related issues at one location and complete a more comprehensive building–wide upgrade project. This not only will result in some economies of scale but also lessen the disruption to the ongoing operations of the facility.



Roadmaster - the best selling car in 1953

The property surrounding each school was also surveyed as part of this Plan. Site improvements budgeted in the plan include upgrades to playing fields, fencing, driveway and parking lot paving, sidewalk replacement, play equipment upgrades and replacement as well as landscaping improvements. Since the expected useful life of pavement is close to 15 years, improvements to almost all of the paved surfaces in the District are included at some point in this Plan.

The total amount of site and infrastructure work required to restore the existing buildings to "overall good" condition totals approximately $380 Million Dollars based on 2020 pricing. As projects are pushed out beyond those years appropriate cost escalation should be added to each project.

The detailed listing of work that is required for each site is provided on the site specific pages later in this report and fully itemized in the spreadsheet included in the Appendix.

Enrollment Projections

As a companion task to the Facilities Planning work, Greenwich Public Schools commissioned a review of enrollment projections by Statistical Forecasting LLC. Their complete report, finalized in September of 201, is included in the appendix to this document. This study uses industry standard methods for projecting enrollments and is based on data provided by local and state resources including birth data and approved housing developments in the Community.

This is a detailed and thoroughly researched report and those who are interested are encouraged to review it in its entirety. There are many variables taken into account with projections of this nature including; birth data, new housing developments, current enrollment and historical trends. Unpredictable changes in private school enrollment, housing costs, new housing developments and sales of existing homes as well as overall economic conditions can significantly impact these projections.

For the purposes of planning the capacity of school buildings, there are different strategies employed as to what year constitutes the best target enrollment. Many States recommend using a five year projection for elementary schools, seven year projection for middle schools and a ten year projection for high schools. These planning horizons are related to the reliable accuracy of projections which are most often tied to birth data. Since it takes approximately five years from birth to arrival in kindergarten this strategy makes sense in that facilities are being planned for children that are already growing up to become young students. Connecticut employs a slightly different approach in that they recommend planning for the 8-Year Highest Projected Enrollment (HPE). This guidance is among the recommendations for school planning included in a recent publication entitled, "Connecticut School Construction Standards and Guidelines" – September 22, 2016 (p.2).

A chart summarizing current (2017) enrollments and the recommended planning targets is included here. The margin of error for district-wide projections is 1-2% but the margin of error for projections for specific schools can be higher.

Some of the key finding of the demographic study are summarized below:

- Elementary School enrollments are projected to be fairly stable. Overall the planning target for all elementary schools is only 22 students below 2017 levels or 0.5% which is not statistically significant.
- Middle School enrollments are projected to have a minor increase of 100 students or a 5% increase with the majority of the increase projected at Eastern and Western Middle Schools.
- The High School is projected to have a significant increase of 257 students or 9.5% over 2017 figures.

Enrollment Planning Summary

			Lowest <5 yrs.	Highest <5 years	2017 Enrollment	Projected Enrollment[1]	Highest Projection in 8 years[2]	Planning Target
Elementary	CC	Cos Cob School	432	447	432	377	415	415
	GV	Glenville School	407	444	448	451	453	453
	HA	Hamilton Avenue School	364	409	364	364	379	379
	ISD	International School at Dundee	368	383	363	348	364	364
	JC	Julian Curtiss School	330	369	338	312	342	342
	NL	New Lebanon School	257	265	260	239	268	268
	NM	North Mianus School	447	496	506	459	491	491
	NS	North Street School	384	423	410	428	428	428
	OG	Old Greenwich School	425	449	466	431	459	459
	PW	Parkway School	258	272	250	240	256	256
	RV	Riverside School	468	497	469	428	461	461
		Subtotal Elementary	**4140**	**4454**	**4306**	**4077**	**4316**	**4316**
							Change	10
Middle	CMS	Central Middle School	558	599	582	531	588	588
	EMS	Eastern Middle School	779	846	842	789	885	885
	WMS	Western Middle School	504	558	593	572	645	645
		Subtotal Middle	**1841**	**2003**	**2017**	**1892**	**2118**	**2118**
							Change	101
	GHS	Greenwich High School	2547	2677	2694	2757	2951	2951
							Change	257
		Grand Total	**8528**	**9134**	**9017**	**8726**	**9385**	**9385**
							Change	368
		1 - Projected dates are for 5 yrs. for elementaries (2022), 8 yrs. for Middle (2025) and 10 yrs. for High School (2027)						4.1%
		2 - CT. uses the highest enrollment in 8 yrs. as a benchmark or target for future planning						
		All figures are from Demographic Study by Statistical Forecasting - September 2017						

NEXT GENERATION SCHOOLS

Next Generation Schools

65% of the children in preschool today will work in jobs that do not yet exist.

We are currently preparing students for jobs that don't yet exist, using technologies that haven't yet been invented, in order to solve problems we don't even know are problems yet.

-Karl Fisch, Educator

You can't expect children to learn 21st Century skills in schools built for the 1950s. We need schools designed for 21st-Century success.

- Chad P. Wick, President and CEO, KnowledgeWorks Foundation

Our education system looks a lot like the U.S. auto industry in the 1970s, stuck in a flabby, inefficient, outdated production model.

- Michael Bloomberg

The statements above begin to frame the issue that schools are facing everywhere. With an accelerating rate of change in technology overall and specifically the introduction of one-to-one devices and personalized learning software for each student, learning environments need to evolve to best serve the next generation of students. There were several presentations during the course of the Master Plan process on this topic that reviewed the changes in thinking and learning modalities that are impacting the current thinking on updating School buildings.

Many of the older school buildings in Greenwich need some level of renovation to become appropriate learning environments for the Next Generation of students in Greenwich. The types of changes to buildings being considered here are not unique to Greenwich. In fact many of the principles being discussed here are already being implemented in recent renovations, new schools and Educational Specifications drafted by District Administrators for portions of the existing buildings. The Connecticut School Construction Standards and Guidelines dated September 22, 2016 (chapter 2) also re-states some of these very same principals and approaches that are being proposed in this Facilities Plan. Some of the key parallels are:

- Accommodate multiple learning styles,
- Incorporate pervasive technology,
- Require content areas to be linked to one another, and
- Must offer both the substance and the practicality to prepare students for an uncertain future.



MIDDLETOWN HIGH SCHOOL INNOVATION LAB

The Standards go on to list several physical features of schools that should be included:

- Student production spaces for project creation,
- Small group rooms for collaborations,
- Large group spaces for presentations and display of student work,
- Grade level teaming,
- Schools within a School
- Thematic Teaming
- Community Use
- Creating a range of learning spaces including:
  - Traditional Learning Environments
  - Student-Centered Learning Environments and
  - Blended Learning Environments.

The Facilities Master Plan addresses the physical impact of these changes to Learning methods. Some of the key principles behind the physical changes that should be included in new and renovated areas are outlined below.

Classroom Environments – Classrooms need to be reconfigured to allow for more active learning approaches. The traditional lecture room configuration of chairs and desks in rows with a teacher at the front of the room writing on a surface for all to see is no longer the primary method for delivering instruction. This so-called "preach and teach" configuration is outdated and increasingly irrelevant to the next generation of students and teachers. Changes can be accomplished by a range of responses from the minimal impact of providing all new flexible, moveable classroom furniture that provides a variety of comfortable seating and work surface options to complete renovation of classroom spaces. Key to providing an active, inviting learning environment that promotes movement is to have ample daylight and fresh air that is properly conditioned.

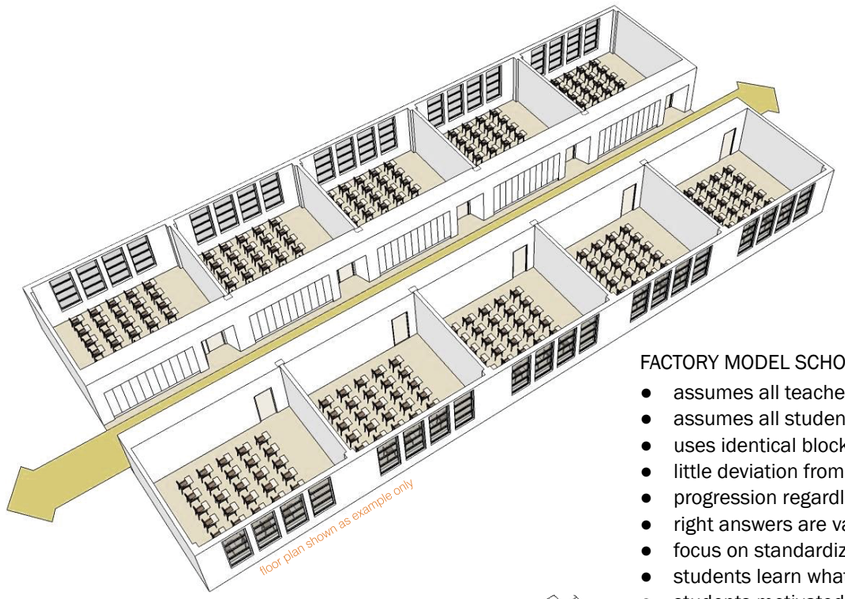
Informal Learning Spaces – Students can learn anywhere and everywhere in a School building. Today you will see students in corridors working and talking about projects. As students' devices play an increasingly important role in directing individual and small group learning it is important to provide space for this to occur that is not a traditional classroom. This can be an open "innovation lab" or glass enclosed small group rooms. These types of spaces can also be created by allowing spaces to be joined together by moveable walls. Informal learning spaces can also be as simple as an overly wide corridor or use of the cafeteria during non-lunch hours.

Learning Commons / Library Media Centers – The traditional printed materials lending Library is obsolete. They are being replaced by more vibrant common spaces that combine technology, access to printed materials and conventional media with individual and group work areas. Similar to the classroom environment they need to provide a variety of comfortable seating and work surface options to promote movement and engagement.

Small Group Learning Areas – Spaces that comfortably hold 4–10 students for group work simply were not included in schools built before 2005. These types of rooms are now critical spaces for project based learning and interdisciplinary learning.

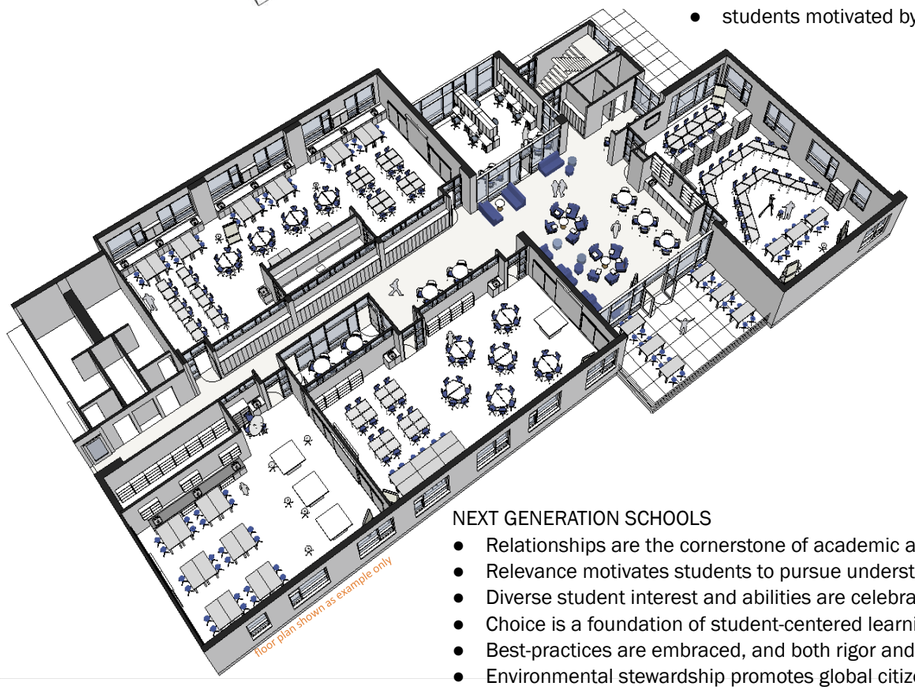
Science, Technology, Engineering & Math (STEM) – This initiative breaks down the traditional departmentalization or compartmentalization of disciplines and requires some re-thinking of where different areas are located within a building and how they are outfitted.

Increased Visibility between spaces – As the boundaries between disciplines and structured and informal learning areas are blurred it is helpful to allow clear lines of sight between all areas. Of course this needs to be balanced with security concerns. This more open environment allows for acoustic privacy while providing opportunities for accidental inspiration by seeing the exciting work that a colleague is doing nearby.



FACTORY MODEL SCHOOLS:

- assumes all teachers teach the same way
- assumes all students learn in the same way
- uses identical blocks of time
- little deviation from year to year
- progression regardless of mastery
- right answers are valued highest
- focus on standardized testing
- students learn what is expected
- students motivated by fear of failure



NEXT GENERATION SCHOOLS

- Relationships are the cornerstone of academic achievement.
- Relevance motivates students to pursue understanding.
- Diverse student interest and abilities are celebrated.
- Choice is a foundation of student-centered learning.
- Best-practices are embraced, and both rigor and innovation are expected.
- Environmental stewardship promotes global citizenship.
- Human, physical and financial responsibility fosters community support.
- A safe, healthy & nurturing environment meets holistic needs of learners.
- Learning extends past the bell schedule and beyond the school campus.
- Technology is a powerful TOOL for teaching & learning.
- The school is a hub of community activity

CAPACITY ANALYSIS

Capacity Analysis

A key aspect of the planning process is to analyze the capacity of the schools to accommodate both the existing and projected enrollment. Capacity calculations for school buildings can be completed in a variety of ways.

Simple Capacity – This method is often used as it is the easiest to complete. It typically involves identifying the full sized classroom spaces in a school and multiplying by the preferred class size to arrive at an overall building capacity. While this method can identify a maximum capacity it does not generate a realistic operational or functional capacity figure as it does not take into account the full complement of spaces required to deliver the educational program, the programming efficiency of each classroom or the impact of a rotating schedule at the secondary levels. This method is not employed as a planning tool in this Plan.

This Master Plan aspires to provide a detailed view of the capacity of each building by analyzing capacity in a range of ways:

- Actual Capacity based on the current use and actual size of each space in every building.
- Adjusted Capacity based on providing all of the Core spaces in the Model Program.
- Adjusted Capacity based on providing all of the Core and Goal spaces in the Model Program.

In all three methods capacities are adjusted to account for actual room sizes, the efficiency of filling up each room to its preferred target class size and the utilization rate of each room (for secondary schools only). Programming efficiency and utilization was reviewed with building principals so that these variables align with how the building is actually utilized.

The process began with an exhaustive physical space inventory (PSI) of all spaces in each school in the District. Data was gathered that included room number, current use, location and the net (useable) square footage for each space district-wide. The capacity of each space is then calculated using the square foot per student based on the preferred class and room size multiplied by the actual room size, the programming efficiency and then the room utilization rate.

During the PSI process it was noted that several schools have a range of classroom sizes some of which are below normal size. This led to some research on classroom size standards in the region and the nation. A chart summarizing that research is included here.

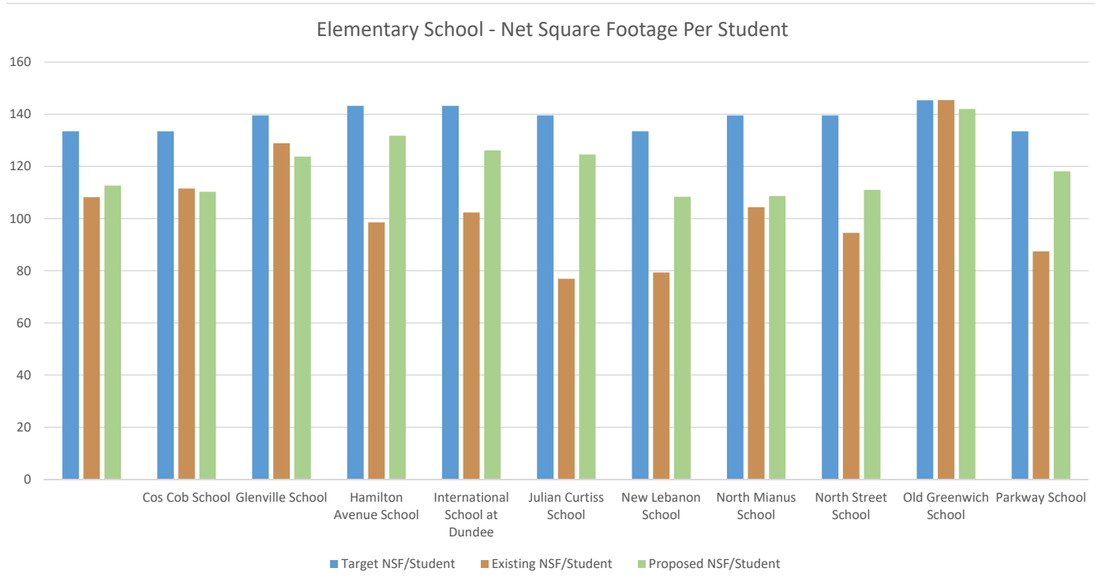
The classroom size that was selected for the purposes of this Master Plan aligns with the decisions made by local building committees for the buildings most recently planned and built by the District (Glenville, Hamilton Avenue & New Lebanon). The full listing of room sizes is included later in the Model Program analysis but a summary of some of the schools with smaller room sizes is included below:

- ISD – 714 sf – 16% below model program
- Old Greenwich – 760 sf – 11% below model program
- Parkway – 795 sf – 6% below model program
- North Mianus – 778 sf – 8% below model program
- Riverside – 738 sf – 13% below model program

Classroom Size Comparisons

Location or Standard	Pre-K	Kindergarten	First Grade	Grades 2-5
GPS Master Plan Model Program	1000	1000	850	850
Connecticut Standard	1200	1200	900	900
Hamilton Avenue	880	895	800	800
Glenville School	NA	1080	895	895
New Lebanon School	NA	1000	900	850
New York State Standards	900	900	770	770
Massachusets State Standards	NA	NA	950	950
California Standards	NA	NA	960	960
Florida Standards	NA	NA	882	882

Notes:
GPS Model Program is being established as part of the 2017 / 2018 Master Plan
Square Footages of classrooms at New Lebanon, Glenville and Hamilton Avenue is based on plans and Ed. Specs. provided by GPS
New York State Standards are based on NYSED Facilities Planning Documents
Massachusets, California and Florida Standards are from a report entitled, "Building Accountability - A Review of State Standards and Requirements for K-12 Public School Facility Planning and Design" by Jeffrey M. Vincent, PhD at the Center for Cities + Schools - University of California Berkeley - Copyright 2016

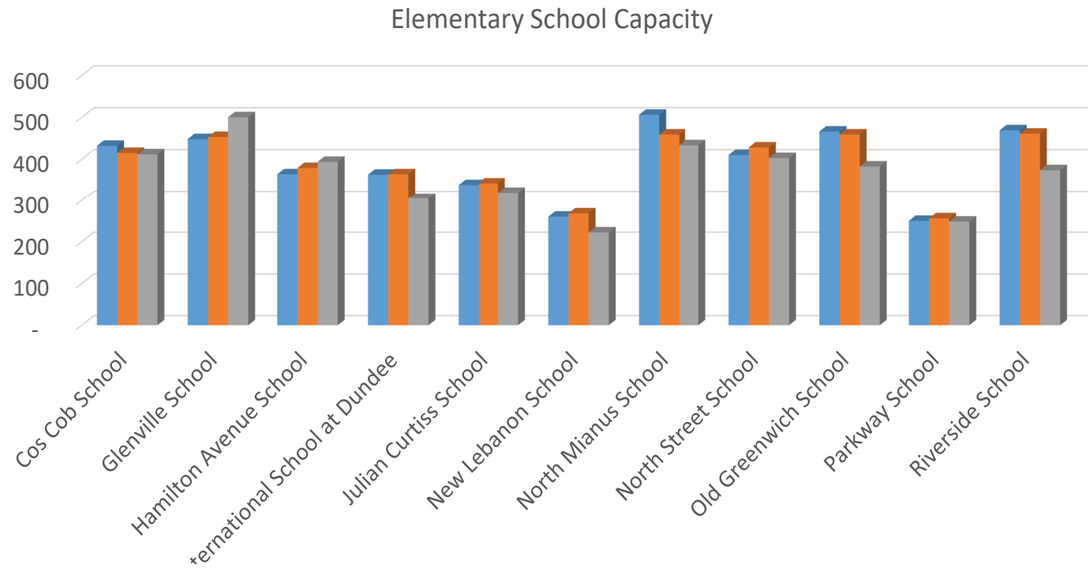


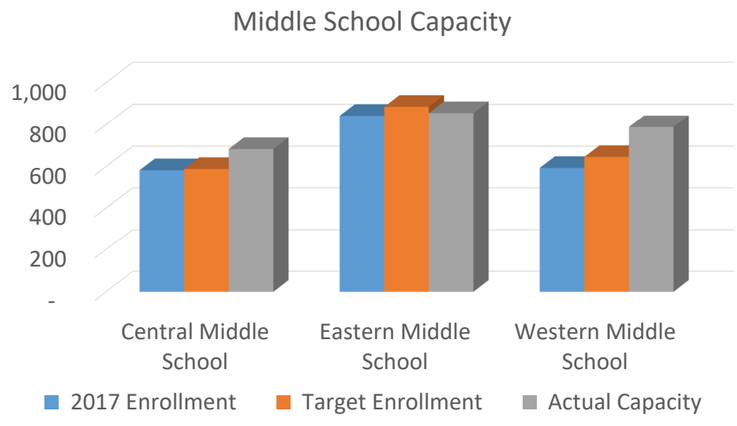
Programming efficiency or the ability to fill up a room to its preferred class size is one of the other variables in the capacity calculation. This factor reflects the reality that it is not always possible to have 24 students in 2 sections of 2nd grade every year at an elementary school as there may not be exactly 48 students in that attendance zone enrolled in the 2nd grade. Similarly in a rotating schedule at the Middle or High School it is common that some subjects are below the preferred class size due to the unavailability of students self-selecting that particular subject during that class period. Programming efficiency tends to go down when elementary buildings are smaller with fewer sections per grade level. They also tend to decrease in secondary schools when a large number of electives are offered which is typical of higher performing High Schools. For the purposes of the capacity calculations in this Plan the figure is set at 90%. This was reviewed with building principals and confirmed that this factor reflects the reality of scheduling their buildings. In a report issued by the New York City Department of Education that explains the programming efficiency of the buildings in their system a rate 75 – 90% was cited as typical for all elementary schools and 87.5% was the average rate for buildings housing grades 6-12.

Room Utilization rates are also a factor in capacity calculations at the secondary level only. Elementary school methods are simpler in that only grade level, self-contained rooms are deemed to be capacity – carrying teaching stations and the overall capacity is the sum of the capacities of grade level classrooms. In secondary schools, with a rotating schedule dividing the day into 8 or 9 periods per day it is typical to assume that a fully scheduled building still results in empty rooms 1 or 2 periods per day for the regular or inter-changeable classroom. Special subject rooms such as Science, Art, or Technology are typically deemed to be fully utilized when they are in use 5 of 8 or 9 periods per day. This is due to the specialized nature of the rooms and that ideally they need time to clean up after the last class and setup for the next class which results in the lower utilization. These rates are typical in many capacity methodologies and are also cited in the New York City Department of Education report, National Science Teachers Association guide and New York State Education Department Facilities Planning Documents. If the preferred room utilization rates are exceeded it can result in students being "forced" into sections that are not their first choice or preferred time slot. If special subject areas exceed the recommended utilization rates it typically results in a reduced amount of time for instruction due to the time required for setup and breakdown of the lab or project activities.

A summary of the capacity calculations is included as an attachment to this report and a graph that shows the results of this analysis is included below. Some of the key findings are summarized below:

- The Elementary Schools are overcrowded as a group with a total shortfall of capacity of approximately 288 students. The five schools that make up the bulk of this shortfall are
  - ISD – 59 students
  - New Lebanon – 46 students (to be remedied by the planned replacement school)
  - North Mianus – 46 students
  - Old Greenwich School – 59 students
  - Riverside School – 78 students
- The Middle Schools have adequate capacity with an overall excess of space equivalent to 216 seats or about 10% of overall capacity.
- The High School appears to have the largest shortfall of approximately 314 seats or about 12% of overall capacity.





MODEL PROGRAM

Model Program

The capacity of a school building should also take into account its ability to serve the educational needs of the students. With this in mind the planning team has assembled a model program that identifies what is required from the facility in a quantitative and qualitative basis. For a school to fully function it is critical to have the full complement of all types of spaces that are necessary to deliver the educational program, not just the right amount of classrooms.

The quantitative aspect is a list of spaces with required square footages broken down into categories:

- Instructional Core
- Activities Programs
- Special Support Programs
- Community Commons
- Administrative & Student Services
- Building / Facilities Support

Within each of these categories the planning team identified the portion of the spaces that must exist to minimally provide for the educational program – listed as Core spaces and those that ideally should exist – listed as Goal spaces. These designations have been reviewed by GPS administrators so that this reflects the District's priorities for their buildings.

Model programs were specifically designed for the varying sizes of Elementary and Middle Schools so that all schools can be effectively benchmarked to a size grouping and relevant Model Program. This list of spaces is then compared to the actual list of spaces in the District's Physical Space Inventory to determine compliance with the Model Program. One way of looking at the shortfall of Core space would be to convert classroom space to non-classroom Core spaces which would further reduce the practical capacity of the buildings.

The results of this quantitative analysis are included on the attached charts and graphs. Some of the key findings are summarized below:

- The Elementary Schools are below the square footage required to achieve the Core Model Program by 96,950 square feet which is roughly equivalent to two full Elementary Schools in Greenwich.
- The buildings with the largest shortages are Riverside, North Mianus, Cos Cob and ISD.
- The Middle Schools are not far below the square footage required to achieve the Core Model Program in aggregate with Central with an excess of space, Western below by 6,700 sf and Eastern approximately 15,000 sf short.
- The High School's core instructional spaces are currently overcrowded and will need further expansion to accommodate the target enrollment of 2,951 students.

			Elementary School Model Program											
			2 Section				3 Section				4 Section			
		Pre-Kindergarten (Opt.)	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF
PK.01	**CORE**	PK Learning Studios	2	1,000	27	2,000	3	1,000	41	3,000	4	1,000	54	4,000
PK.02	GOAL	Small Group Rooms	1	200		200	2	200		400	2	200		400
PK.03	GOAL	Commons/Transition Area	1	400		400	1	500		500	1	600		600
PK.04	GOAL	PK Storage Room	1	200		200	1	250		250	1	300		300
PK.05	**CORE**	PK Toilets	2	50		100	3	50		150	4	50		200
		Subtotals			**27**	**2,900**			**41**	**4,300**			**54**	**5,500**
		Instructional Core	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF
A.01	**CORE**	Kindergarten Learning Studios	2	1,000	36	2,000	3	1,000	54	3,000	4	1,000	72	4,000
A.01a	**CORE**	Kindergarten Toilets	2	50		100	3	50		150	4	50		200
A.01b	**CORE**	Kindergarten Storage	1	100		100	1	100		100	1	100		100
A.01c	**CORE**	First Grade Learning Studios	2	1,000	36	2,000	3	1,000	54	3,000	4	1,000	72	4,000
A.01d	**CORE**	First Grade Toilets	2	50		100	3	50		150	4	50		200
A.01e	**CORE**	First Grade Storage	1	100		100	3	100		300	4	50		200
A.02	**CORE**	2-5 Learning Studios	8	850	173	6,800	12	850	259	10,200	16	850	346	13,600
A.03	GOAL	FLEX Learning Studios	2	850	43	1,700	0	850	-	-	0	850	-	-
A.04	GOAL	Small Group Rooms	4	100		400	6	100		600	8	100		800
A.05	GOAL	Activity Commons	1	400		400	1	400		400	1	400		400
A.06	GOAL	Storage Rooms	1	100		100	1	100		100	1	100		100
A.07	**CORE**	Student Restrooms	6	150		900	8	150		1,200	10	150		1,500
A.08	**CORE**	Staff Restrooms	6	50		300	8	50		400	10	50		500
		Subtotals			**288**	**15,000**			**367**	**19,600**			**490**	**25,600**
		Activities Programs	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF	Qty	Avg. Size	Capacity	Total NSF
B.01	**CORE**	Gymnasium	1	3,500		3,500	1	4,500		4,500	1	5,500		5,500
B.09	**CORE**	Gym Storage & Supports	1	300		300	1	300		300	1	500		500
B.02	**CORE**	Music Labs	1	1,000		1,000	1	1,000		1,000	1	1,200		1,200
B.03	**CORE**	Music Lab (Band/Orch)	1	850		850	1	1,000		1,000	1	1,000		1,000
B.04	**CORE**	Art Lab	1	1,000		1,000	1	1,000		1,000	1	1,000		1,000
B.04a	**CORE**	Art Kiln, Glazing & Storage Rooms	2	100		200	2	150		300	2	150		300
B.10	GOAL	Computer Lab	0	850		-	0	850		-	0	850		-
B.11	GOAL	World Language Lab	0	850		-	0	850		-	0	850		-
B.05	**CORE**	Science Lab w/Prep Room	1	1,200		1,200	1	1,200		1,200	1	1,200		1,200
B.05a	GOAL	Additional Science Lab w/Prep Room	1	1,200		1,200	1	1,200		1,200	1	1,200		1,200
B.06	GOAL	Project/Idea Lab	1	850		850	1	850		850	1	850		850
B.07	GOAL	Flex Lab	1	500		500	1	650		650	1	850		850
B.08	GOAL	Lab Storage Rooms	4	100		400	4	100		400	4	100		400
		Subtotals			-	**11,000**			-	**12,400**			-	**14,000**

A PORTION OF THE MODEL PROGRAM (FULL MODEL APPROGRAM IS INCLUDED IN THE APPENDIX)

Of course the amount or size of a space is not the only indicator of its ability to serve the needs of the educational program. Some of the other key qualitative features of spaces that should exist in Next Generation Schools were discussed earlier and are summarized below:

Spatial Organization / Zoning – Where spaces are located can also really effect the overall function of a school. Locating Community spaces in a distinct and separable area is often desirable as it allows the building to act as a community resource without opening up all of the instructional space to the public. Other desirable characteristics of adjacencies can include; interspersing Support program spaces into the areas where Instructional Core spaces are located, creating age level groupings (for example PK – 2 and 3 – 5 areas in an Elementary School), and grouping Activities Programs by discipline, also known as thematic teaming, to create STEM or ARTS zones within a building.

Program Improvements

Once the enrollment targets were established, the capacity and model program analyses completed and interviews with each building administrator conducted the Master Plan team reviewed each building to determine what was realistic to propose in the way of program related improvements. This process used the information gathered as a guide, not a mandate and proposed what was realistically achievable and sensible at each school site. The specific proposals for each school should be viewed as a starting point that basically outlines one possible way of addressing the range of issues that need to be improved.

In each case there was a focused effort on not only remedying the current shortfall of space but also to re-create a sensible whole School as part of updating the design of each building. This holistic approach often leads to relocating of spaces to allow for the re-newed building to properly function. The proposed program improvements also incorporated sensible improvements related to overall building security and ADA access where an integrated solution was possible.

Program Improvements for the Elementary School Buildings are focused on the buildings that have had the least attention and are facing the most significant capacity issues and shortfalls of Core spaces when compared to the Model Program. Significant Addition and Alteration projects are being proposed at:

- The International School at Dundee
- Julian Curtiss School
- North Mianus School
- North Street School
- Old Greenwich School
- Riverside School

Buildings that have been more recently reconstructed, renovated or are not facing capacity issues are included in the Plan for more modest proposals. These proposals include updating key shared areas such as Libraries or Learning Commons and replacement of furnishings to allow for more flexible classroom environments. The Elementary School Buildings that are in this category include:

- Cos Cob School
- Glenville School
- Hamilton Avenue School
- The New Lebanon School
- Parkway School

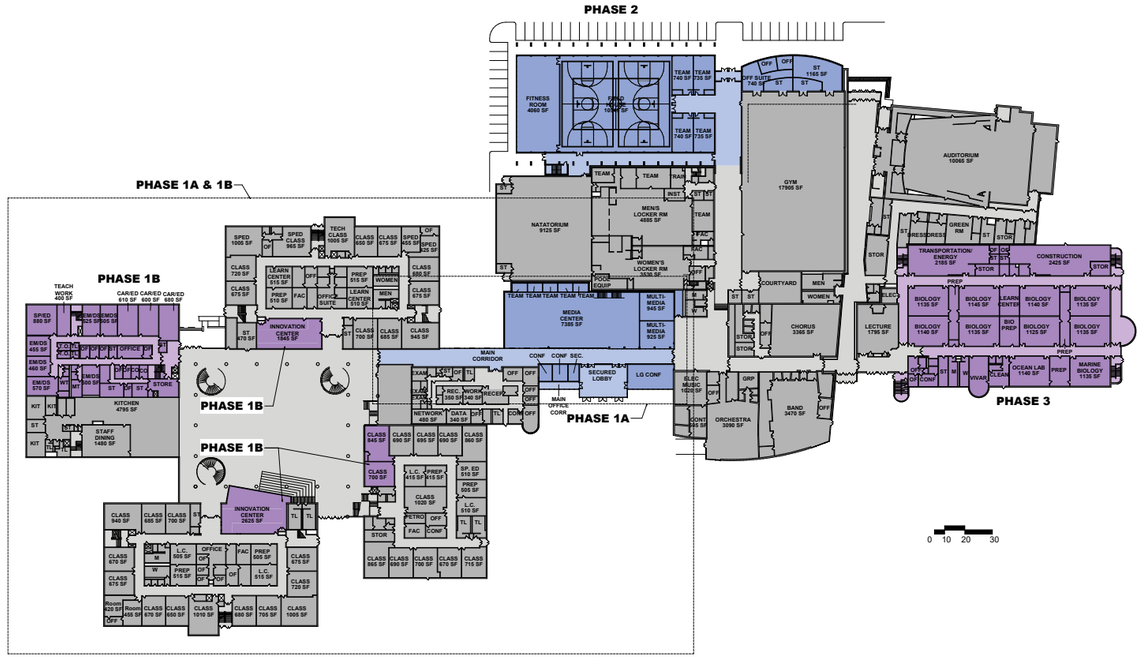
The District has three Middle Schools that do not appear to be facing capacity issues. Overall Central Middle School is in the worst condition with several structural limitations as well as some current structural problems that have been remediated. There are other structural problems which may become critical in the next few years and will also need to be remediated. These are the basic reasons that Central Middle School is the only building in this Plan that is slated for replacement.

Given that consideration the planning team was asked to explore consolidation of all Middle School students into the other two Middle Schools; Eastern and Western Middle Schools. This would eliminate the need to replace Central Middle School and could result in some operational efficiencies due to the reduction of one Middle School. It would also free up the Central Middle School site for another District function that could be related to the nearby High School.

As earlier mentioned the High School is predicted to have significant increases in enrollment while being currently at or above its maximum capacity. While it is a large building overall, there are issues with travel distance for students and how best to provide additional capacity to improve overall building organization. An integrated approach that re-organizes some of the instructional and common areas as well addressing security improvements and Next Generation School features is proposed as part of this Plan.

Some of the recurring principles that were employed when assembling concepts for program improvements at each school include:

- Consolidate main office and security functions at the main building entrance.
- Create clusters of grade level classrooms to stimulate collaboration.
- Group special subjects together – for elementary schools this includes Art, Music, Maker – Spaces.
- Place cafeteria spaces near play areas at the elementary level.



PROGRAM IMPROVEMENTS FOR THE HIGH SCHOOL (DISCUSSED IN MORE DETAIL LATER)

BUDGET DEVELOPMENT

Budget Development & Cost Control

The development of reasonable and achievable budgets is critical to the success of any publicly funded capital project. The process and factors outlined below describe how budgets were developed for this Facilities Master Plan. Budget summaries and detailed breakdowns are provided in the Appendix to this report.

During the planning phase of a project budgets are developed based on the final cost per square foot of similar building projects completed in the region. The level of design used to determine the overall type of space and quantities are conceptual or pre-schematic and represent only the very beginning of the design effort (+/-1%) that will eventually be expended to produce complete project documentation.

To create a comprehensive project budget or total cost to the Town it is necessary to add reasonable design and construction contingencies, the cost of related demolition, site development or utility upgrades, allowances for hazardous material abatement, estimates of projected cost escalation to the beginning of construction, allowances for new furniture needed for the project and all related project costs (soft costs).

The inclusion of contingencies in budgets is a common and advisable practice for this stage of project development. Two types of contingencies are included; design and construction. A design contingency is typically an amount of funding set aside for items that arise during the more detailed design phases of the project. These can range from additional features requested to be included by the Owner to increases in complexity and thus cost for items that were originally included that become better known as the design develops. At the conclusion of the Design Development Phase, the design contingency utilization should be known and if not expended, the budget can be reduced by this amount or the balance can be retained by the Owner as additional construction contingency.

Construction contingencies are typically held aside for additional items that occur after the bids have been accepted and the project is underway. These types of items also have a range from additional requests for work by the Owner, unforeseen conditions either underground or hidden in existing buildings, additional work required to complete the intended work of the project that were not shown on drawings to additional hazardous material abatement. The construction contingency is typically expended by the issuance of change orders and if not fully utilized the Owner can reduce the budget for the project.

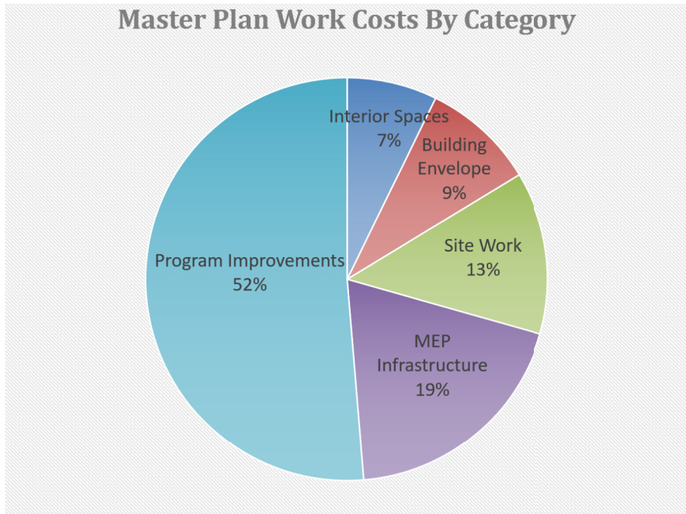
Project Costs or “soft costs” are the funds necessary for the District to complete the project that are not expended on “hard” construction. These typically include professional fees for architects, engineers, attorneys, financial advisors, surveyors, testing laboratories as well as printing, shipping, custodial overtime and other project related administrative expenses. The project costs are typically administered by the District and if not fully needed for the project, the budget can be reduced.

It is also critical to add cost escalation at current rates up to the time that the project will be issued for competitive bids. Preliminary budgets in this Plan are escalated to 2020. Obviously any implementation plan that completes the proposed work in phases will add considerable costs due to cost escalation which in 2018 is tracking at 5% per year. This figure has ranged from 10.6% (2006) to -8.4% (2009) according to nationally published figures. A reasonable average figure for cost escalation for the last 5 years is 4.5% per year.

Some of these budget categories are different than what has been done in the past in Greenwich. Project Costs or at least professional fees have often been funded separately from construction expenditures in Greenwich. Additionally the Town’s Department of Public Works has traditionally included the cost of road and re-paving projects in their budget and the Town’s Parks and Recreation Department has often carried the cost of fields improvements in their own budget. With this in mind the budgets developed in this Master Plan are inclusive of all costs while they may eventually continue to be funded in separate pieces.

The conceptual budget that is developed during the planning phase often establishes a fixed budget for the project that then is used as a maximum budget target for the subsequent design and construction phases. As issues arise during the development of the project, typically after the budget is approved, the design and construction contingency are utilized and or the scope or quality of the project is adjusted as necessary to stay within budget.

To confidently establish a fixed cost for a specific project it is best to advance the design and planning beyond the conceptual design level. While there are varied opinions of how far the design needs to progress to confidently establish a scope of work and a budget there is obvious benefit to getting beyond the concept stage. A design study phase or Schematic Design (+/- 30% complete pre construction documentation) would be the recommended minimum refinement to establish a budget. To complete the Design Development stage (+/- 60% complete pre construction documentation) is preferred as this is the stage of development where cost estimators and contractors can reasonably assign a guaranteed maximum price for the project.



Implementation

A 15 year Facilities plan at this scale is both challenging to assemble and implement. The question of how to accomplish what is planned and in what order must be balanced with what is affordable.

Prioritization of projects is often based on an established set of criteria which often include:

- Project solves a critical Health, Safety and Welfare concern,
- The project is necessary to accommodate the student enrollment,
- The project is necessary to adequately provide for the educational program,
- The project allows for equal access for all individuals,
- The project or projects improves the overall security environment,
- The project is necessary to replace a building element or system that is no longer functional or is expected to fail in the near term,
- Project is important and the building has not been improved recently,
- Projects are beneficial but the building is so poor overall that it is not worth significant investment and is slated for replacement and
- The fiscal efficacy of the project – large impact for a modest cost.

Decision making is easiest if a single project or building meets more than one of the criteria above. Of course this is not a comprehensive list and public entities will also weigh other more political concerns related to finding a balance of projects that serves the different geographic regions and demographic profiles within the School District.

How projects get done is also important to consider in the implementation of this Plan. Improvements can be accomplished on a system by system basis across the District or by addressing everything that is needed at a single site or building. It is typically most advisable to find a balance between these two strategies.

Some of the types of work that can be appropriately addressed as District-wide projects are projects that are “specialized” in nature and benefit from a level of standardization or an economy of scale including:

- Roof Replacements
- Playing Field Upgrades
- Playground Upgrades
- Re-paving projects
- Fence replacement projects
- Digital HVAC Controls Upgrades
- Masonry Restoration
- Security System Improvements
- Fire Alarm System Upgrades or Replacements
- Door Hardware or Door Replacements
- Window Replacements

For addition and alteration projects that are a combination of program improvements and infrastructure updates it is often better to address them holistically as part of one comprehensive project at each building or site. This approach has many advantages including:

- Providing an opportunity for synergies between solving program improvement challenges and infrastructure concerns. This often results in design approaches that are more integrated solutions that are both more functional and more economical.
- Limiting disruption to the ongoing operations of each school by accomplishing the full range of improvements that have been prioritized as part of one comprehensive project.
- Better value as these larger projects benefit from an economy of scale in trade construction costs but also in design, management and oversite expenses.
- Less chance that recent improvements will need to be replaced or modified which can occur when projects are accomplished in a piecemeal fashion.

Prioritization of the larger projects will require thorough deliberations and a structured decision making process. While this process is critical to establish a path forward for implementing the Plan it is also worth considering some opportunities to achieve “quick-wins” for a number of locations. Some of these types of improvements could be achieved for a modest expenditure including:

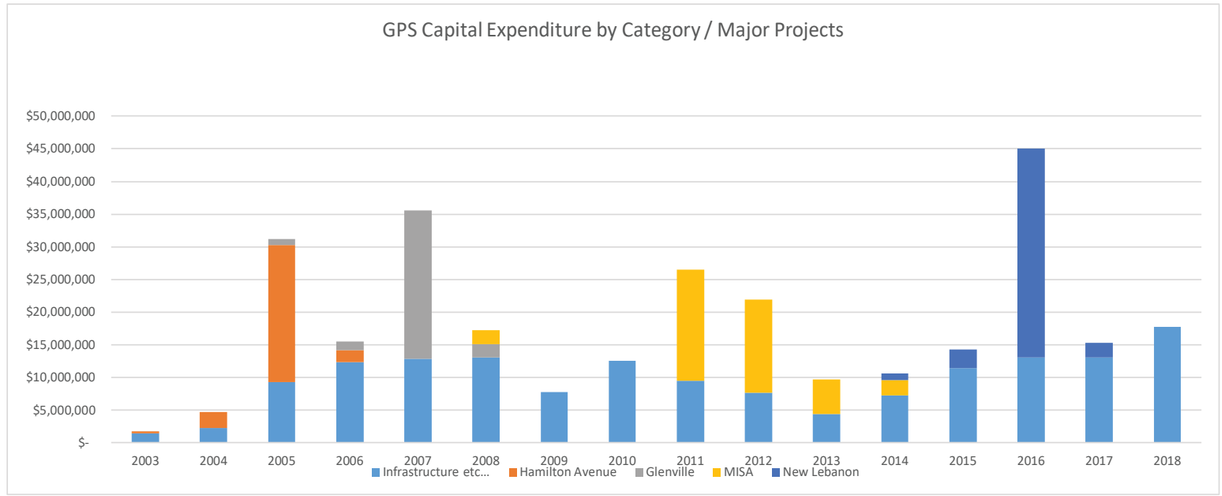
- Furniture upgrades for 2-3 classrooms per year at each location,
- Selective renovation of portions of buildings to “test” or “incubate” more innovative ways of providing collaborative or small group space at all Middle Schools,
- New inclusive and accessible play structures district-wide or
- Updating the remaining learning commons at all elementary schools to be next generation ready.

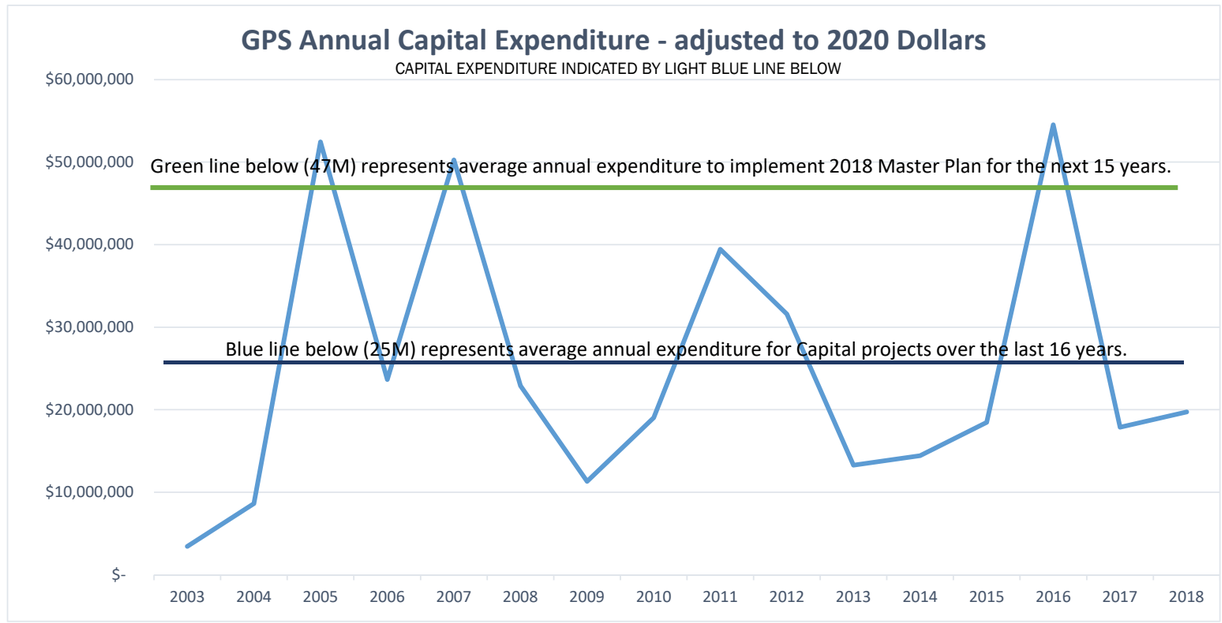
The longer an implementation plan is extended, cost escalation has a larger impact on the overall budget. As earlier mentioned cost escalation is averaging 4.5% per year. At that rate, if the work of this plan were evenly distributed over 15 years the additional cost escalation results in an additional $120 Million Dollars of expenditure.

Summary

This Master Plan identifies a wide range of site, infrastructure and program related improvements to all of the buildings in the Greenwich Public Schools.

The overall budget for these improvements is significant and many question how it will be funded or if it can be afforded. With this in mind the planning team was asked to research how much has historically been spent on the public schools over the years. The attached charts shows the variations in annual spending adjusted to 2020 dollars. While this shows that the historical average spending is below what is needed today it also shows that during peak years the spending has reached the average level that the Plan is recommending.





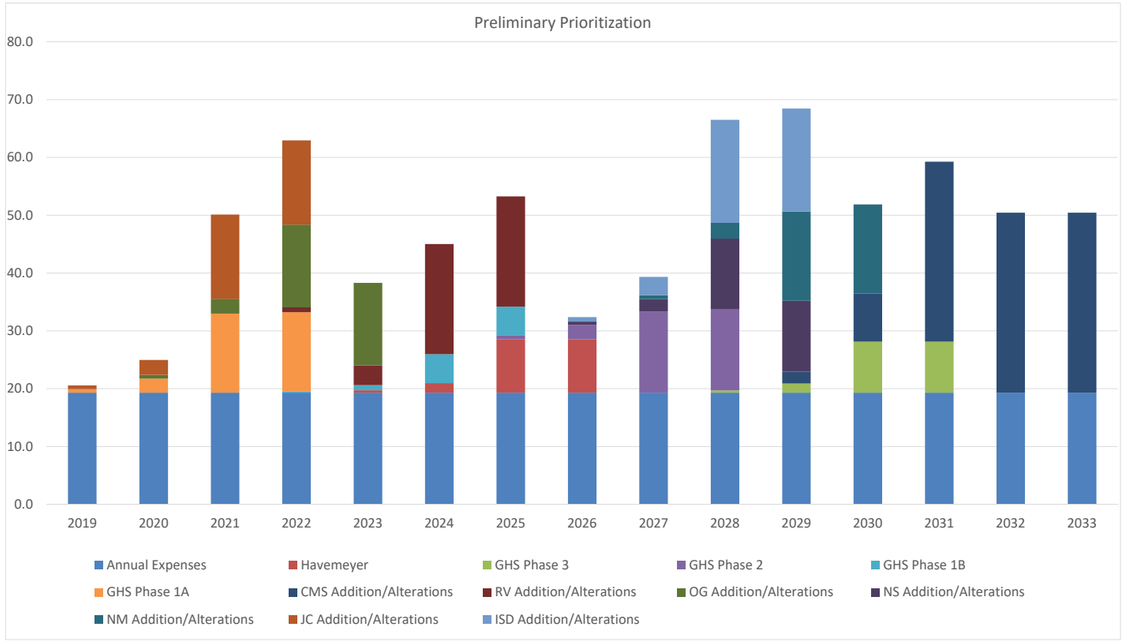
The Board also asked that the planning team attempt to prioritize the various improvements in the Plan. This is provided as an initial guide by the planning team only. It is understood that prioritization will be an ongoing process that will be re-visited by future Boards and Town leaders as each annual budget is developed. Using a rubric for evaluation based on several factors a prioritization process was completed that is summarized in the attached charts.

PRIORITIZATION WORKSHEET

	Original Date	Major Improvement	GSF	2017 Enrollment	Target Enrollment	Capacity - Existing	Shortfall - Core Program	NSF/Student	Site work	Infrastructure	Program	Total		Create Additional Capacity	Update to Next Generation Learning Environment	Security Improvements	Air Quality & HVAC Improvements	Accessibility - Interior Accessible Route - Elevator	Replace - due to poor conditions and limitations	Other HSW (Fire Alarm & Sprinklers)	Total	Ranking
Cos Cob School	1914	1992	83,000	432	415	413	12,765	108	$3,134,301	$9,776,010	$1,433,834	$14,344,145	**CC**	0	1	2	1	0	0	0	4	9
Glenville School	2008		87,000	448	453	500	8,195	112	$8,313,590	$9,308,598	$1,499,008	$19,121,196	**GL**	0	0	2	0	0	0	0	2	T10
Hamilton Avenue School	2005		71,500	364	379	394	4,185	129	$6,173,182	$4,665,990	$782,091	$11,621,263	**HA**	0	0	2	0	0	0	0	2	T10
International School at Dundee	1961	1998	52,500	363	364	305	10,400	99	$4,135,489	$7,521,607	$34,919,693	$46,576,789	**ISD**	4	4	3	2	2	2	0	17	T6
Julian Curtiss School	1946		62,500	338	342	306	11,960	102	$6,095,730	$13,751,776	$22,006,162	$41,853,667	**JC**	4	5	3	4	5	1	4	26	T1
New Lebanon School	1955	2019	30,000	260	268	222	17,195	77	$0	$0	$0	$0	**NL**									
North Mianus School	1925	1995	61,500	506	491	445	18,078	79	$4,131,561	$16,304,858	$22,159,255	$42,595,673	**NM**	4	4	3	3	0	1	3	18	5
North Street School	1953	1997	57,500	410	428	403	5,810	104	$6,912,791	$18,362,178	$12,542,405	$37,817,374	**NS**	2	3	3	3	0	0	3	14	8
Old Greenwich School	1902	1995	72,000	466	459	400	5,955	95	$3,025,309	$15,848,542	$19,760,904	$38,634,754	**OG**	3	4	4	4	5	2	4	26	T1
Parkway School	1958		52,000	250	256	259	2,885	145	$5,466,778	$8,989,188	$2,118,164	$16,574,130	**PW**	0	4	3	4	0	2	3	16	7
Riverside School	1932	1995	65,500	469	461	383	18,010	87	$5,864,463	$18,286,869	$28,588,698	$52,740,030	**RV**	5	4	3	3	5	2	3	25	2
Central Middle School	1957	2000	110,000	582	588	734	(2,501)	132	$10,361,040	$9,420,504	$105,365,240	$125,146,785	**CMS**	0	3	3	4	1	5	3	19	T4
Western Middle School	1960	1970	128,000	842	885	904	6,700	123	$8,433,389	$26,034,103	$6,161,394	$40,628,885	**WMS**	0	3	3	4	1	3	3	17	T6
Eastern Middle School	1954	2000	116,000	593	645	696	15,216	98	$8,758,588	$27,910,462	$6,853,483	$43,522,533	**EMS**	0	3	3	4	1	3	3	17	T6
Greenwich High School	1970	2016	793,000	2,694	2,951	2,637	29,395*	121	$20,783,025	$62,866,339	$125,586,733	$209,236,097	**GHS**	5	3	5	3	0	3	0	19	T4
									*HS Core Instructional Spaces Only													
Havemeyer Building	1892		47,500						$155,604	$15,001,332	$9,450,271	$24,607,206	**DIST**	0	4	3	4	5	4	4	24	3

Prioritization - Legend	
Highest Need	5
	4
	3
	2
	1
Lowest Need	0

SUMMARY



Project Description	Project Costs (2020)	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
CC	$ -															
GL	$ -															
HA	$ -															
ISD Addition/Alterations	$ 37,837,884						0.8M	3.0M	17.0M	17.0M						
JC Addition/Alterations	$ 31,282,376	0.6M	2.5M	14.1M	14.1M											
NL	$ -															
NM Addition/Alterations	$ 33,197,794									0.7M	2.7M	14.9M	14.9M			
NS Addition/Alterations	$ 26,580,915								0.5M	2.1M	12.0M	12.0M				
OG Addition/Alterations	$ 30,793,608		0.6M	2.5M	13.9M	13.9M										
PW	$ -															
RV Addition/Alterations	$ 40,946,364				0.8M	3.3M	18.4M	18.4M								
	Project Costs (2020)															
CMS Addition/Alterations	$ 103,707,701											2.1M	8.3M	31.1M	31.1M	31.1M
EMS	$ -															
WMS	$ -															
	Project Costs (2020)															
GHS Phase 1A	$ 30,400,000	0.6M	2.4M	13.7M	13.7M											
GHS Phase 1B	$ 11,100,000				0.2M	0.9M	5.0M	5.0M								
GHS Phase 2	$ 31,100,000							0.6M	2.5M	14.0M	14.0M					
GHS Phase 3	$ 19,600,000										0.4M	1.6M	8.8M	8.8M		
Havemeyer	$ 20,537,430					0.4M	1.6M	9.2M	9.2M							
	Total Annual (2020)															
Annual Expenses	$ 296,112,314	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M	19.7M
	Total Costs	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Total Costs (2020)	**$ 713,196,386**	**20.97M**	**25.29M**	**49.96M**	**62.40M**	**38.17M**	**45.56M**	**56.05M**	**49.03M**	**53.55M**	**48.75M**	**50.28M**	**51.80M**	**59.67M**	**50.85M**	**50.85M**
Escalation	Escalated Total	-4.5%	0.0%	4.5%	9.2%	14.1%	19.3%	24.6%	30.2%	36.1%	42.2%	48.6%	55.3%	62.3%	69.6%	77.2%
Total with Escalation	**$ 967,830,551**	**20.0M**	**25.3M**	**52.2M**	**68.1M**	**43.6M**	**54.3M**	**69.9M**	**63.8M**	**72.9M**	**69.3M**	**74.7M**	**80.4M**	**96.8M**	**86.2M**	**90.1M**

A Master Plan by definition is to comprehensive and visionary. The improvements proposed in this Plan would accomplish many goals including:

- Updating the Schools to meet the educational program requirements,
- Expanding and modifying facilities to accommodate for the existing and projected enrollment,
- Providing equivalent facilities for students in each grade level division throughout the Town and
- Improving security, indoor air quality and handicapped accessibility for all buildings.

The projected budget for this set of work is substantial and if it is to be realized will require an increased funding commitment to school buildings in the near term. The budget will need to be continually refined, prioritized and updated as projects are developed.

Master Plan Cost Summary (No Paving)

Abbv	Building Name	Site	Infrastructure	Program	Total (2020)
CC	Cos Cob School	$1,528,570	$9,776,010	$1,433,834	$12,738,414
GL	Glenville School	$1,906,959	$9,308,598	$1,499,008	$12,714,565
HA	Hamilton Avenue School	$4,106,342	$4,665,990	$782,091	$9,554,424
ISD	Int'l School at Dundee	$1,964,371	$7,521,607	$34,919,693	$44,405,671
JC	Julian Curtiss School	$2,377,049	$13,751,776	$22,006,162	$38,134,986
NL	New Lebanon School	$0	$0	$0	$0
NM	North Mianus School	$1,052,890	$16,304,858	$22,159,255	$39,517,003
NS	North Street School	$3,015,044	$18,362,178	$12,542,405	$33,919,626
OG	Old Greenwich School	$1,649,805	$15,848,542	$19,760,904	$37,259,251
PW	Parkway School	$2,118,449	$8,989,188	$2,118,164	$13,225,801
RV	Riverside School	$2,935,205	$18,286,869	$28,588,698	$49,810,772
	Elementary School Subtotal	**$22,654,684**	**$122,815,616**	**$145,810,214**	**$291,280,514**

Abbv	Building Name	Site	Infrastructure	Program	Total (NP)
CMS	Central Middle School	$6,712,910	$9,420,504	$105,365,240	$121,498,654
EMS	Eastern Middle School	$6,027,785	$27,910,462	$6,853,483	$40,791,730
WMS	Western Middle School	$4,843,101	$26,034,103	$6,161,394	$37,038,597
	Middle School Subtotal	**$17,583,796**	**$63,365,069**	**$118,380,116**	**$199,328,982**
GHS	Greenwich High School	$9,526,612	$62,866,339	$125,586,733	$197,979,684
DIST	Havemeyer Building	$155,604	$15,001,332	$9,450,271	$24,607,206
	Grand Total	**$49,920,696**	**$264,048,356**	**$399,227,334**	**$713,196,386**

COS COB ELEMENTARY SCHOOL



The original building was constructed in 1914 and then substantially re-constructed and expanded after an extensive fire in 1993. The building has a courtyard configuration and is in overall good condition.

Some of the key issues with this building include; lack of storage, relocation of music classroom to provide grade level classrooms and the periodic relocation of small group instruction space to provide grade level classrooms. Since this building was all reconstructed at one time many of the finishes and systems will reach the end of their expected useful life at the same time. They are all now approaching 25 years old and so significant work will be needed at this facility closer to the end of the term of this Master Plan.

Key infrastructure work needed at this school includes; re-paving, playground upgrades including an accessible play structure, masonry restoration, classroom casework and locker upgrades, lighting, public address and fire alarm upgrades, a new emergency generator and significant upgrades to the heating, ventilation and air conditioning systems.

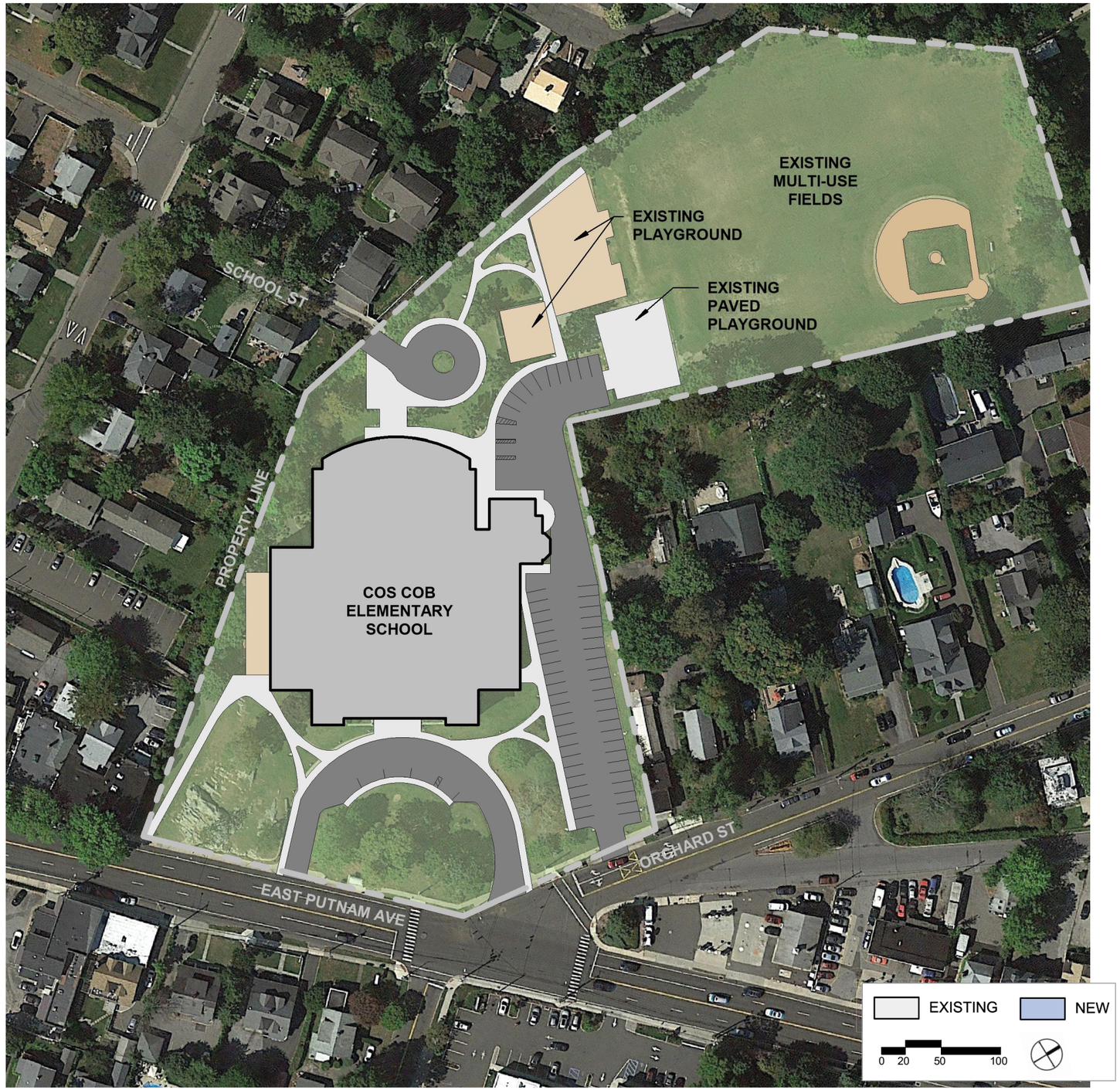
Program improvements in this building will be limited to furniture upgrades and minor renovations to update areas over the course of the Master Plan.

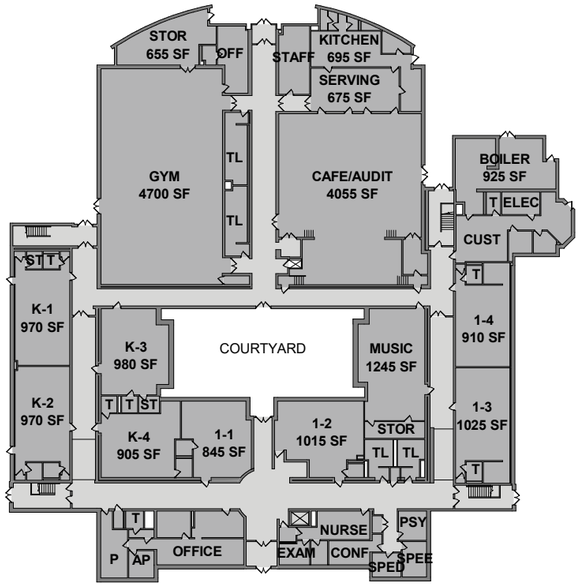
Building Information

Year built:	1914
Building area:	83,000
Site acres:	6.6
Functional capacity:	413
Projected enrollment:	415

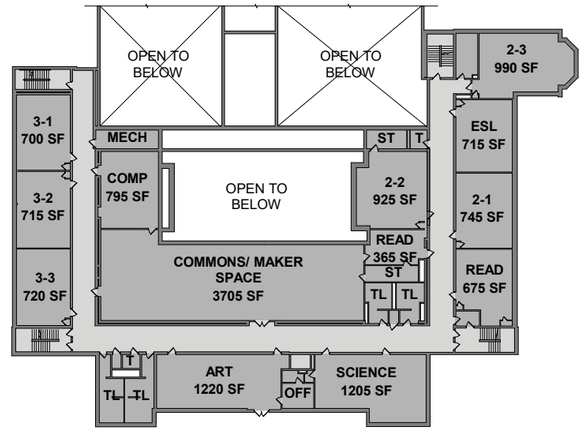
Project Costs

Sitework	$3,134,301
Infrastructure	$9,776,010
Programmatic Improvements	$1,433,834
Total	$14,334,145





GROUND FLOOR



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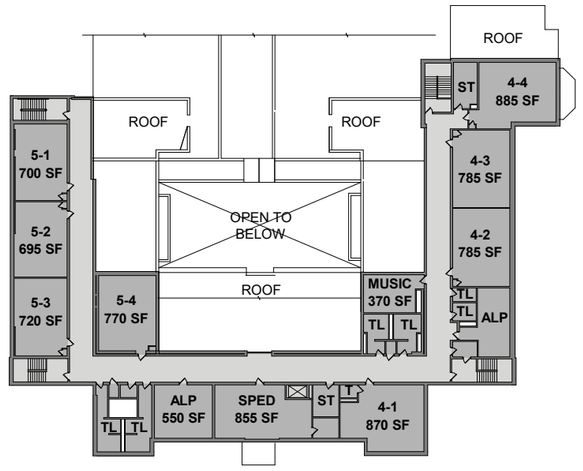

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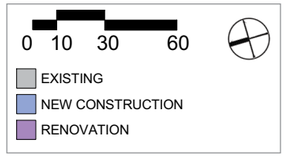


GLENVILLE ELEMENTARY SCHOOL



This building was constructed in 2008 and is in excellent condition. The design incorporated many of the aspects of Next Generation schools including clustering of grade levels, use of corridor "pods" for small group space, increased interior visibility through the use of glass walls and the provision of small group instruction space.

The building is functioning well but is somewhat a victim of its own success so it is above capacity when compared to the Model program. This has resulted in the conversion of some small group space into grade level classroom areas. The computer room that is located off of the Library also may need to be converted to a grade level classroom.

This building is 10 years old and so close to the end of this Master Plan period it will need some updates. Age related replacements will include re-paving, playground updates including an accessible play structure, masonry restoration, classroom casework upgrades, lighting, PA and fire alarm system upgrades, installation of an emergency generator and updates to the heating, ventilation and air conditioning systems.

Given the age and design of the building no significant program improvements are included in the Master Plan. Classroom furniture will need to be updated during the course of the Plan.

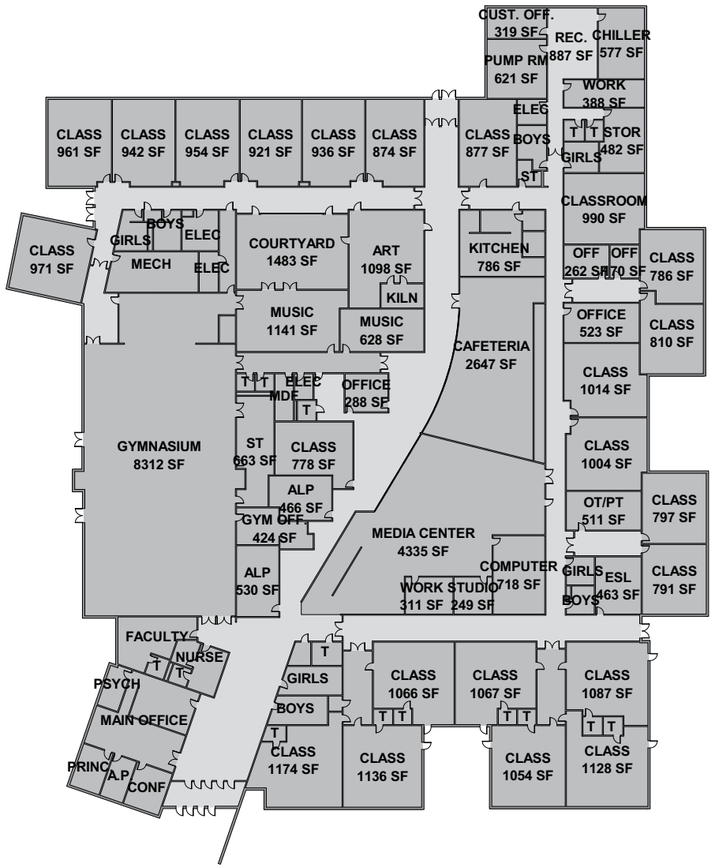
Building Information

Year built:	2008
Building area:	87,000
Site acres:	19.8
Functional capacity:	500
Projected enrollment:	453

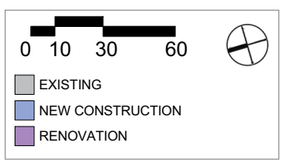
Project Costs

Sitework	$8,313,590
Infrastructure	$9,308,598
Programmatic Improvements	$1,499,008
Total	$19,121,196





GROUND FLOOR



HAMILTON AVENUE ELEMENTARY SCHOOL



This building was re- constructed and expanded in 2005 and is in excellent condition. The program is a STEM magnet program and so this school also draws some of its population from outside of its attendance zone. Pre-K classes are also provided at this location. The design incorporated some of the aspects of Next Generation schools including clustering of grade levels, increased interior visibility through the use of glass walls and the provision of small group instruction space integrated into classroom areas.

The building is functioning well and is at capacity with only a minor shortfall of space when compared to the model program. The gym is contiguous to the cafeteria which is not an ideal arrangement and should have some sort of divider.

This building is 13 years old and so close to the end of this Master Plan period it will need some updates. Age related replacements will include re-paving, playground updates including an accessible play structure, masonry restoration, some roof work, lighting, PA and fire alarm system upgrades and installation of an emergency generator.

Given the age and design of the building no significant program improvements are included in the Master Plan. Classroom furniture will need to be updated during the course of the Plan.

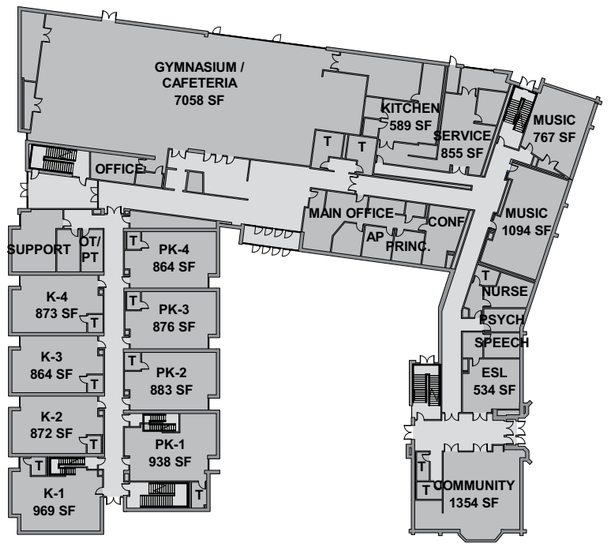
Building Information

Year built:	2005
Building area:	71,500
Site acres:	4.1
Functional capacity:	394
Projected enrollment:	379

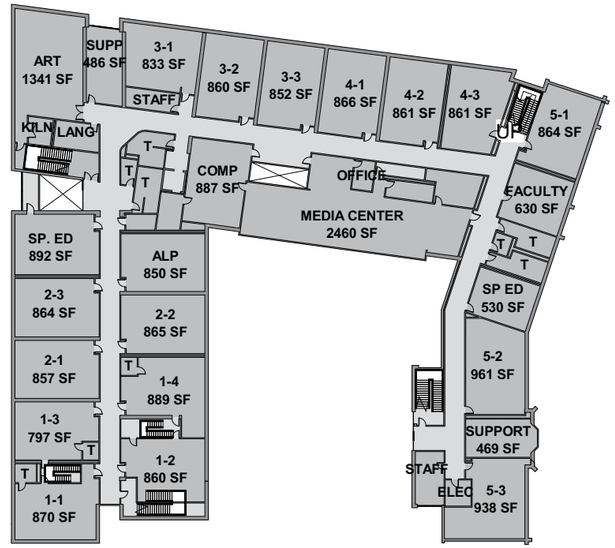
Project Costs

Sitework	$6,173,182
Infrastructure	$4,665,990
Programmatic Improvements	$782,091
Total	$11,621,263

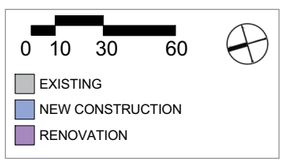




GROUND FLOOR



FIRST FLOOR



INTERNATIONAL SCHOOL AT DUNDEE



The original building was completed in 1961 and was published as an exemplary school in Architectural Record in 1963. There was some portions of the building updated in approximately 2000. This is a popular magnet school offering an International Baccalaureate program with approximately 45% of the students selecting this location and curriculum who are not within its attendance zone.

Some of the key issues with this building include; undersized classrooms, inadequate amount of small group instruction space, undersized cafeteria and a small stage adjacent to the Learning Commons that is too small for the band and orchestra. The gym was built as a separate building with a covered walkway connection that crosses a driveway. This is both a functional and security concern.

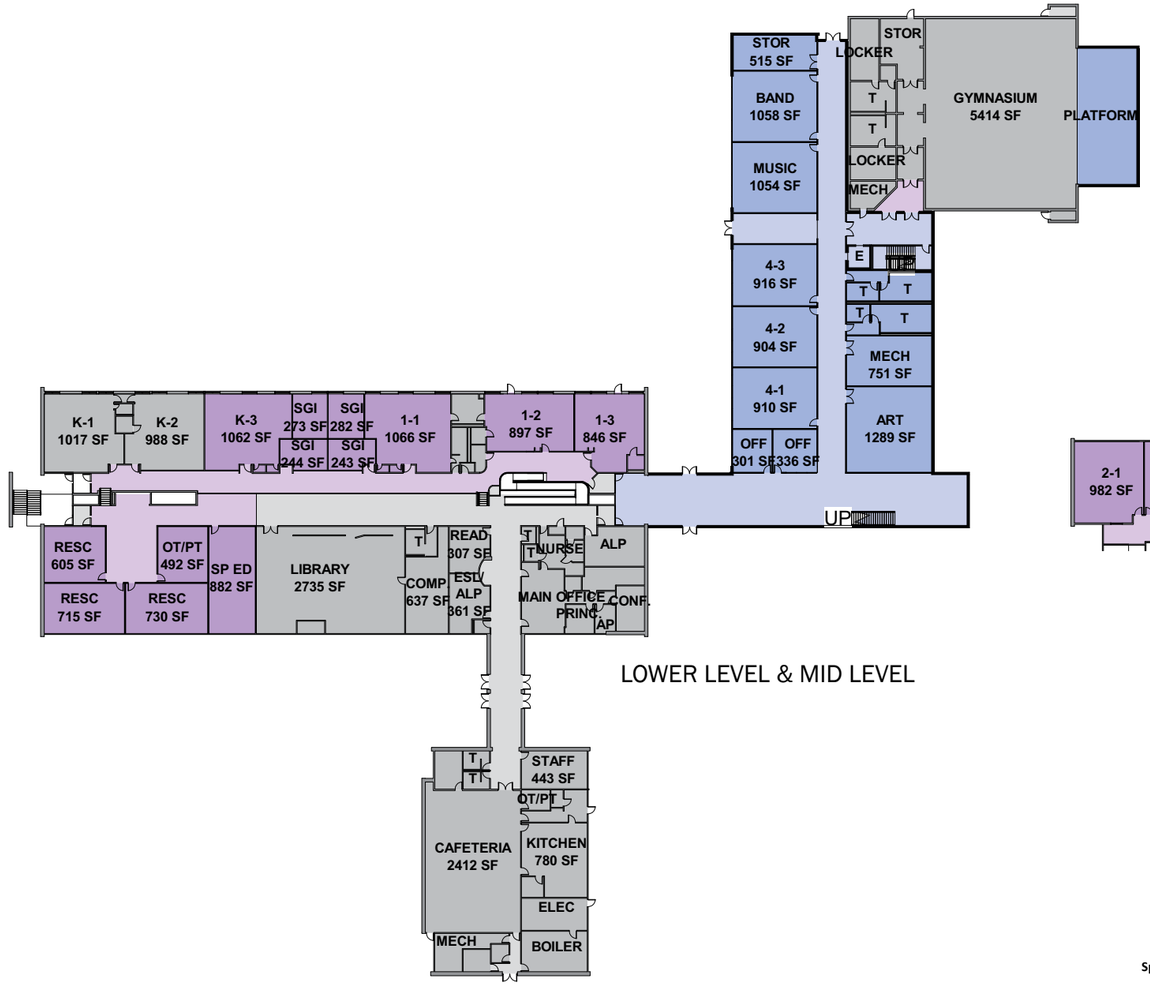
Key infrastructure work needed at this school includes; re-paving, playground updates including an accessible play structure, lighting upgrades, fire alarm system upgrades, a new emergency generator and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program Improvements are in response to the capacity and model program issues. The approach includes a two story addition that provides an interior connection to the gym. With this additional space it will allow for a phased renovation of the older building to “right-size” classroom and small group instruction space.

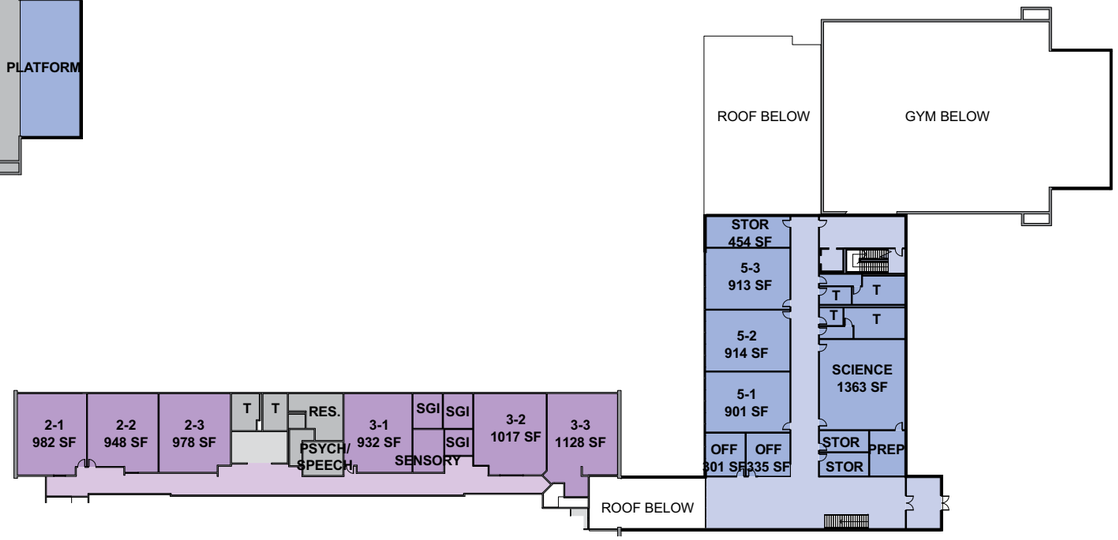
Building Information	
Year built:	1961
Building area:	52,500
Site acres:	10.7
Functional capacity:	305
Projected enrollment:	364

Project Costs	
Sitework	$4,131,561
Infrastructure	$7,521,607
Programmatic Improvements	$34,919,693
Total	$46,576,789





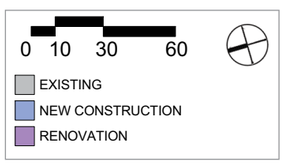
LOWER LEVEL & MID LEVEL



UPPER LEVEL

Dundee Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	18,500	1,100	19,600	15,050	-	15,050	18,345	-	18,345
Activities Programs	9,300	3,100	12,400	8,150	680	8,830	9,350	1,580	10,930
Special/Support Programs	4,000	1,000	5,000	2,405	-	2,405	3,655	550	4,205
Community Commons	8,900	1,200	10,100	6,700	110	6,810	10,800	110	10,910
Admin & Student Services	2,850	1,050	3,900	2,185	225	2,410	2,785	225	3,010
Building/Facilities Support	1,600	-	1,600	260	-	260	560	-	560
	45,150	7,450	52,600	34,750	1,015	35,765	45,495	2,465	47,960



JULIAN CURTISS ELEMENTARY SCHOOL



This building was constructed in 1946 and has not undergone any significant changes since this date. A four classroom addition was planned in 1952 but was never constructed. This is a classic American neighborhood school building that was quite well constructed with Colonial and Georgian style detailing including a marble door surround at the front entrance.

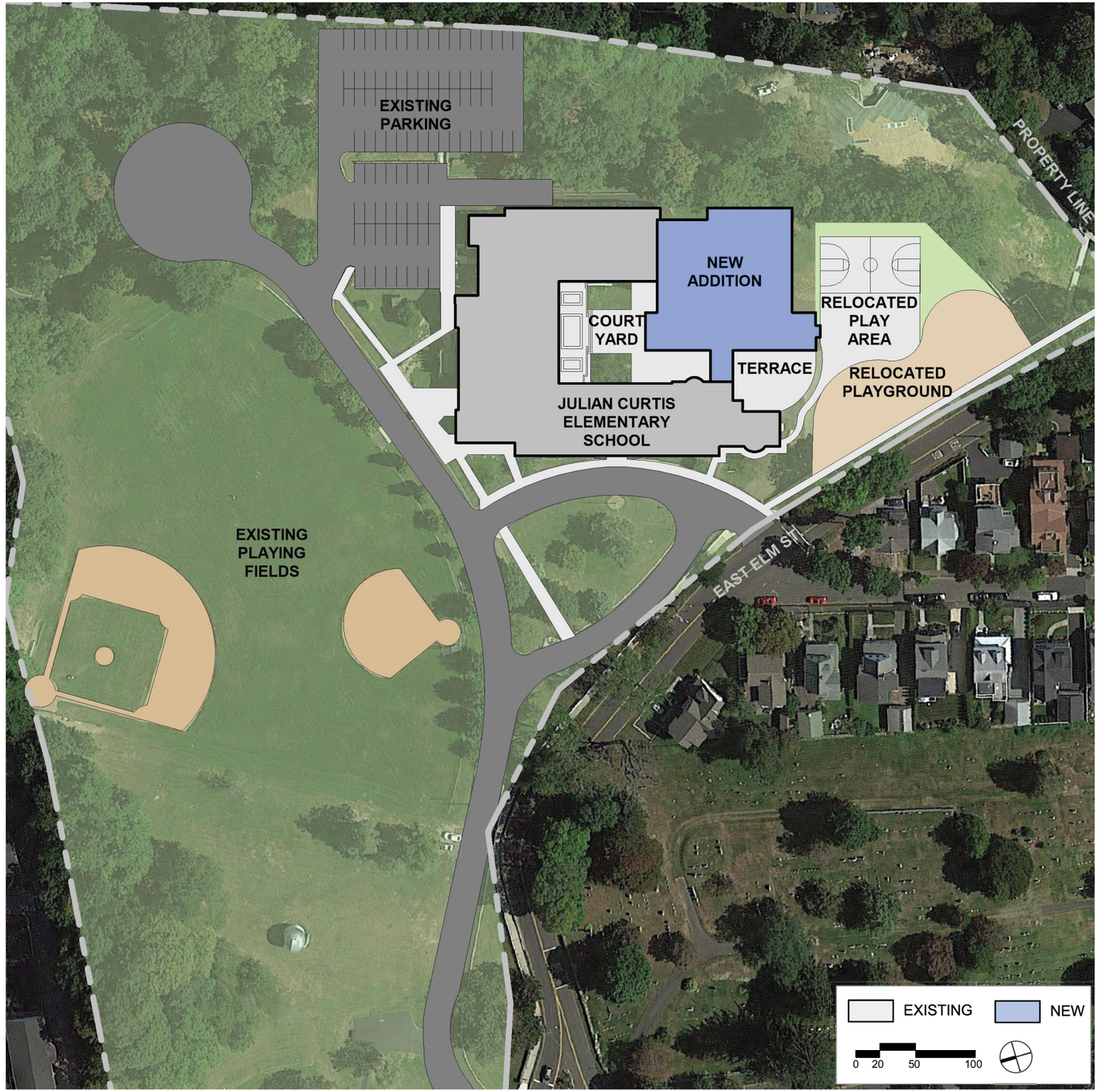
Some of the key issues with this building include; lack of accessibility throughout, poor overall building organization, undersized cafeteria, lack of adequate classroom and small group instruction space. The lack of an accessible entrance and interior accessible route are major shortfalls for a public facility with this use profile. A single secure, accessible point of entrance is needed at this School.

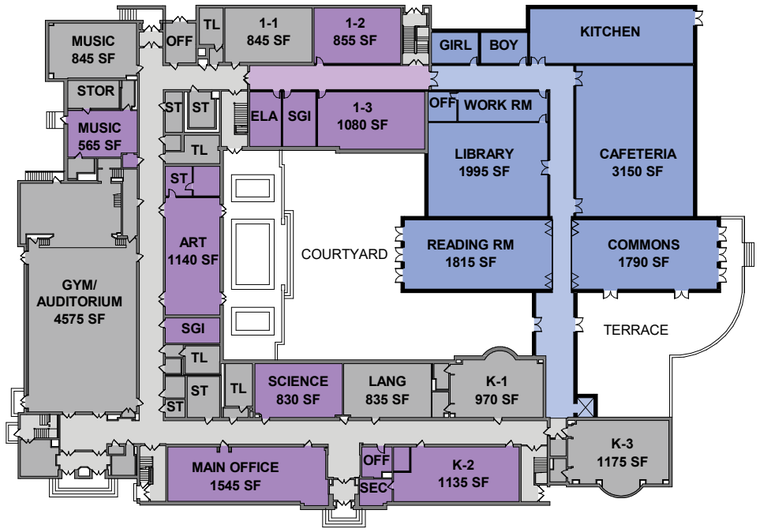
Key infrastructure work needed at this school includes; re-paving, playground updates including an accessible play structure, classroom casework replacement, additional roof replacement work, installation of an elevator and ramps, installation of an emergency generator, lighting upgrades and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program Improvements are needed to both improve the organization of the building and to provide additional capacity in accordance with the model program. The concept proposed in this plan includes a one story addition that connects the two wings of the building and provides a full sized cafeteria and Library. This new addition will also tie in to the new elevator. The new space allows existing areas to be converted back to their original uses thus providing the needed additional instructional space. Office space is moved to the front of the building and grade level classrooms are grouped together as a result of the proposed renovations.

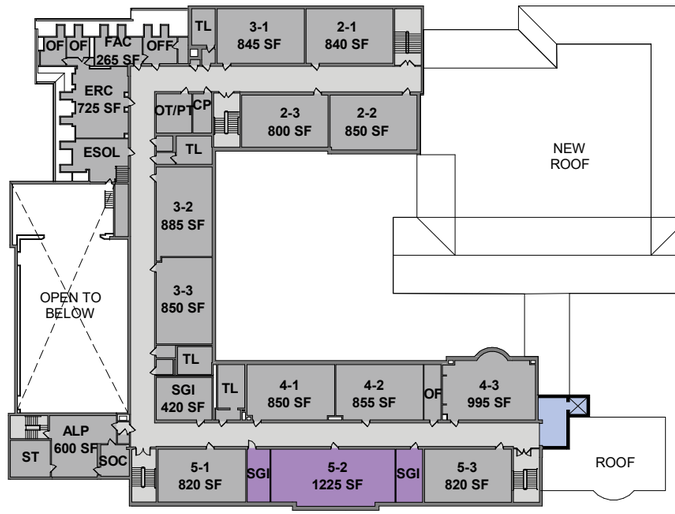
Building Information	
Year built:	1946
Building area:	62,500
Site acres:	15.7
Functional capacity:	306
Projected enrollment:	342

Project Costs	
Sitework	$6,095,730
Infrastructure	$13,751,776
Programmatic Improvements	$21,006,162
Total	$41,853,667

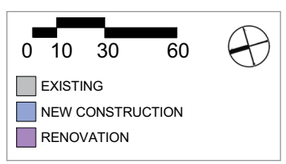




GROUND FLOOR



FIRST FLOOR



Julian Curtiss Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	18,500	1,100	19,600	15,270	365	15,635	16,620	365	16,985
Activities Programs	9,300	3,100	12,400	5,055	-	5,055	6,913	-	6,913
Special/Support Programs	4,000	1,000	5,000	3,460	675	4,135	3,460	675	4,135
Community Commons	8,900	1,200	10,100	5,810	-	5,810	10,600	400	11,000
Admin & Student Services	2,850	1,050	3,900	3,380	370	3,750	2,850	1,050	3,900
Building/Facilities Support	1,600	-	1,600	215	-	215	215	-	215
	45,150	7,450	52,600	33,190	1,410	34,600	40,658	2,490	43,148



During the course of this Plan the replacement of the New Lebanon School obtained all of its approvals and is under construction. The planning team did visit the site and concurred with the plethora of earlier studies that recommended replacing this building.

The new building was planned to accommodate some additional capacity which could eventually reduce the need to add capacity to some of the other elementary schools. Since this would occur through magnet – type programs and will only be realized after the building is complete this additional capacity is not currently included in the Plan. Prior to implementing other elementary school projects this capacity issue should be re-visited to see if the expanded New Lebanon school is decreasing student populations in other attendance zones.

Given that this will be a new building in late 2018 there was no capital repair or infrastructure upgrades budgeted in the Plan for this site.



Building Information	
Year built:	
Building area:	
Site acres:	
Functional capacity:	
Projected enrollment:	

Project Costs	
Sitework	$0
Infrastructure	$0
Programmatic Improvements	$0
Total	$0

NORTH MIANUS ELEMENTARY SCHOOL



This building was constructed in 1925 with building additions in 1952, 1970 and 1995. The building is a combination of one and two story building elements surrounding a central courtyard.

Some of the key issues with this building include; undersized cafeteria and gymnasium, lack of science lab and undersized classrooms in the older section of the building.

Key infrastructure work needed at this school includes; re-paving, roof replacement work, replacement of classroom casework, lighting upgrades, installation of an emergency generator and most significantly a major upgrade to the heating, ventilation and air conditioning system.

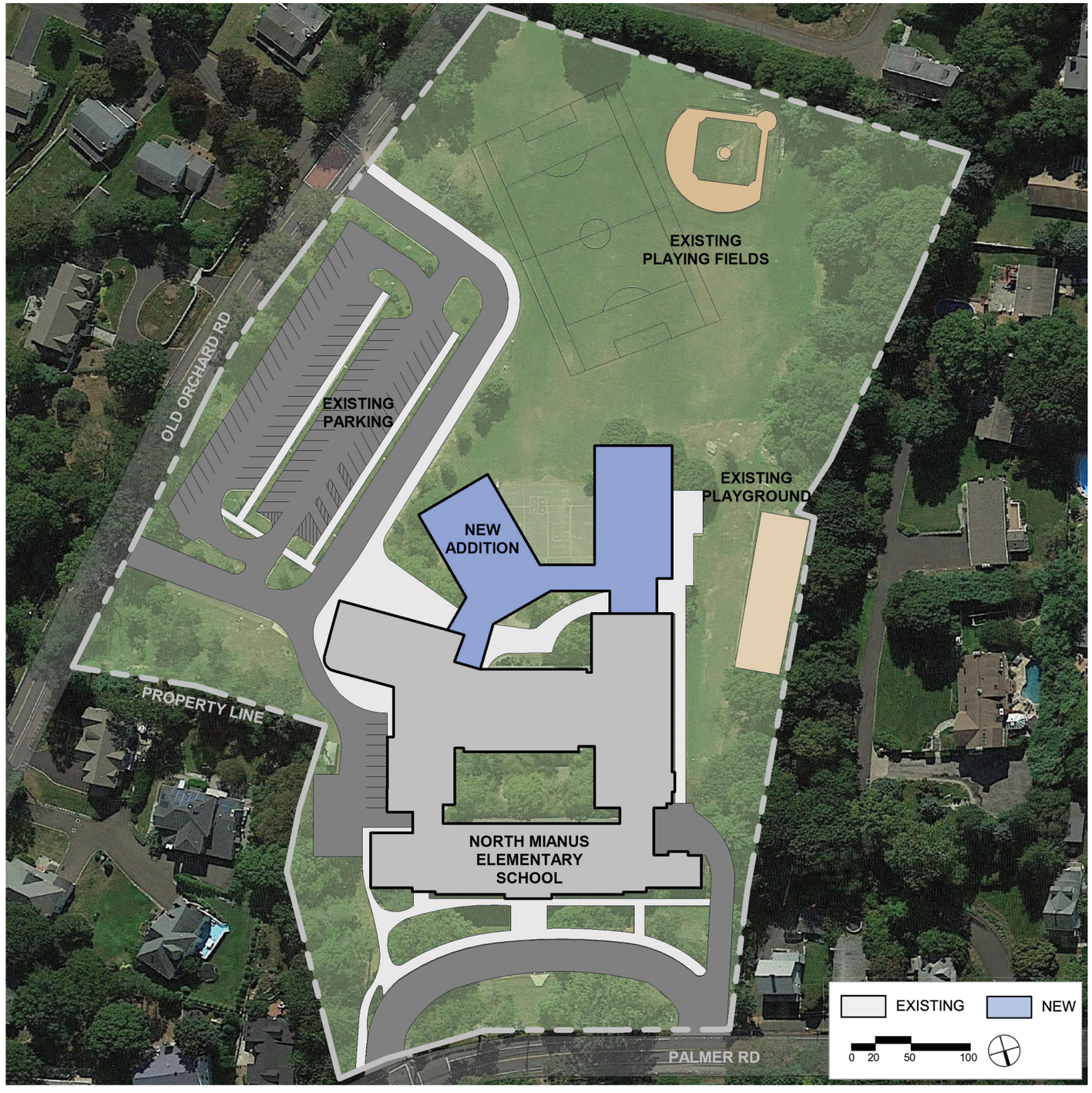
Program Improvements are needed to both improve the organization of the building and to provide additional capacity in accordance with the model program. The concept proposed in this plan includes a one story addition that connects the two wings of the building and provides a full sized gymnasium and classroom wing. This new addition will allow for conversion of the current under-sized gym into an adequately sized cafeteria. The new classroom wing will allow for renovation of the oldest portion of the building which will result in providing full sized classrooms. Office space is renovated and moved to the front of the building and grade level classrooms are grouped together as a result of the proposed renovations.

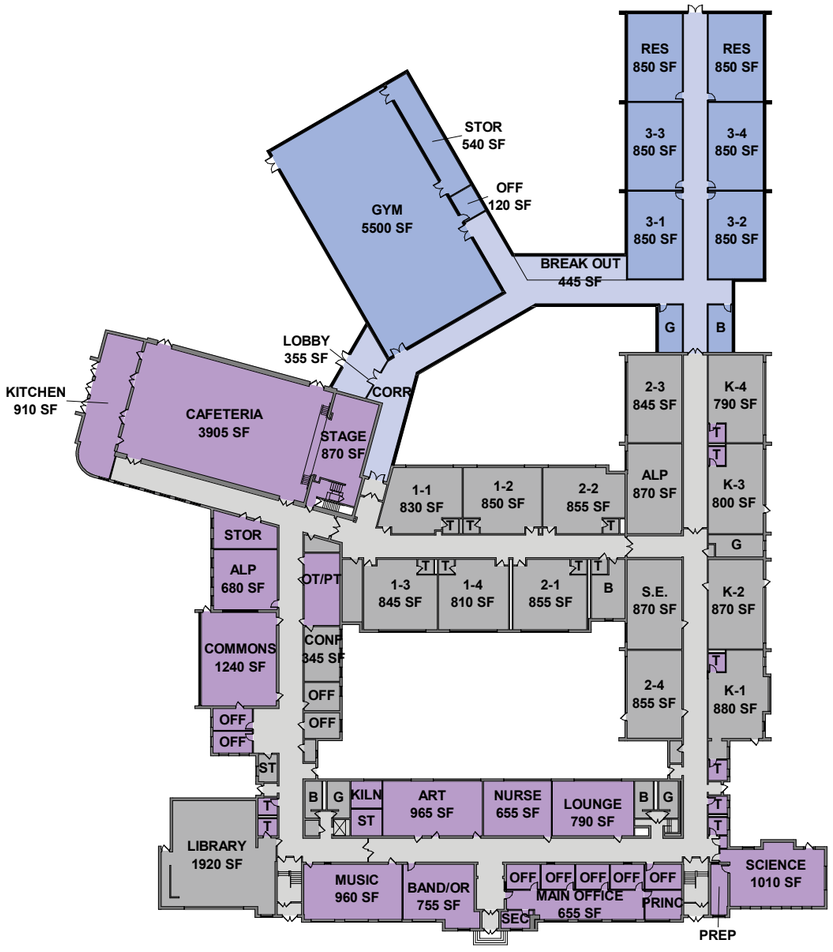
Building Information

Year built:	1925
Building area:	61,500
Site acres:	5.9
Functional capacity:	445
Projected enrollment:	491

Project Costs

Sitework	$4,131,561
Infrastructure	$16,304,858
Programmatic Improvements	$22,159,255
Total	$42,595,673





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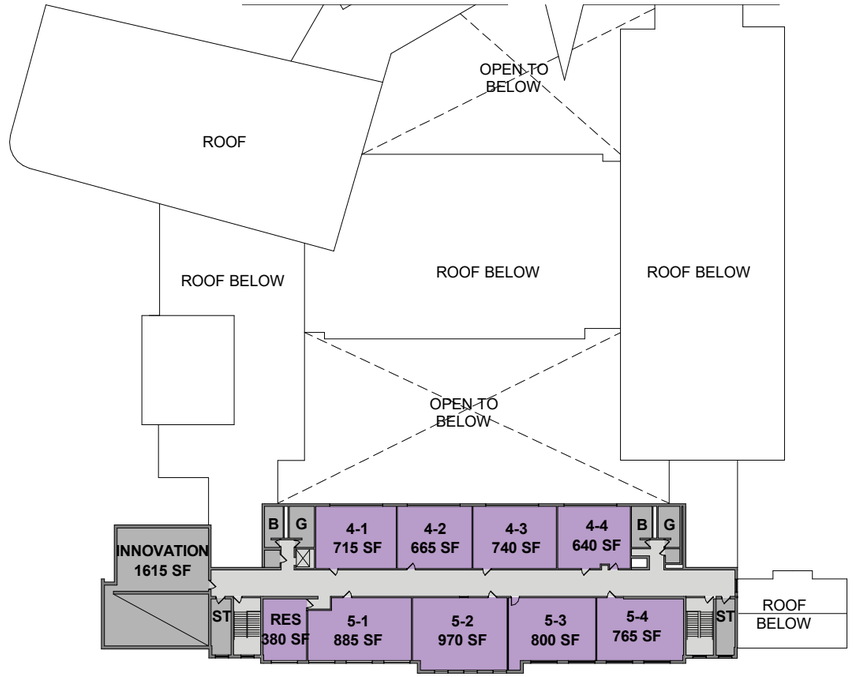
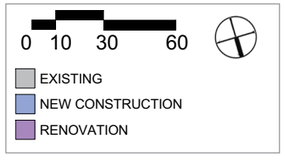


SECOND FLOOR

North Mianus Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	24,300	1,300	25,600	21,635	170	21,805	22,080	571	22,651
Activities Programs	10,700	3,300	14,000	6,111	885	6,996	10,341	885	11,226
Special/Support Programs	4,850	1,300	6,150	2,690	-	2,690	4,943	-	4,943
Community Commons	11,600	1,400	13,000	5,031	130	5,161	8,746	-	8,746
Admin & Student Services	3,450	1,350	4,800	2,080	340	2,420	3,386	656	4,042
Building/Facilities Support	1,800	-	1,800	1,075	-	1,075	1,595	-	1,595
	56,700	8,650	65,350	38,622	1,525	40,147	51,091	2,112	53,203



NORTH STREET ELEMENTARY SCHOOL

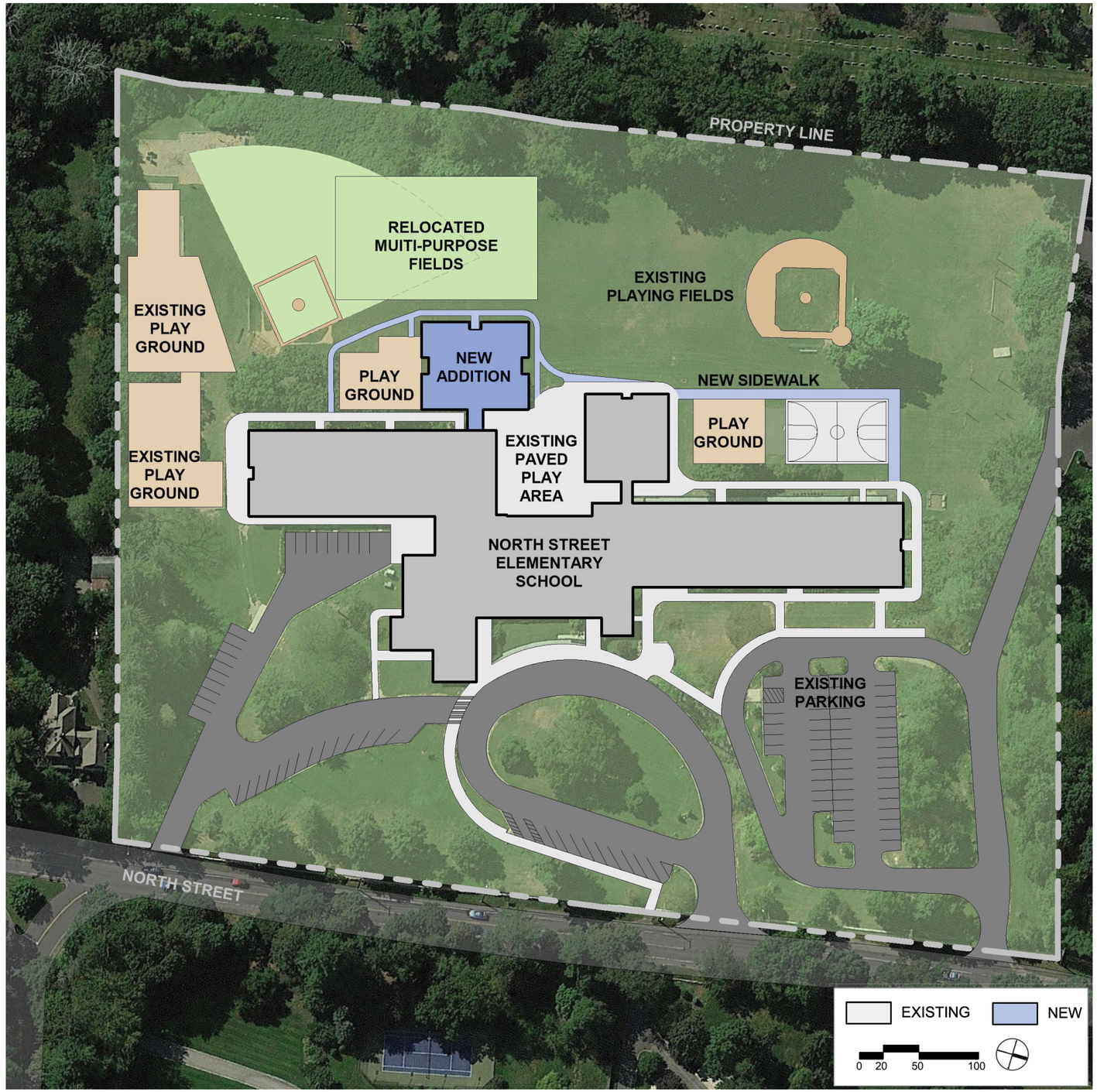


This building was constructed in 1953 with a building addition in 1997. The building is a sprawling one story layout stretching north to south on its 23 acre site.

Some of the key issues with this building include; lack of dedicated music space which is also too small, undersized Art Room and lack of appropriate small group instruction rooms.

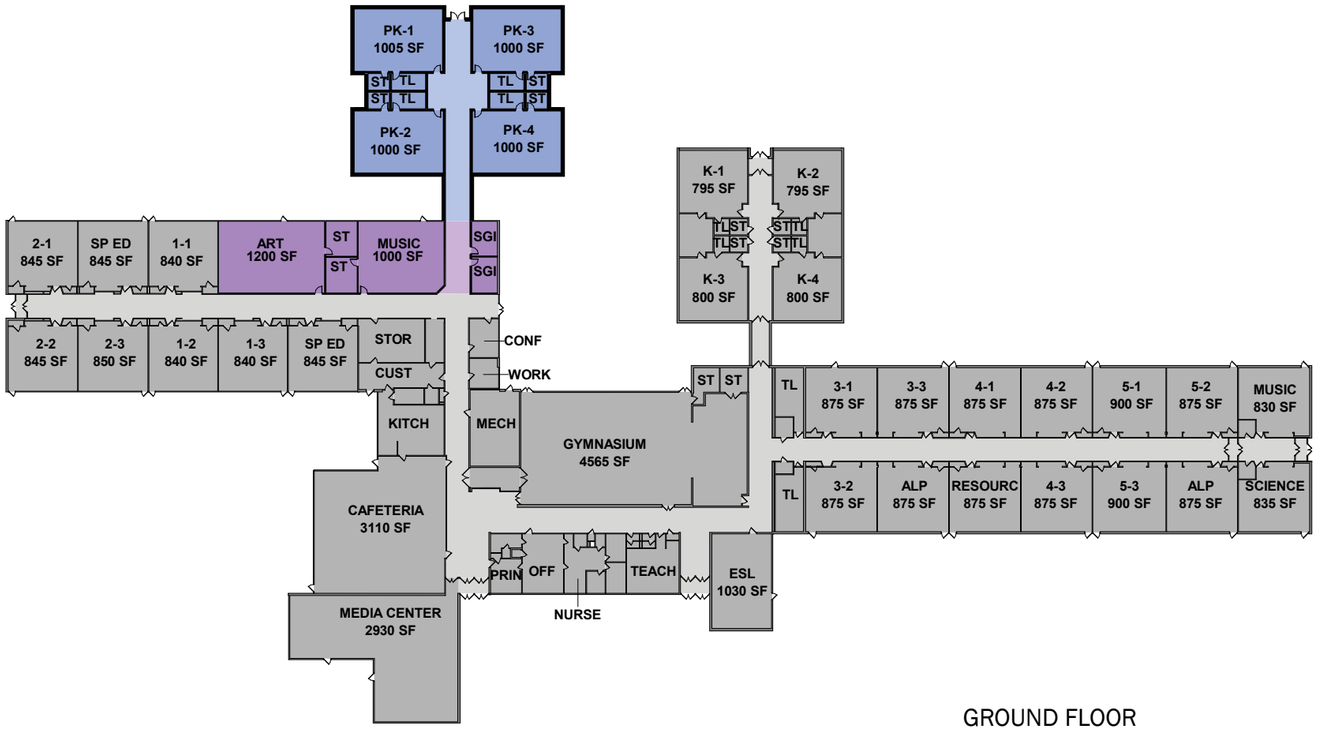
Key infrastructure work needed at this school includes; re-paving, playground updates including an accessible play structure, roof replacement work, replacement of classroom casework, lighting upgrades, fire alarm system upgrades, installation of an automatic sprinkler system in the entire building, installation of an emergency generator and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program Improvements are needed to both improve the organization of the building and to provide additional capacity in accordance with the model program. The concept proposed in this plan includes a one story addition that provides four pre-K classrooms. This liberates space for the creation of full sized art and music spaces in the existing building.

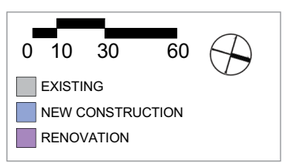


Building Information	
Year built:	1953
Building area:	57,500
Site acres:	23
Functional capacity:	403
Projected enrollment:	428

Project Costs	
Sitework	$6,912,791
Infrastructure	$18,463,178
Programmatic Improvements	$12,542,405
Total	$37,817,374



GROUND FLOOR



North Street Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	21,650	2,250	23,900	20,190	40	20,230	21,940	1,190	23,130
Activities Programs	9,300	3,100	12,400	7,190	-	7,190	8,015	-	8,015
Special/Support Programs	4,000	1,000	5,000	4,395	-	4,395	4,395	-	4,395
Community Commons	8,900	1,200	10,100	7,920	-	7,920	7,920	-	7,920
Admin & Student Services	2,850	1,050	3,900	1,880	250	2,130	1,880	250	2,130
Building/Facilities Support	1,600	-	1,600	915	-	915	915	-	915
	48,300	8,600	56,900	42,490	290	42,780	45,065	1,440	46,505

OLD GREENWICH ELEMENTARY SCHOOL



This building was constructed in 1902 with additions in 1950, 1957 & 1995. This is an attractive traditional neighborhood school building that fills an important role in the Old Greenwich neighborhood. One story additions completed in 1950 that are adjacent to the original three story building are very close to the property line on the south and constrict the area available for an access driveway on the north. The configuration of the expanded building is convoluted resulting in long travel distances to common areas as well as many floor levels that are not easily connected and made accessible.

Some of the key issues with this building include; lack of accessibility throughout, poor overall building organization, lack of adequate sized classroom space and small group instruction space. The lack of an accessible entrance and interior accessible route are major shortfalls for a public facility with this use profile. A single secure, accessible point of entrance is needed at this School.

Key infrastructure work needed at this school includes; re-paving, playground updates including an accessible play structure, repair and replacement of exterior stairs and ramps, classroom casework replacement, additional roof replacement work, installation of an elevator and ramps, installation of an emergency generator, lighting upgrades, installation of an automatic fire suppression (sprinkler) system throughout and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program Improvements are needed to both improve the organization of the building and to provide additional capacity in accordance with the model program. The concept proposed in this plan includes the removal of the two one story additions constructed in the 1950's and the addition of a three story connector addition that results in a courtyard plan. This approach provides for full sized classrooms, small group spaces, a centralized elevator location and adequate space to relocate the main entrance and offices to a grade level accessible location that will also improve security. The resulting configuration eases interior circulation on all levels as well as providing for additional exterior circulation and drop off areas adjacent to the new main entrance.

Building Information

Year built:	1902
Building area:	72,000
Site acres:	11.1
Functional capacity:	400
Projected enrollment:	459

Project Costs

Sitework	$3,025,309
Infrastructure	$15,848,542
Programmatic Improvements	$19,760,904
Total	$38,634,754



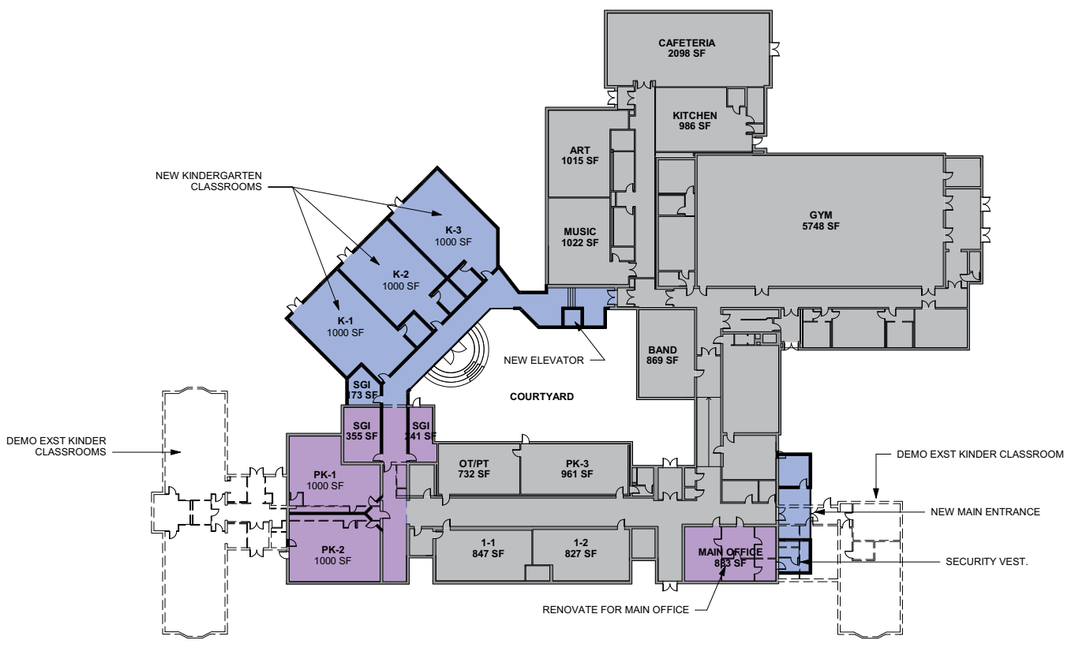
OLD GREENWICH ELEMENTARY SCHOOL



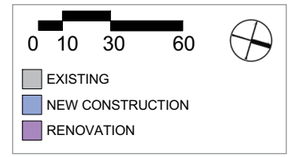
FIRST FLOOR



SECOND FLOOR



GROUND FLOOR



Old Greenwich Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	21,650	2,250	23,900	20,039	685	20,724	23,500	1,650	25,150
Activities Programs	9,300	3,100	12,400	8,590	920	9,510	8,590	920	9,510
Special/Support Programs	4,000	1,000	5,000	3,241	-	3,241	4,850	100	4,950
Community Commons	8,900	1,200	10,100	7,785	-	7,785	7,785	-	7,785
Admin & Student Services	2,850	1,050	3,900	2,275	105	2,380	2,700	250	2,950
Building/Facilities Support	1,600	-	1,600	415	-	415	615	-	615
	48,300	8,600	56,900	42,345	1,710	44,055	48,040	2,920	50,960

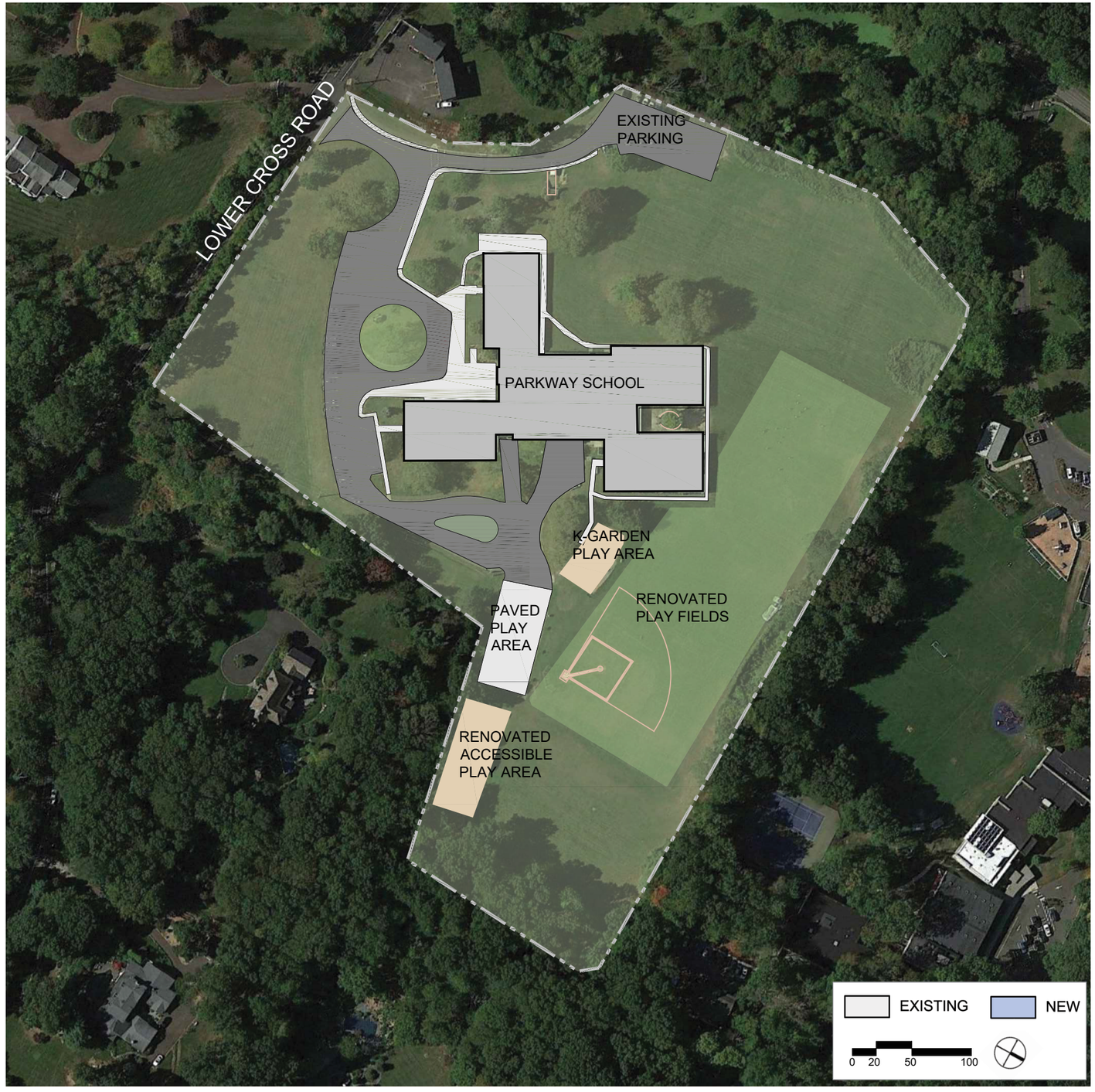
PARKWAY ELEMENTARY SCHOOL



This building was built in 1958 and was original conceived in part as an open plan building. Due to the lack of school age children is this attendance zone the building has additional available capacity. Overall the building is in good condition and is well maintained.

Some key infrastructure concerns include; updating corridor ceilings, re-paving, playground updates including an accessible play structure, roof replacement, classroom casework upgrades, lighting upgrades, fire alarm upgrades, installation of an emergency generator and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program improvements will be limited to renovations to bring the school up to date including some classroom upgrades, new classroom furniture, office renovation and the conversion of the Library to a Learning Commons.

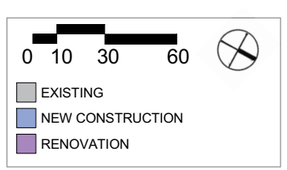


Building Information	
Year built:	1958
Building area:	52,000
Site acres:	17.1
Functional capacity:	259
Projected enrollment:	256

Project Costs	
Sitework	$5,466,778
Infrastructure	$8,989,188
Programmatic Improvements	$2,118,164
Total	$16,574,130



GROUND FLOOR



Parkway Capacity Analysis

Model Program

	CORE	GOAL	Total NSF
Instructional Core	14,500	3,400	17,900
Activities Programs	8,050	2,950	11,000
Special/Support Programs	3,400	700	4,100
Community Commons	7,200	1,200	8,400
Admin & Student Services	2,250	750	3,000
Building/Facilities Support	1,400	-	1,400
	36,800	9,000	45,800

Current

CORE	GOAL	Total NSF
13,085	120	13,205
6,970	1,655	8,625
4,870	-	4,870
6,510	510	7,020
1,635	165	1,800
845	-	845
33,915	2,450	36,365

Proposed

CORE	GOAL	Total NSF
13,085	120	13,205
6,970	1,655	8,625
4,870	-	4,870
6,510	510	7,020
1,635	165	1,800
845	-	845
33,915	2,450	36,365

RIVERSIDE ELEMENTARY SCHOOL



The original two story building was built in 1932 with single story additions that include the Gym/ Auditorium, classrooms and Library built in 1950 and then another single story eight classroom addition completed in 1995. This is a classic American school building from the WPA era that is very well constructed with an attractive historic façade set back in a picturesque front lawn with mature landscaping.

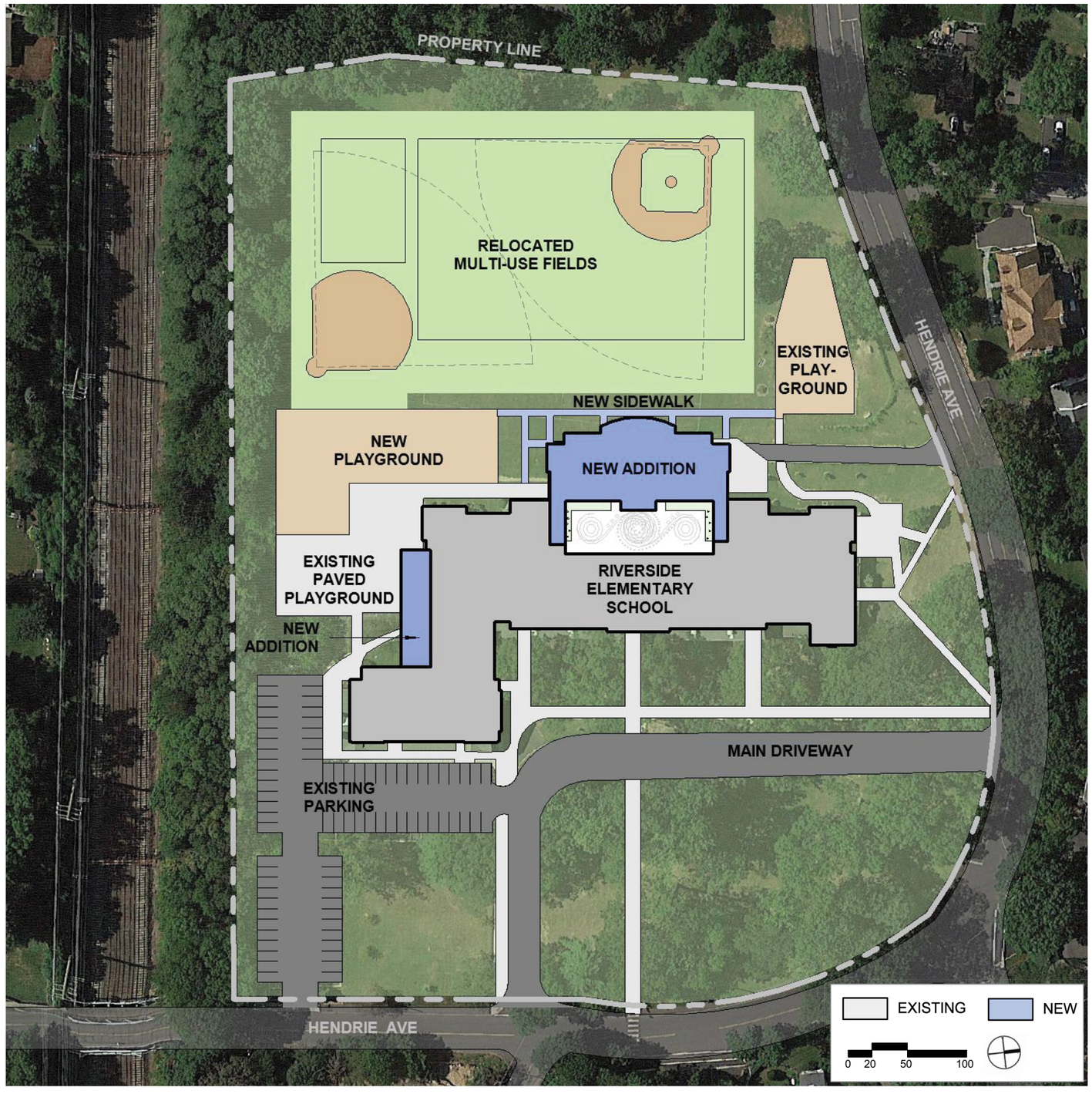
Some of the key issues with this building include; lack of accessibility throughout, undersized cafeteria space, no science lab, undersized main office suite, lack of adequate sized classroom space and small group instruction space. The lack of an accessible entrance and interior accessible route are major shortfalls for a public facility with this use profile. A single secure, accessible point of entrance is needed at this School.

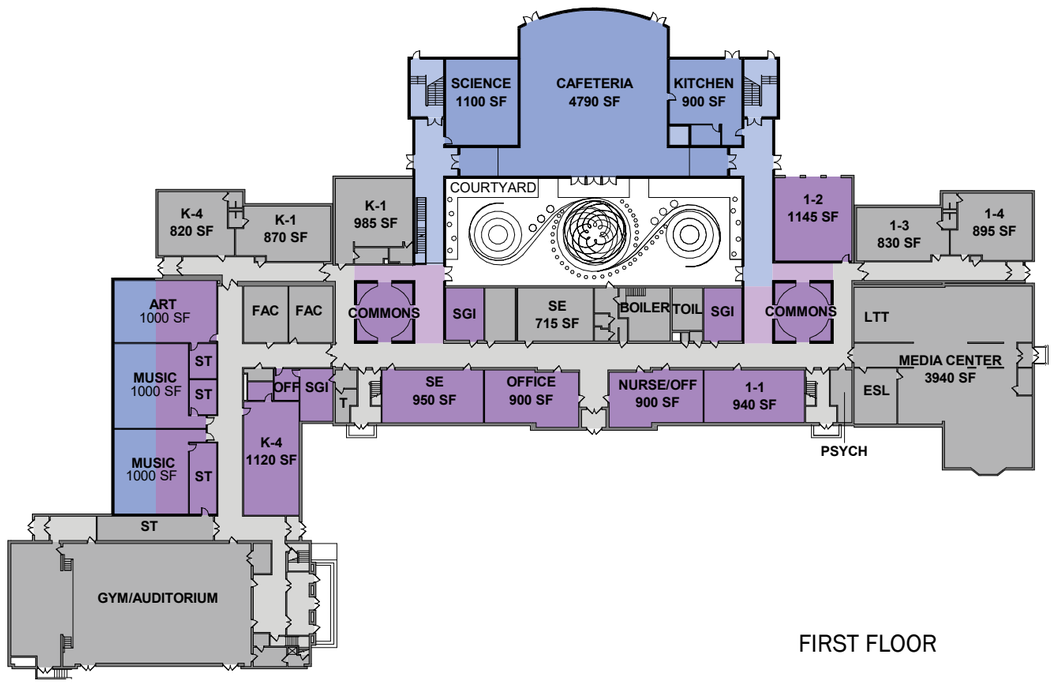
Key infrastructure work needed at this school includes; re-paving, upgrades to the playground including an accessible play structure, classroom casework and furniture replacement, additional roof replacement work, installation of an elevator, installation of an emergency generator, lighting upgrades, installation of an automatic fire suppression (sprinkler) system throughout and most significantly a major upgrade to the heating, ventilation and air conditioning system.

Program Improvements are needed to both improve the organization of the building and to provide additional capacity in accordance with the model program. The concept proposed in this plan is a two story addition to the rear of the building that results in an interior courtyard. The addition would provide a larger cafeteria in a better location with classrooms on the upper level. A one story addition to the area currently occupied by the cafeteria would allow the art and music programs to be relocated to this area. Renovations would allow for the provision of some small group instruction rooms, an expanded main office and increasing the size of some of the under-sized classrooms. The overall result would be a much improved overall building and site configuration that would meet the model program be completely accessible and more secure.

Building Information	
Year built:	1932
Building area:	65,500
Site acres:	11.2
Functional capacity:	383
Projected enrollment:	461

Project Costs	
Sitework	$5,864,463
Infrastructure	$18,286,869
Programmatic Improvements	$28,588,698
Total	$52,740,030





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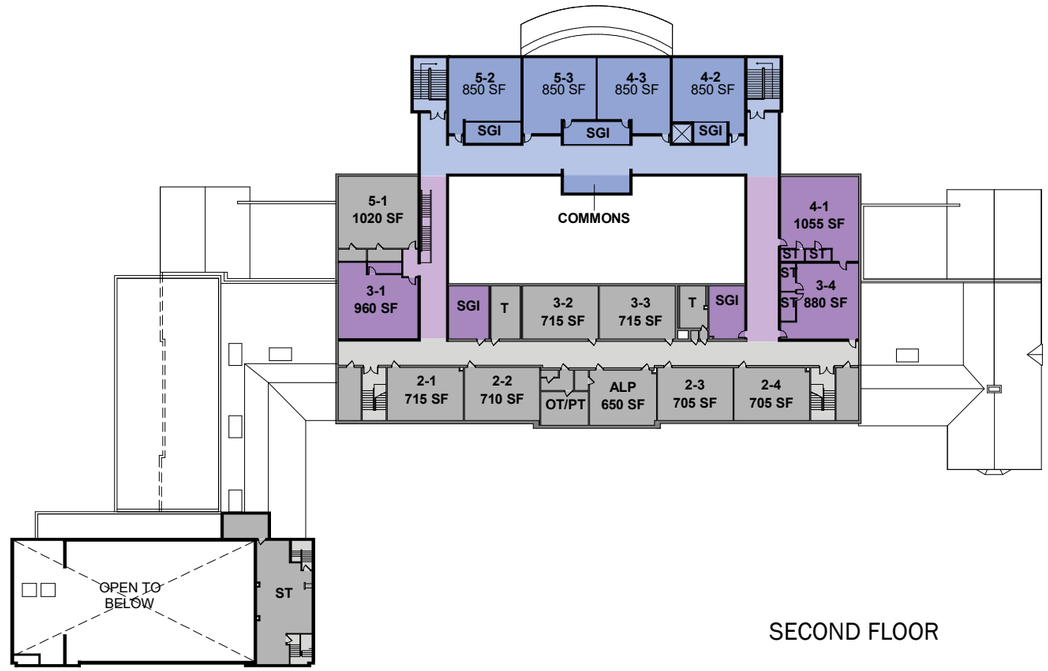

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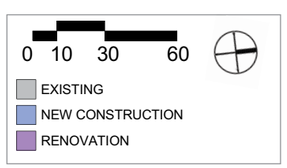

Riverside Capacity Analysis

	Model Program			Current			Proposed		
	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF	CORE	GOAL	Total NSF
Instructional Core	24,300	1,300	25,600	18,080	1,355	19,435	21,720	1,755	23,475
Activities Programs	10,700	3,300	14,000	6,600	655	7,255	9,200	655	9,855
Special/Support Programs	4,850	1,300	6,150	4,050	-	4,050	4,850	100	4,950
Community Commons	11,600	1,400	13,000	7,395	70	7,465	11,565	70	11,635
Admin & Student Services	3,450	1,350	4,800	2,270	240	2,510	3,450	600	4,050
Building/Facilities Support	1,800	-	1,800	295	-	295	495	-	495
	56,700	8,650	65,350	38,690	2,320	41,010	51,280	3,180	54,460

CENTRAL MIDDLE SCHOOL



The original building was constructed in 1957 and expanded with a small classroom addition in 2000. The original building is typical of post-war construction and is very "thin" in terms of structure and building envelope. The exterior walls are comprised of a "window-wall" system that is original to the building with the exterior columns penetrating this wall so that the steel material allows for the conduction of thermal energy directly through the wall. The building is also constrained with a low floor to roof height (10'-8") which limits the ability to have high ceilings which allow for daylight penetration and space above the ceilings for ductwork necessary for adequate ventilation and fresh air.

The gymnasium is under-sized for the current program and locker rooms are in need of renovation and upgrades. The building is organized in a somewhat regimented fashion in that it provides long rows of classrooms that do not easily allow for collaboration or the integration of small or large group instruction areas.

Key infrastructure items are mostly related to the age of the facility. While it has been maintained well and some systems have been upgraded during the term of this Plan upgrades will become due for these same systems for the second time during the life of this School. There are also several structural concerns with the building including failing column bases in the boiler room, cracking in the gymnasium wall and adjacent foundation as well as concerns that the exterior wall is separating from the building. These concerns will need to be (or already have been) remediated in order to continue occupancy of the building. It is likely that additional concerns along these lines will continue to emerge given the original design and configuration of the structure and building envelope.

Site improvements that are included in the Plan include the conversion of a portion of the grass fields on this site to synthetic turf. This is in response to an overall shortage of playing field space during daylight hours across the District. Synthetic turf fields are known to have more play-ability than grass and are becoming the standard for inter-scholastic sports throughout the region.

Given that the total 2020 cost for upgrading the infrastructure is approximately $30 Million and if completed this would not solve the structural limitations of the building nor provide any opportunities for creating a next generation Middle school it is worth considering replacing this school in the long term. Given the current standards for ventilation the installation of an updated system will either result in even lower standards ceiling heights or the installation of extensive rooftop ductwork.

If the long term recommendation of replacing this School with a new building on this same site is adopted there will still be some infrastructure and program improvement work to be accomplished in the interim. This will include some structural remediation and other near term work needed to keep the School functioning until a replacement is completed. Furniture upgrades and perhaps a partial renovation of one area of the building to test or incubate ideas related to next generation learning styles is worth consideration in the near term.

The concept for the replacement building is to build a new building to the north of the current one so that the existing building can stay in operation during the replacement process. Ultimately the existing building will be removed and replaced with useable playing fields and or parking areas.

During the development of the Plan the question arose as to what would be the implications of consolidating the Middle School population into two locations, at Eastern and Western Middle School sites and eliminating the use of the current Central site as a Middle School location. This would then allow this site to be used for other functions valuable to the school programs and or the community such as a Freshman Academy, District Offices or a centralized athletic facility.

Building Information

Year built:	1957
Building area:	110,000
Site acres:	22.3
Functional capacity:	734
Projected enrollment:	588

Project Costs

Sitework	$10,361,040
Infrastructure	$9,420,504
Programmatic Improvements	$105,365,240
Total	$125,146,785

Model Program

Target Enrollment	588
Actual Capacity	644
Net Square Footage	78,850
NSF/Student	134
CORE	70,350
GOAL	8,500

Central Middle School

Target Enrollment	588
Actual Capacity	734
Net Square Footage	76,692
NSF/Student	130
CORE	73,251
GOAL	3,441

Proposed

Target Enrollment	588
Actual Capacity	661
Net Square Footage	82,034
NSF/Student	140
CORE	71,639
GOAL	10,395


INDIAN ROCK LANE
DEMOLISH EXISTING BUILDING
PROPERTY LINE
NEW DROPOFF AREA
NEW PARKING
EXISTING BUILDING
NEW OUTDOOR CLASSROOM / COURTYARD
NEW PARKING
EXISTING TENNIS COURTS
NEW BUILDING
RELOCATED FIELD
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EXISTING FIELD
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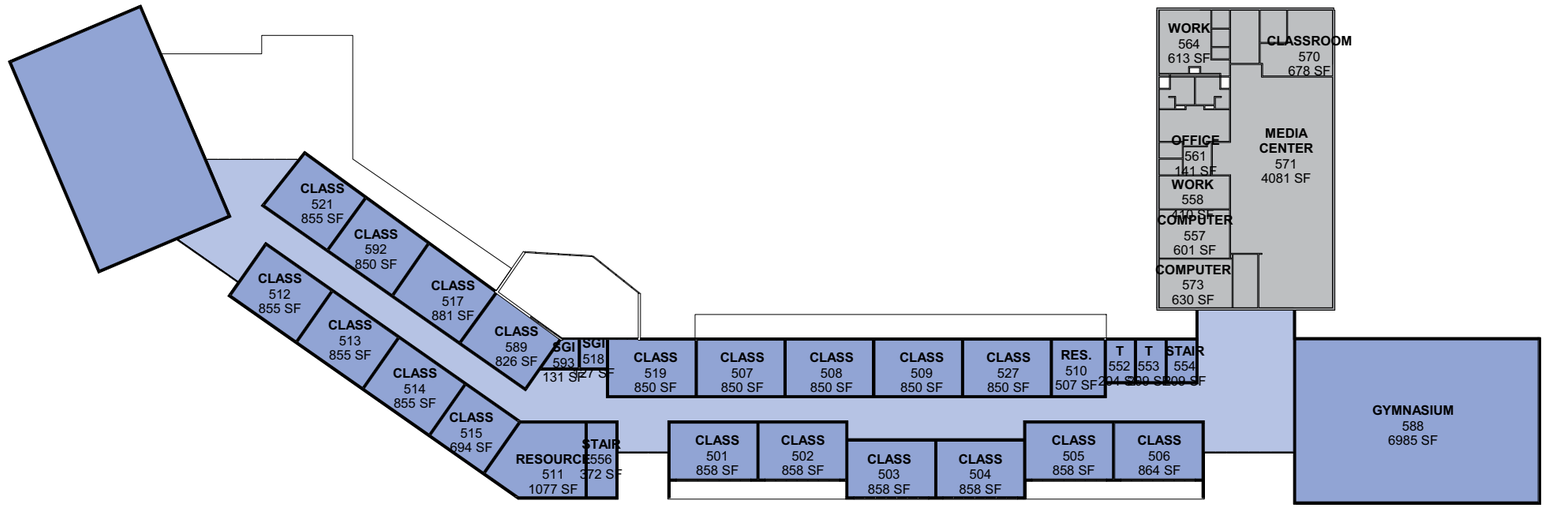
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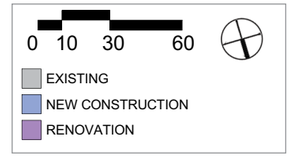
6985 SF

FIRST FLOOR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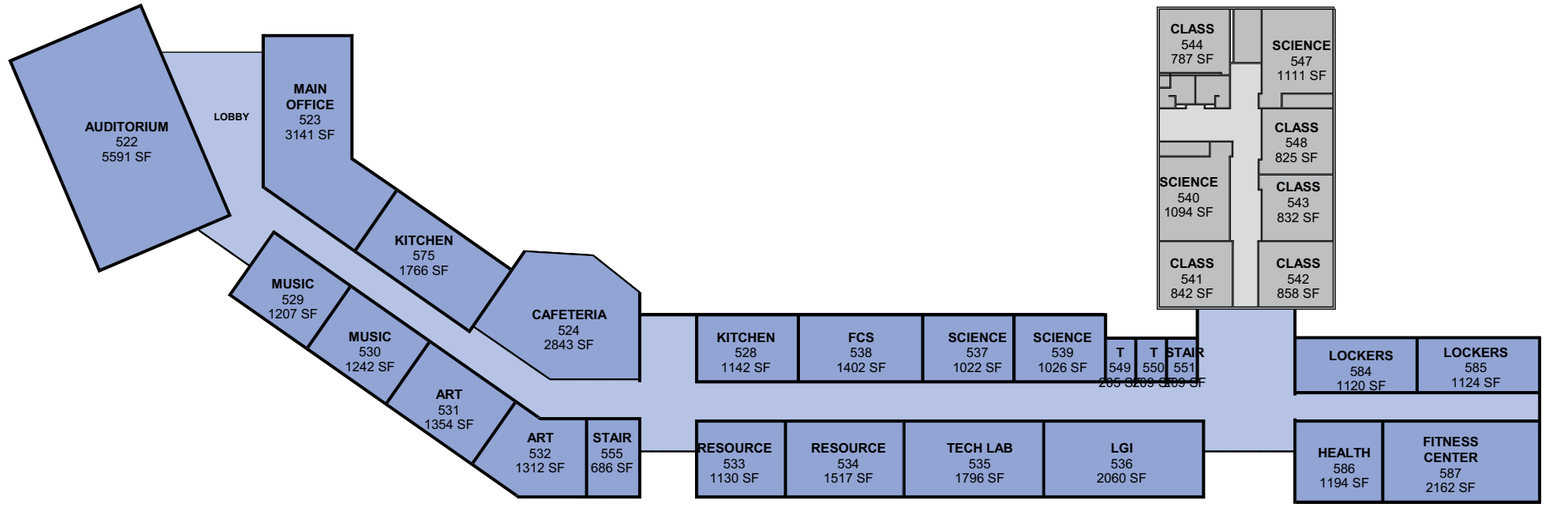
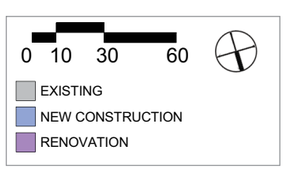
EXISTING
NEW CONSTRUCTION
RENOVATION



GROUND FLOOR



EASTERN MIDDLE SCHOOL



The original building was constructed in 1954 with a small classroom addition in 2000. This building shares many of the same attributes as Central having been designed by the same Architect and built at approximately the same time. The height of the building is slightly taller than Central and the exterior wall construction is also different with better thermal qualities.

This building could also benefit from an expanded gymnasium and an update to the Library and Media Center. The air conditioning system in the new wing is also quite loud and this does impede instruction. The main entrance stairs are not accessible and this entire configuration including the canopy needs to be updated.

Key infrastructure work required at this school is also primarily related to the age of the facility and includes; re-paving, sidewalk replacement, replacement of the building envelope including window walls, replacement of the roof and exterior doors, updates to classroom casework, new lighting, update the fire alarm system, install sprinklers in the balance of the building, install an emergency generator, update plumbing fixtures and major work to update the heating, ventilation and air conditioning system.

Site improvements that are included in the Plan include the conversion of a portion of the grass fields on this site to synthetic turf. This is in response to an overall shortage of playing field space during daylight hours across the District. Synthetic turf fields are known to have more play-ability than grass and are becoming the standard for inter-scholastic sports throughout the region.

Program related updates should include conversion of the Library to a next generation Learning Commons and furniture upgrades throughout the building. It is also worthwhile exploring limited renovations to a portion of the school to test or incubate concepts that will help transform this building to a next generation learning environment.

If Central were to close Eastern would need to be expanded to house an additional 175 students so that the total population would be approximately 1,059. This could be accommodated by designing an addition similar to the one completed in 2000 and relocating parking areas to the north.

Building Information

Year built:	1954
Building area:	128,000
Site acres:	16.1
Functional capacity:	904
Projected enrollment:	885

Project Costs

Sitework	$8,758,588
Infrastructure	$27,910,462
Programmatic Improvements	$6,858,483
Total	$43,522,533

Model Program

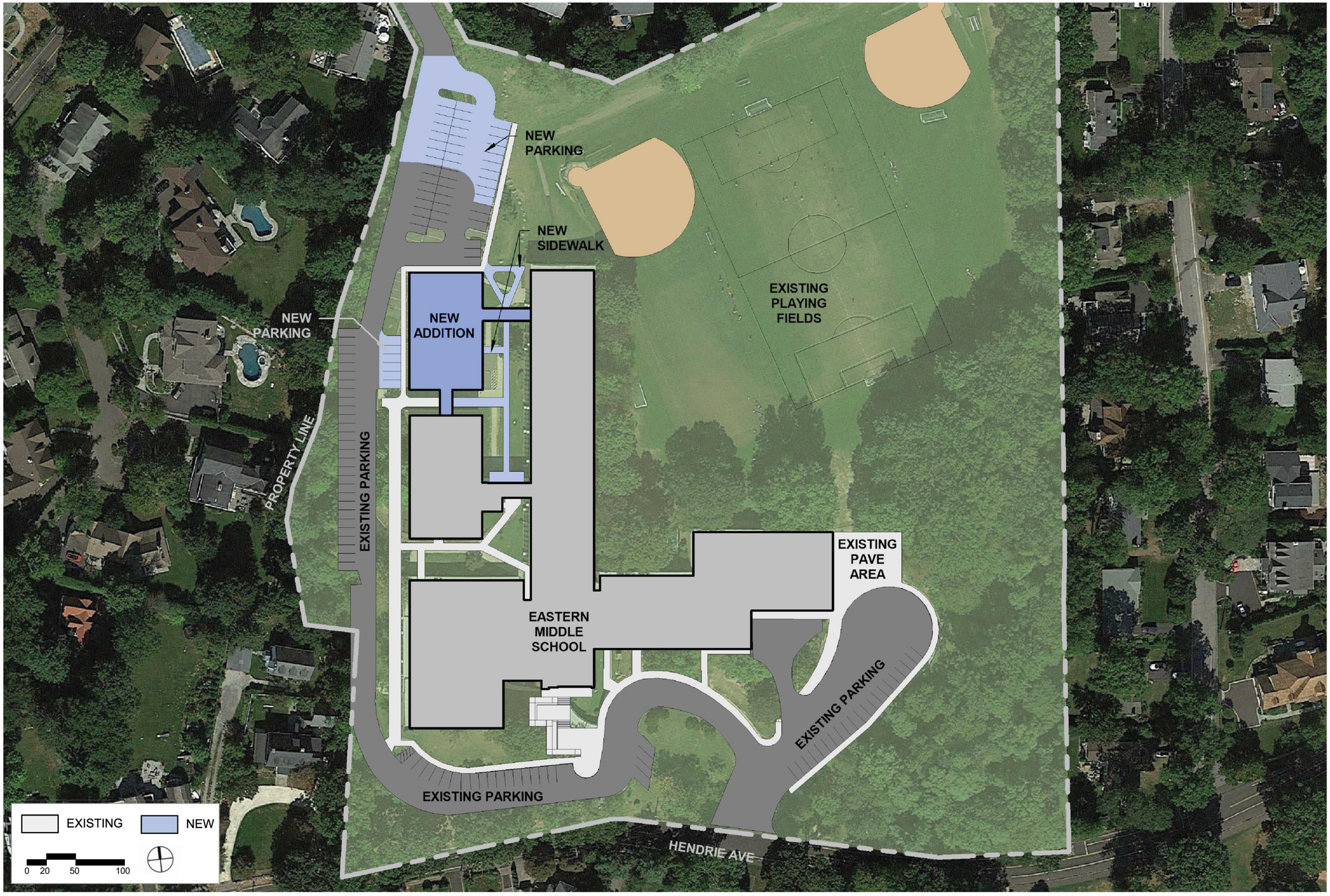
Target Enrollment	885
Actual Capacity	946
Net Square Footage	109,155
NSF/Student	115
CORE	96,505
GOAL	12,650

Eastern Middle School

Target Enrollment	885
Actual Capacity	904
Net Square Footage	82,269
NSF/Student	91
CORE	81,689
GOAL	580

Proposed

Target Enrollment	588
Actual Capacity	1,032
Net Square Footage	95,493
NSF/Student	93
CORE	94,113
GOAL	1,380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NEW SIDEWALK
NEW ADDITION
EXISTING PLAYING FIELDS
NEW PARKING
PROPERTY LINE
EXISTING PARKING
EXISTING PAVE AREA
EASTERN MIDDLE SCHOOL
EXISTING PARKING
EXISTING PARKING
HENDRIE AVE
EXISTING
NEW
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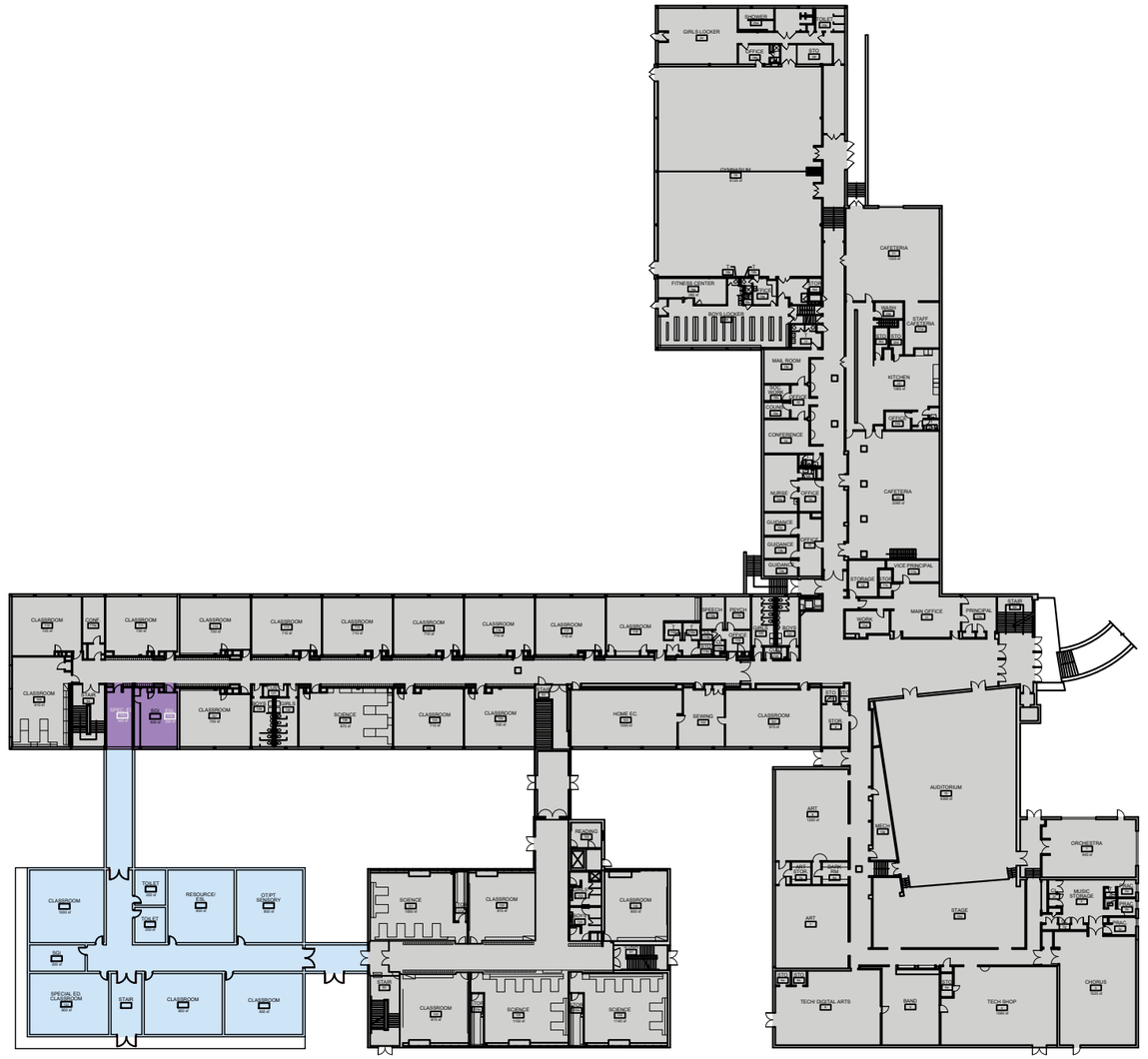
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GYMNASIUM
FITNESS CENTER
BOYS LOCKER
COMMON
KITCHEN
STAFF DINING
MAIL ROOM
CONFERENCE
NURSE
GUIDANCE
VICE PRINCIPAL
MAIN OFFICE
PRINCIPAL
CAFETERIA
CLASSROOM
HOME EC.
SEWING
SCIENCE
AUDITORIUM
ART
STAGE
ORCHESTRA
MUSIC STORAGE
CHORUS
TECH DRAFT. ARTS
TECH SHOP
TOILET
RESOURCE/ SP. ED.
OT/PT SECURITY
SPECIAL ED. CLASSROOM

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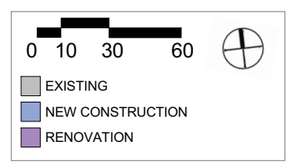
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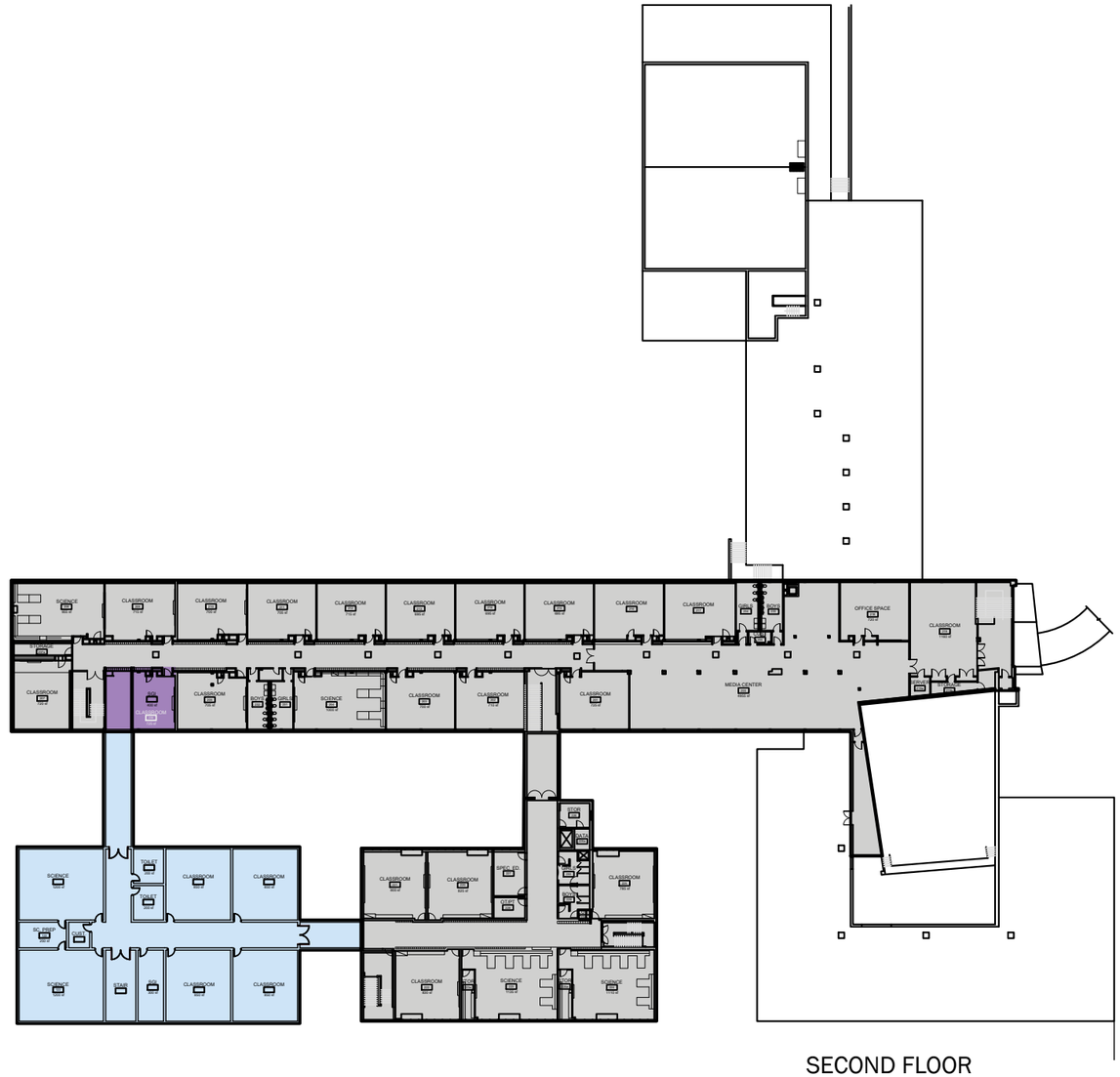
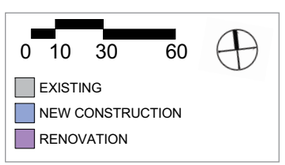
NEW CONSTRUCTION
RENOVATION



SECOND FLOOR



WESTERN MIDDLE SCHOOL



The original building was constructed in 1960 with a two story classroom and Library wing added in 1970. This addition is elevated with parking below this 1970's wing. The original building shares many of the same attributes as Central and Eastern having been designed by the same Architect and built at approximately the same time. The height of the building is slightly taller than Central and the exterior wall construction is also different with better thermal qualities.

This building offers a magnet school program but actually enrolls very few students that are not within its natural attendance zone. The Library needs to be re-designed to be more relevant now that all students have their own devices. The cafeteria space is also under-sized and in need of expansion. Some double-sized rooms and smaller breakout rooms for project work are also needed.

Key infrastructure work required at this school is also primarily related to the age of the facility and includes; re-paving, sidewalk replacement, replacement of the building envelope including window walls, replacement of the roof and exterior doors, updates to classroom casework, new lighting, update the fire alarm system, install sprinklers in the balance of the building, install an emergency generator, update plumbing fixtures and major work to update the heating, ventilation and air conditioning system.

Site improvements that are included in the Plan include the conversion of a portion of the grass fields on this site to synthetic turf. This is in response to an overall shortage of playing field space during daylight hours across the District. Synthetic turf fields are known to have more play-ability than grass and are becoming the standard for inter-scholastic sports throughout the region.

There has been an ongoing issue with remediation of contaminated soil related to portions of the playing fields on this site. These efforts are funded separately and design and planning work is well underway. Costs related to these efforts are not included in this Plan.

Program related updates should include conversion of the Library to a next generation Learning Commons and furniture upgrades throughout the building. It is also worthwhile exploring limited renovations to a portion of the school to test or incubate concepts that will help transform this building to a next generation learning environment.

If Central were to close Western would need to be expanded to house an additional 414 students so that the total population would be approximately 1,059. The concept for this expansion includes an extension of the 1970's west wing that would connect over to the older 1960 two story wing. This would require relocation of the Library to the interior of the new wing where it will be more centrally located. Due to the amount of students being added to the building there would also be a smaller gymnasium addition with locker rooms on the south side of the building. Renovation work would include relocation of some offices closer to the front of the building and expansion and renovation of the cafeteria.

Building Information

Year built:	1960
Building area:	116,000
Site acres:	22.1
Functional capacity:	696
Projected enrollment:	645

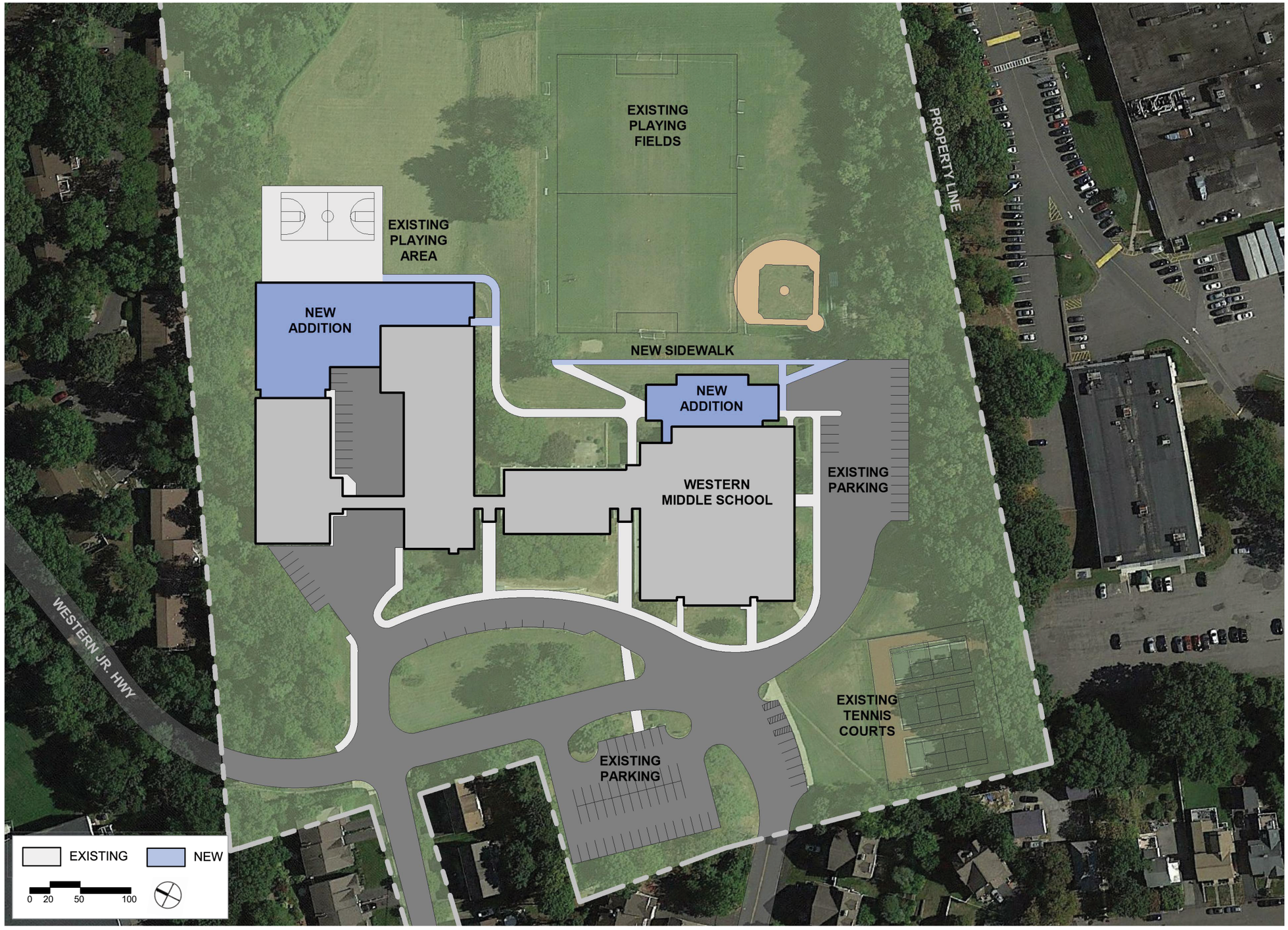
Project Costs

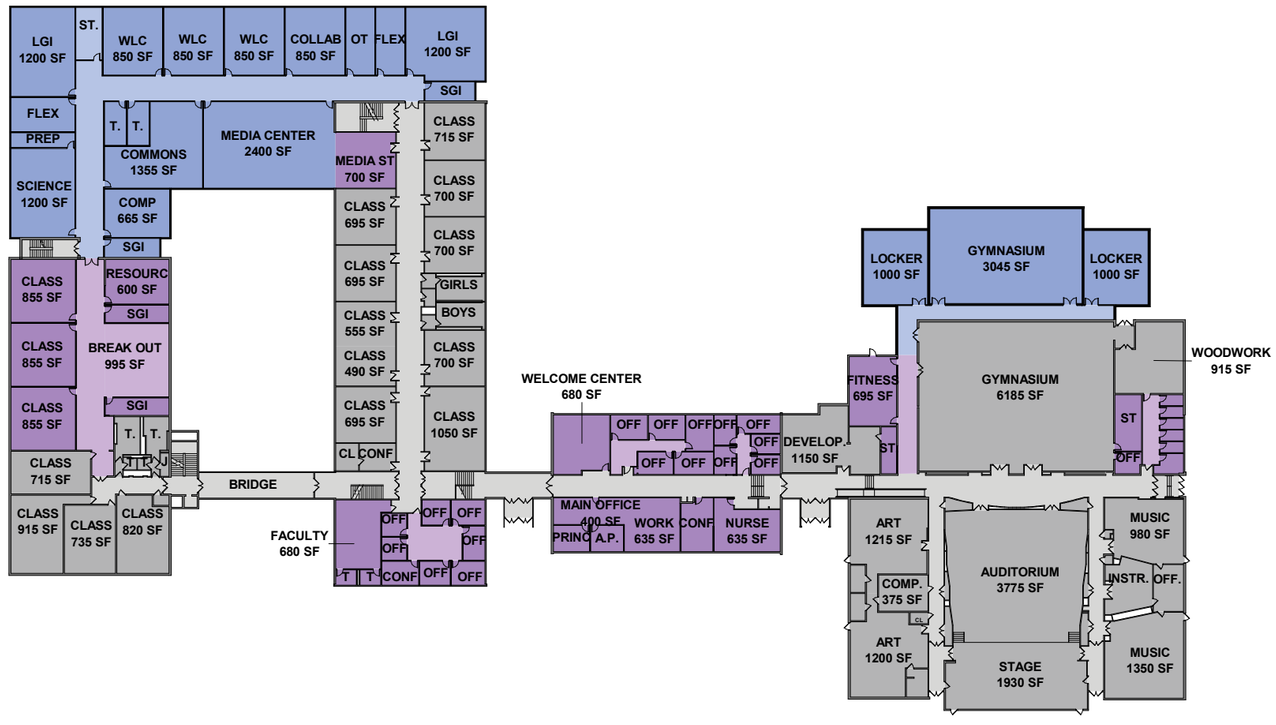
Sitework	$8,433,389
Infrastructure	$26,034,103
Programmatic Improvements	$6,161,394
Total	$40,628,885

Model Program	
Target Enrollment	645
Actual Capacity	699
Net Square Footage	87,040
NSF/Student	125
CORE	77,490
GOAL	9,550

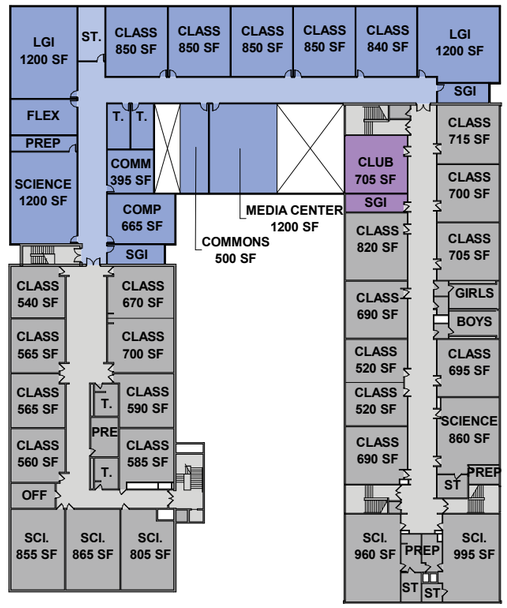
Western Middle School	
Target Enrollment	645
Actual Capacity	696
Net Square Footage	73,230
NSF/Student	105
CORE	71,190
GOAL	2,040

Proposed	
Target Enrollment	588
Actual Capacity	896
Net Square Footage	102,241
NSF/Student	114
CORE	90,299
GOAL	11,942


EXISTING PLAYING FIELDS
PROPERTY LINE
EXISTING PLAYING AREA
NEW ADDITION
NEW SIDEWALK
NEW ADDITION
WESTERN MIDDLE SCHOOL
EXISTING PARKING
WESTERN JR. HWY
EXISTING TENNIS COURTS
EXISTING PARKING
EXISTING
NEW
0 20 50 100



GROUND FLOOR


LGI 1200 SF
ST.
CLASS 850 SF
CLASS 850 SF
CLASS 850 SF
CLASS 850 SF
CLASS 840 SF
LGI 1200 SF
SGI
FLEX
PREP
SCIENCE 1200 SF
T.
T.
COMM 395 SF
COMP 665 SF
SGI
COMMONS 500 SF
MEDIA CENTER 1200 SF
CLUB 705 SF
SGI
CLASS 820 SF
CLASS 690 SF
CLASS 520 SF
CLASS 520 SF
CLASS 690 SF
CLASS 715 SF
CLASS 700 SF
CLASS 705 SF
GIRLS
BOYS
CLASS 695 SF
SCIENCE 860 SF
PREP
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SCI. 960 SF
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ST
SCI. 995 SF
CLASS 540 SF
CLASS 565 SF
CLASS 565 SF
CLASS 560 SF
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CLASS 670 SF
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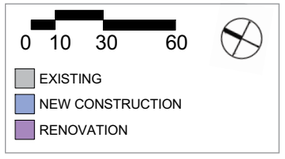
SCI. 805 SF

FIRST FLOOR


0 10 30 60
EXISTING
NEW CONSTRUCTION
RENOVATION

GREENWICH HIGH SCHOOL



Greenwich High School was relocated to its current site and the original building was built in 1970. A building-wide renovation and a 75,000 square foot science wing was completed in 2001. Recently the Music Instructional Space and Auditorium (MISA) project was undertaken with the planning commencing in 2008 and construction completed in 2016. The building now totals approximately 455,000 gross square feet on a site of 54.5 acres.

The original building was configured as a house plan building which is a planning technique to break down larger schools into, “schools within a school”. House plan schools typically have all general education spaces in close proximity to Science lab/classrooms so that the travel distance for any one student is limited to their local house resulting in students becoming more familiar with each other and their instructors. Once the Science wing was built the house plan organization was weakened somewhat due to the long distance between the houses and the new science facilities although the basic organization is still utilized. Maximum travel distances from classrooms in the original building to the far end of the Science wing can be up to a quarter mile which can take five minutes in between classes.

Given the age of the building there are a number of accumulating infrastructure issues. Some of the key issues include; re-paving, replacement of sidewalks, roof replacement, replacement of synthetic turf fields, window replacement, classroom casework upgrades, locker replacement, light fixture replacement, upgrades to PA, security, fire alarm and emergency lighting systems, plumbing fixture upgrades and major upgrades to and partial replacement of the heating, ventilation and air conditioning systems. The main entrance corridor which is a major connecting artery in the building is in especially poor physical condition and is a security concern.

Upgrades to the main contest field, Cardinal Field, was the subject of a separate feasibility study that was completed during the same time period that this Facilities Plan was developed. The costs of the recommended solution are included in this plan. The scope of this project involves a new access drive and vehicle and pedestrian bridge, relocated tennis courts, new bleachers and press box, a field building with team rooms, toilet rooms and an athletic training facility as well as a tennis building and a storage building. These improvements are necessary to make this public facility accessible, provide public toilet rooms and to replace bleachers that are failing and have exceeded their expected useful life. The reconfigured area will provide additional off street parking.

There has been an ongoing issue with remediation of contaminated soil related to portions of other playing fields on the High School site that are funded separately and design and planning work is well underway. Costs related to these efforts are not included in this Plan.

Program improvements to the High School that are not related to the projected increase in enrollment include classroom furniture upgrades, creation of innovation spaces in each house for collaborative project based work, updating the Library or Learning Commons and updating and replacing casework in the Science lab/classrooms. Indoor physical education and athletic space is also under-provided for a High School of this size.

While this is a large building overall, the classroom and lab space is fully, if not over, utilized to serve the current population. A detailed capacity analysis was carefully reviewed with High School administrators and it was confirmed that spaces are heavily scheduled due to the size of the student body and the breadth of offerings at this high performing High School. With a projected enrollment increase of 10% or approximately 257 students additional classroom space will be needed.

The proposed concept for providing the needed additional instructional space involves re-visiting the original concept for the building and attempting to re-make a “whole” school rather than simply append the missing spaces to one end of the building. The concept is to relocate the Library or Learning Commons to an underutilized portion of the interior of the site behind the main connecting corridor across from the main entrance. This will allow the location of the current Library to be converted back into classroom use. Many of the spaces in the area of the existing Library are already configured to be classrooms so this renovation should be cost-effective to accomplish. This integrated approach also puts the Learning Commons at the heart of the school’s plan and emphasizes its importance academically.

The relocated Learning Commons will be adjacent to a new connecting corridor and security office and vestibule. This configuration is essential for safety and will remedy a long-standing sub-standard arrangement.





Other components of the proposed improvements to the High School include:

- Creation of a mezzanine that aligns with the second floors of the “houses” to provide informal learning areas and better connections between houses. Some of the adjacent classroom areas will also be converted to innovation or collaboration centers. A tiered “learning stair” or stadium like seating will connect the second floor to the main level. This type of space can have multiple purposes (work areas, group discussions, informal performance space…) and are becoming quite prevalent in academic environments. This combination of improvements will make the largest space in the High School more useable for academic purposes and ease building-wide circulation.
- The mezzanine can also connect over the new corridor to the Learning Commons and the Arts facilities on the other side of the High School.
- Renovation of the lower level of the area now occupied by the Library to better serve special needs students.
- A larger building addition to provide additional indoor physical education and athletic space. This proposed addition requires removal of some current team rooms and will eliminate one row of parking spaces. The new addition will replace the team rooms that were eliminated with slightly larger one and provides a double sized gymnasium. This new floor space is approximately two thirds of the size of the current gymnasium. On the upper floor there will be additional fitness and dance space and it will be surrounded by a jogging track. The addition extends to the north and provides a new entrance to the physical education facilities to balance the new entrance to the MISA facility. It also relocates the athletic and physical education offices from an undersized facility to the exterior near the entrance.
- The Science wing is showing signs of its age after 18 years of use and will need to be updated prior to the end of the period of this plan.

The sum total of the proposed additions and renovations will both accommodate the increased enrollment and update the building as a next generation school with significant community benefits. The needed infrastructure and security related upgrades will re-establish the facility as a safe and healthy environment for staff and students.

There are a range of options presented in the Plan for the High School that related to the options discussed for the Middle Schools.

If Central is not replaced and the additions are created at Eastern and Western to make them larger Middle Schools, then the Central site could be re-purposed as a stand-alone site for a freshman academy. If this did take place there would be no reason to expand the High School as the new facility would be designed for approximately 750 students thus leaving the current High School with ample capacity for grades 10-12.

Based on feedback received during preliminary presentations of the Plan an alternative approach to the proposed relocation of the Learning Commons was developed that reduces the scope and the budget. This approach has a budget of $20 Million as opposed to the initial larger plan with a budget of $XX Million. The key differences between the plans are:

- Deferring a lot of the second story work until a later phase,
- Reducing the size of the new Learning Commons,
- Reducing the size of the new Lobby
- Deferring a lot of the renovation work in the existing building to a later phase.



Building Information

Year built:	1970
Building area:	793,000
Site acres:	54.8
Functional capacity:	2,637
Projected enrollment:	2,951

Project Costs

Sitework	$20,783,025
Infrastructure	$62,866,339
Programmatic Improvements	$125.586,733
Total	$209,236,097

Model Program

Model Enrollment	2,954
Model Capacity	2,954
Net Square Footage	307,660
NSF/Student	104
CORE	274,110
GOAL	33,550

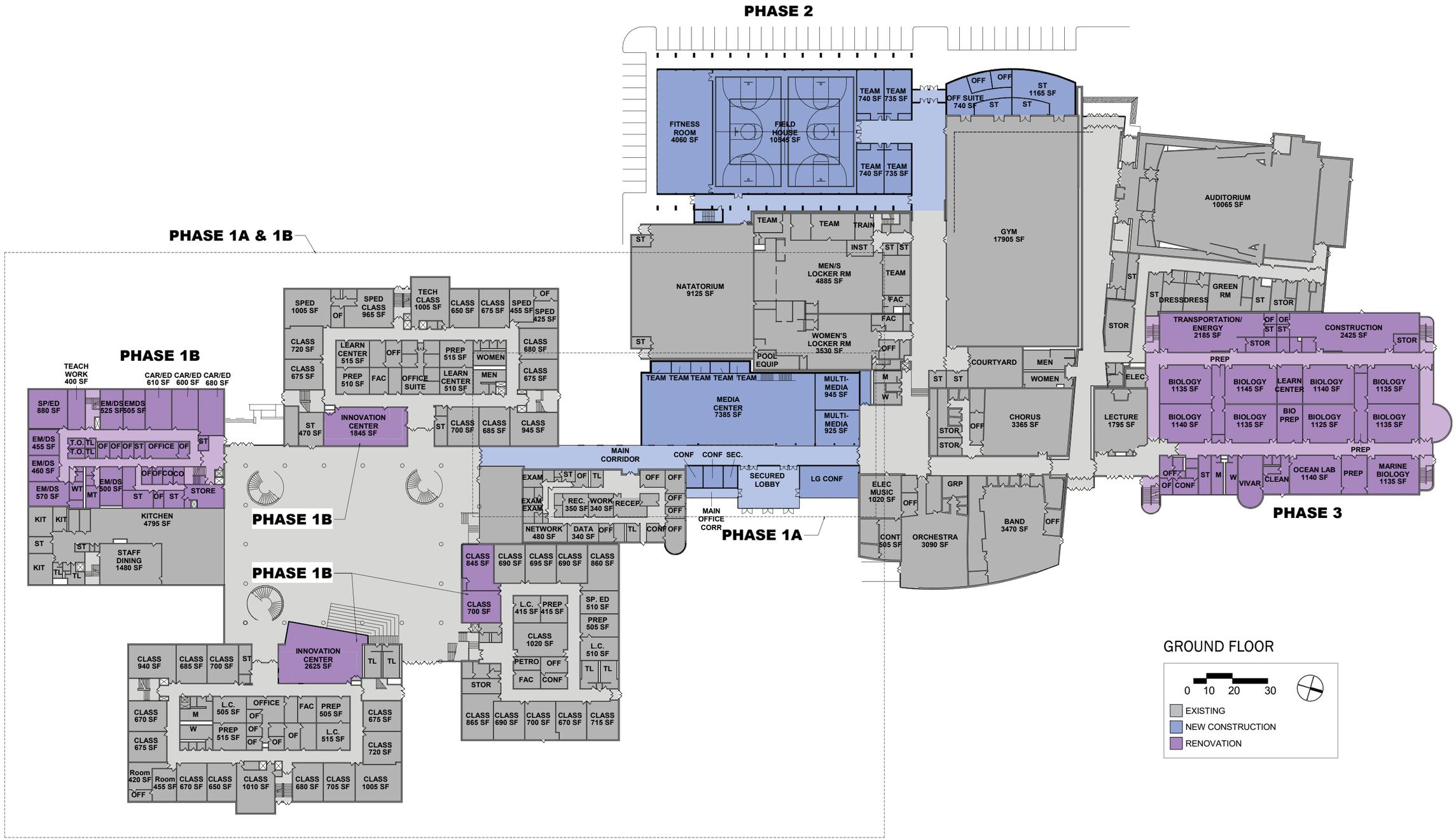
Greenwich High School

Target Enrollment	2,951
Actual Capacity	2,637
Net Square Footage	325,219
NSF/Student	123
CORE	303,734
GOAL	21,485

Proposed

Target Enrollment	2,951
Actual Capacity	2,950
Net Square Footage	341,919
NSF/Student	116
CORE	320,434
GOAL	21,485


EXISTING
NEW
0 20 50 100
GREENWICH
CARDINALS
NEW FIELD HOUSE
NEW PARKING
NEW TENNIS PAVILION AND TENNIS COURTS
EXISTING PARKING
NEW ADDITION
GREENWICH HIGH SCHOOL
NEW LEARNING COMMONS
NEW ENTRY PLAZA
EXISTING PARKING
EXISTING PARKING
HILLSIDE ROAD


PHASE 2
PHASE 1A & 1B
PHASE 1B
PHASE 1B
PHASE 1B
PHASE 1A
PHASE 3
FITNESS ROOM 4060 SF
FIELD HOUSE 10545 SF
TEAM 740 SF
TEAM 735 SF
OFF SUITE 740 SF
ST 1165 SF
GYM 17905 SF
AUDITORIUM 10065 SF
NATATORIUM 9125 SF
MEN'S LOCKER RM 4885 SF
WOMEN'S LOCKER RM 3530 SF
POOL EQUIP
MEDIA CENTER 7385 SF
MULTI-MEDIA 945 SF
MULTI-MEDIA 925 SF
COURTYARD
CHORUS 3365 SF
LECTURE 1795 SF
TRANSPORTATION/ ENERGY 2185 SF
CONSTRUCTION 2425 SF
GREEN RM
BIOLOGY 1135 SF
BIOLOGY 1145 SF
LEARN CENTER
BIOLOGY 1140 SF
BIO PREP
BIOLOGY 1125 SF
OCEAN LAB 1140 SF
MARINE BIOLOGY 1135 SF
MAIN CORRIDOR
SECURED LOBBY
LG CONF
MAIN OFFICE CORR
ELEC MUSIC 1020 SF
ORCHESTRA 3090 SF
BAND 3470 SF
CONT 505 SF
GRP
TEACH WORK 400 SF
CAR/ED 610 SF
CAR/ED 600 SF
CAR/ED 680 SF
SP/ED 880 SF
EM/DS 525 SF
EM/DS 505 SF
EM/DS 455 SF
EM/DS 460 SF
EM/DS 570 SF
EM/DS 500 SF
STORE
KITCHEN 4795 SF
STAFF DINING 1480 SF
SPED 1005 SF
SPED CLASS 965 SF
TECH CLASS 1005 SF
CLASS 650 SF
CLASS 675 SF
SPED 455 SF
SPED 425 SF
CLASS 720 SF
CLASS 675 SF
LEARN CENTER 515 SF
PREP 510 SF
OFFICE SUITE
PREP 515 SF
LEARN CENTER 510 SF
CLASS 680 SF
CLASS 675 SF
INNOVATION CENTER 1845 SF
ST 470 SF
CLASS 700 SF
CLASS 685 SF
CLASS 945 SF
EXAM
EXAM
REC. 350 SF
WORK 340 SF
RECEP
NETWORK 480 SF
DATA 340 SF
CLASS 845 SF
CLASS 690 SF
CLASS 695 SF
CLASS 690 SF
CLASS 860 SF
CLASS 700 SF
L.C. 415 SF
PREP 415 SF
CLASS 1020 SF
SP. ED 510 SF
PREP 505 SF
L.C. 510 SF
PETRO
FAC
CONF
STOR
CLASS 865 SF
CLASS 690 SF
CLASS 700 SF
CLASS 670 SF
CLASS 715 SF
CLASS 940 SF
CLASS 685 SF
CLASS 700 SF
INNOVATION CENTER 2625 SF
CLASS 670 SF
CLASS 675 SF
L.C. 505 SF
PREP 515 SF
OFFICE
PREP 505 SF
L.C. 515 SF
CLASS 675 SF
CLASS 720 SF
Room 420 SF
Room 455 SF
CLASS 670 SF
CLASS 650 SF
CLASS 1010 SF
CLASS 680 SF
CLASS 705 SF
CLASS 1005 SF
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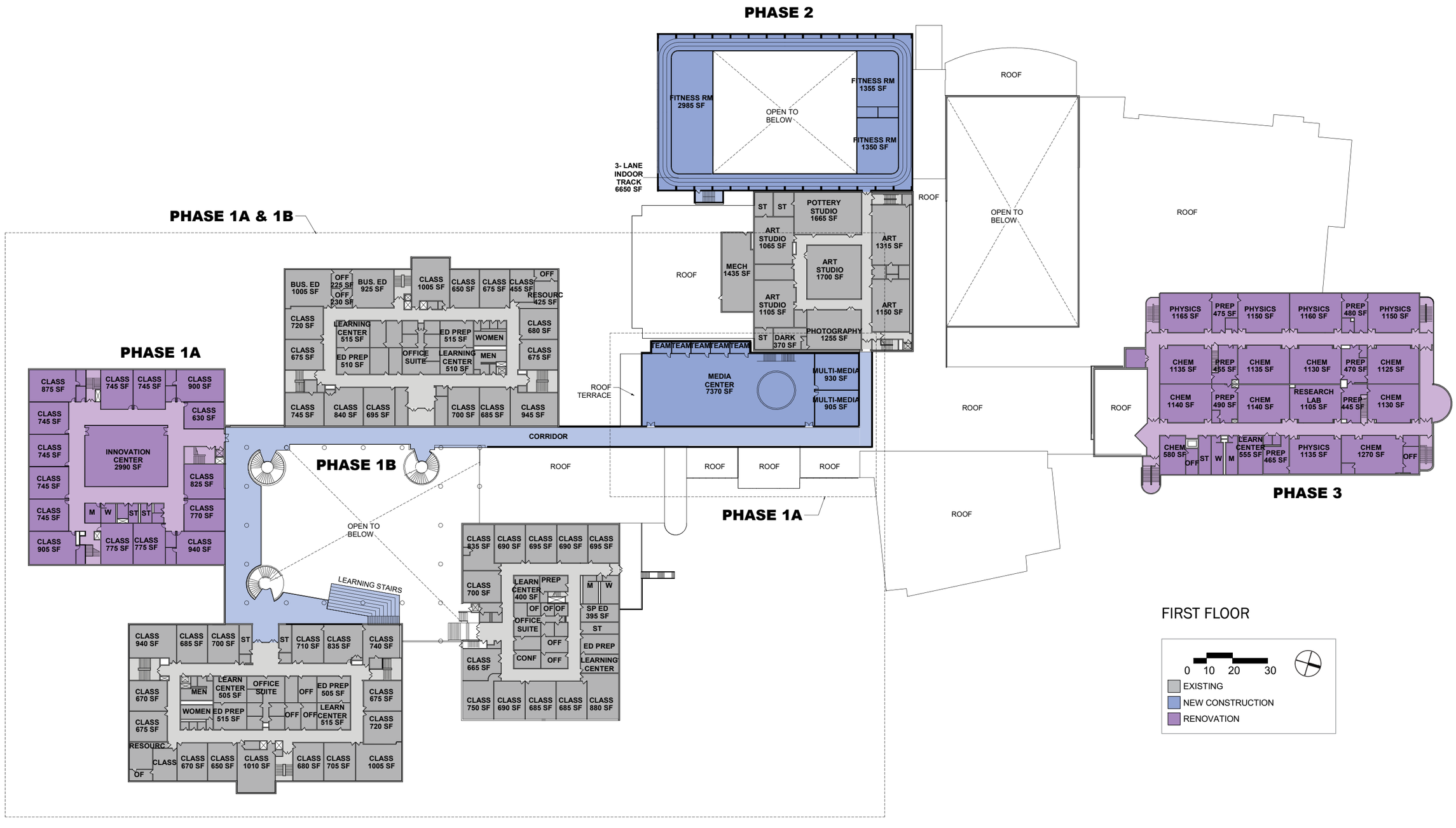
EXISTING
NEW CONSTRUCTION
RENOVATION



FIRST FLOOR

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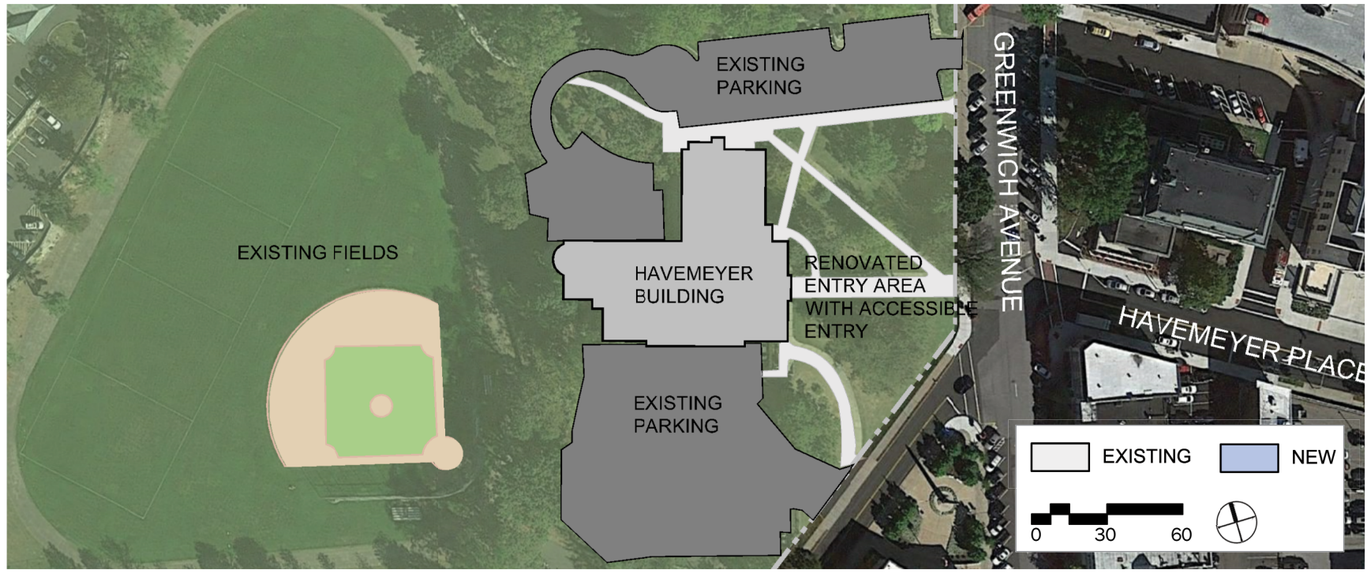
EXISTING

NEW CONSTRUCTION

RENOVATION

HAVEMEYER BUILDING





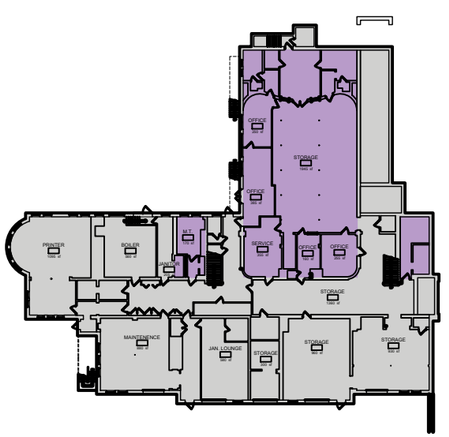
This building was a gift to the community from one of Greenwich's early families and was constructed in 1892. By all reports it has been in continuous use for over 125 years as a public facility in support of the school programs. It is currently used as an administration building for Greenwich Public Schools. It accommodates office space, public meeting rooms and conferences with individuals with special needs, including physical disabilities and their advocates.

The building is not fully accessible and should have an accessible main entrance, new fully accessible toilet rooms and an elevator installed. The original building had a multi-purpose auditorium space that has now been converted to a meeting room. Some of the original features, including a decorative proscenium arch, still exist behind drywall partitions and above suspended ceilings. Many of the spaces, including executive offices and public meeting rooms, utilize window air conditioners that are so noisy that they have to be turned off during peak use periods.

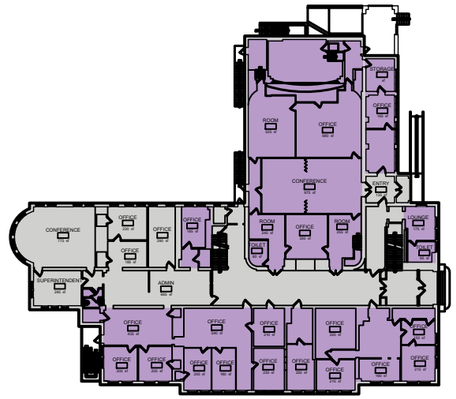
Key infrastructure concerns with this facility all relate to its age and include; masonry restoration, new ramps, stairs and elevator, new toilet rooms on three levels, window replacement, interior wall replacement, flooring updates, new lighting systems, updates to communications, security and fire alarm systems, installation of an emergency generator, updates to plumbing fixtures and replacement of the heating, ventilation and air conditioning system.

The concept for updating this building or program improvements is a combination of restoration and modernization. The budget developed includes funds to restore the historic multi-purpose auditorium space as a large meeting room and small performance space. Other areas of the building need to be modernized to accommodate a collaborative and integrated office environment that is commensurate with the quality of the School District and the administrators who lead it. A more open office plan, with increased visibility and informal meeting areas is envisioned. This is in contrast to what exists today which is the compartmentalization of workspaces that were carved up out of former classroom spaces.

The end result would be a completely updated building with a significant community amenity in the heart of Greenwich. An open accessible building with a variety of meeting spaces and updated offices would serve the Town well for many years.



BASEMENT



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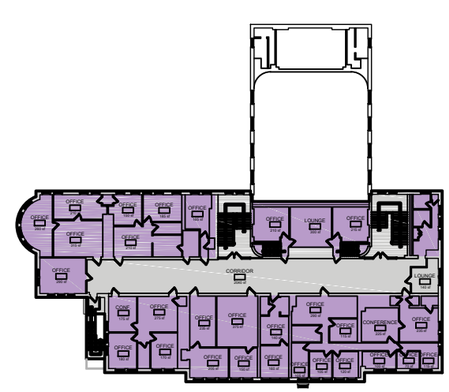

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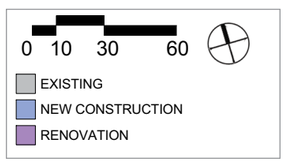

Building Information

Year built:	1892
Building area:	47,500
Site acres:	8
Functional capacity:	-
Projected enrollment:	-

Project Costs

Sitework	$153,381
Infrastructure	$14,641,593
Programmatic Improvements	$9,315,269
Total	$24,110,243