

# Sudbury Public Schools Elementary Schools Space Utilization Study



November 16, 2018

Prepared for:  
Sudbury Public Schools  
40 Fairbank Rd.  
Sudbury, MA 01776



**TBA ARCHITECTS, INC**

Sudbury  
Public  
Schools

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# **Noyes, Nixon, Haynes, and Loring Schools**

## **Space Utilization Study**

### **Existing Conditions and Utilization Analysis**

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## 1. Introduction

**Project Name and Building Address:**  
Sudbury Public Schools Space Utilization Study

Peter Noyes Elementary School  
280 Old Sudbury Rd.

General John Nixon Elementary School  
472 Concord Rd.

Josiah Haynes Elementary School  
169 Haynes Rd.

Israel Loring Elementary School  
80 Woodside Rd.

### Project Team:

**Town of Sudbury – Public Schools**  
40 Fairbank Rd., Sudbury, MA 01776  
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Brad Crozier – Superintendent of Schools

**Architect – TBA Architects, Inc.**  
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Justin Humphreys, AIA, Principal (prepared report)  
Anthony Rodriguez

Site Visits:  
9/24/18 – Justin Humphreys toured the elementary schools with Superintendent Crozier. Photographs and notes were taken, layout of the buildings reviewed (not measured).

TBA has received and utilized prints of floor plans for each of the four schools. TBA has been provided school schedules, enrollment data (updated 11/15/18) and room assignment diagrams. The existing space use and enrollment numbers and projections are all based on the provided information.

Thank you to the administration and staff for your patience and assistance during our visit and in providing the documents we requested.



## 2. Executive Summary

TBA was requested to determine current and future capacity of the Town of Sudbury's elementary schools and in particular to determine the impacts of anticipated housing development in town on the Noyes, Nixon, and Haynes schools. TBA approached this question of capacity of from a few different directions: looking at current enrollment; projected increase by the proposed housing development; projected enrollment from 2016 NESDEC numbers; and, compared them to the Town's own limitations on class size and MSBA recommended standards. The primary focus of this study was to determine the classroom capacity, so most statements made are with regard to classrooms only. Enrollment affects all functions and programs in a school, however, so we do speak to those impacts as well. Our overall goal is to understand the space use and utilization of the current schools and their ability (or inability) to accommodate future growth whatever the reason.

This first phase of the study looked at the four elementary schools: the Peter Noyes Elementary School, the General John Nixon Elementary School, the Josiah Haynes Elementary School, and the Israel Loring Elementary School.

As we understand, there is a private proposal to develop 250 units of private housing near the center of town at Sudbury Station. A warrant item has been put forth to Town Meeting to execute a land swap with the developer to move the development to the north end of town on the Quarry North / Melone parcel. If the development proceeds at Sudbury Station enrollment is projected to increase by 116 students across grades K-12, 84 at the K-8 level. Should this development go forward the impact of a projected 56 additional students would be borne by the Noyes and/or Nixon Schools. Should Town Meeting approve the land swap, the development would be approximately 274 units and the projected increase in school enrollment would be 97 additional students across grades K-12; 70 of them at the K-8 level. Development of the Quarry North / Melone parcel would mean the Haynes School would bear the impact of 47 additional students.

The Noyes, Nixon, and Haynes were studied as to their ability to accommodate the projected enrollment from the housing development. The Loring is not expected to be impacted by the new housing, but we did study its ability to accommodate NESDEC projected enrollment and capacity based on MSBA guidelines, and a hypothetical increase from the Sudbury Station development.

We see classroom spaces available for additional homeroom sections at each school, but not enough at the Noyes. In all but one school, other programs would need to be reconfigured or relocated to accommodate the additional section. The close proximity of the Noyes and Nixon schools and the availability of more "spare" classrooms at the Nixon presents the possibility of easing overcrowding at the Noyes.

Scheduling is different at each of the elementary schools. All days are the same length, but the number of periods, length of periods and number of lunch seatings all vary. It also appears that staff are shared

between schools. It does appear that at least one additional classroom section can be added to the schedules without complicating the schedules further. Adding more than one or two appears that it would impact planning/prep time and schedules of shared staff.

The MSBA comparisons show the largest area of divergence by Sudbury from the standard is in the area of special education space. Sudbury allocates fewer larger spaces to special education than the standard. This appears to be due to a few factors – the pedagogy of the district, the practice of placing a given specialized district program at each school, and the configuration of the spaces at each. All schools have more full sized classroom spaces available than small group and office spaces. (This can be easily modified at each school should the district wish to create smaller group spaces, rather than shared classrooms.) To make use of existing special education space for general classrooms would require “right-sizing” the reconfigured special education space and attention to proper distribution of spaces.

Sudbury also dedicates classroom space to foreign language instruction. At the elementary school level, the MSBA standard does not require dedicated space for this education. While, it is not recommended, we identified these spaces as available for general classroom use which would require delivering foreign language instruction in either smaller space or into the homeroom classrooms. Any program that is delivered into the homeroom impacts planning and team meeting time.

The conclusion of each direction of study was similar, and similar for each school.

1. All schools have a sufficient number of classrooms for both MSBA guidelines and District guidelines for their current enrollment.
  - a. Classrooms vary in size, but those for kindergarten are often smaller than standards.
2. All schools have some capacity at each grade level and in each section.
3. All schools have at least one classroom available for an additional section – but not at each grade level. (The Sudbury Station development triggers the need for two additional classrooms and only one is easily achievable in most schools.)
4. All schools (except Nixon) would require relocation, reorganization, or changes in methods of delivery of established programs to accommodate an additional classroom.
5. Three of the four schools can accommodate the projected enrollment in general classrooms from either development location. However we see other impacts and effected areas:
  - a. The enrollment per class would be at the District's limit or one to two students over in certain grades and sections.
  - b. Development at Sudbury Station would require relocation or reconfiguration of existing programs at the Noyes where there is one (possibly two) additional general classrooms

can be mined. The increased enrollment from the Station development requires two additional classrooms at the K-5 level.

- c. Development at Sudbury Station is more readily handled at the Nixon, where one classroom is currently unused by any program and a couple of others can be combined to make up to three easily available.
- 6. The schools' schedules and staffing may be more of a determinant in ability to accommodate an increase in sections. Each school appears to have room for one or two additional sections before complicating the schedule. Additional staff will likely be required.
- 7. NESDEC projections are on a level or downward trend for each school which indicates that the available space at each school will continue to be sufficient until either:
  - a. The housing development is realized and can be incorporated into projections and this analysis revised, and/or;
  - b. The District changes the curriculum or service delivery methods of one or more programs.

Should the district wish to undertake reconfiguration or expansion of any of the schools to better accommodate the increased enrollment, we offer thoughts on square foot project costs. Construction, without MSBA standards or reimbursement, has recently run at approximately \$160/sf for renovation construction; \$425/sf for new stick-built construction; and \$380/sf for permanent modular construction. Design, engineering and project management fees are approximately 12% of construction cost. We provide these for rough estimate consideration only, as we have not identified any specific scopes of work, nor calculated any specific costs associated with any of the four schools.

### 3. Analysis and Observations

An enrollment analysis spreadsheet is included. We used the total school enrollment, enrollment per grade and section, and District's guidelines for class size as provided by Sudbury Public Schools, and tabulated the quantitative impacts of the projections from the proposed housing development and those from NESDEC and then compared them to the currently available classrooms to determine the capacity of each school and render an opinion as to their ability to accommodate those projections.

The spreadsheet is divided into two parts – the left half is current enrollment and the impact of the new housing development on enrollment by grade level; and, the right half is total capacity in population and classrooms as determined by the District's guidelines, MSBA guidelines, and NESDEC projections. The population and number of classrooms required varies in each – part of why it's so difficult to determine a definite capacity of a school building. These numbers are based on classrooms only. Other programmatic areas are always affected greatly by the population as is the schedule. However, the physical space to educate children for a majority of the day – the general or homeroom classroom – is the priority of this study.

1. The Noyes School needs two additional classrooms to accommodate the increased enrollment, and would require some sections to be over the district's limit. The Noyes school enrollment numbers were run with the projected increase from the Sudbury Station development and was compared to the MSBA with and without the preschool classrooms. As the district houses special programs at each school, the Noyes housing the preschool, the district could choose to deliver those services in other locations. In order to determine if the Noyes school as-built could accommodate the anticipated enrollment increase we looked at how many classrooms would be needed and to do that we ran the numbers in various combinations. Ultimately we see that, ignoring the pre-K spaces, the school could accommodate the enrollment increase if that increase were evenly distributed across grade levels. However, while the total population in grades 1-5 is below the MSBA determined capacity, it is over the capacity per district guidelines, and at grades K-2 the number of students in each classroom is two students per section over the guideline. This suggests that if enrollment is not evenly distributed (most likely) that an additional classroom and possibly more would be needed. This would mean taking over the computer lab for a single classroom, or if more are needed, the preschool or other spaces would be impacted. When the preschool is included for student population and number of classrooms, the increase from development places the Noyes two classrooms short. To accommodate the increase two classrooms need to be found either by displacing program or expansion.
  - a. The computer lab could be returned to a general classroom to accommodate one additional section.

- b. One large space currently houses several special education programs (Rm 43). The space could be renovated to better serve those uses and possibly free up another full sized general classroom.
  - c. Expansion of the school. Should this be done further consideration should be given to expanding more than two classrooms to anticipate the enrollment increase beyond the development and to create additional storage space to eliminate the storage units on-site.
  - d. Create an early childhood center. Relocating the preschool out of the Noyes would not only open up three classrooms for the school, it would give the district the opportunity to expand the early childhood program and create spaces tailored to preschool children and their needs.
- 2. The Nixon School is better able to accommodate the projected Station increase with the least impact to the school. Second grade is the most effected and would require an additional section to meet the district's maximum class size.
  - a. One classroom is currently unprogrammed/unused and is readily available.
  - b. Two classrooms have shared small group areas which could be considered for general classroom or renovated to work better for the programs.
  - c. One classroom is currently district-wide science curriculum storage. The items stored can be downsized and store in another location more efficiently, freeing up this space for general classroom.
  - d. The east wing can be expanded by approximately four additional classrooms. This would require relocating a paved play area, but there is little impact to the rest of the site.
- 3. The Haynes School while able to accommodate the increased enrollment, would require some sections to be over the district's limit.
  - a. The increase is accommodated in the existing classrooms by virtue of the current lower class enrollment.
  - b. Additional sections could be accommodated by relocating the foreign language classroom to the teachers' lounge and relocating the teachers' lounge to the conference room across the corridor.
  - c. One existing kindergarten is in a space too small and without a dedicated bathroom.
  - d. District-wide special education programs occupy three full sized classroom spaces.

- e. The multi-purpose room is not an MSBA programmed space. The school utilizes it regularly, but it is a space that could be renovated to suit specials (art, music, etc.) thereby freeing up general classroom space.
4. The Loring School was analyzed for current utilization and capacity. We ran current enrollment numbers and looked at NESDEC projections to determine capacity as for the other schools. The school schedule was reviewed to determine time utilization and the overall and individual areas were compared to MSBA guidelines to determine area utilization. The school was also tested hypothetically to accommodate the Sudbury Station development.
- a. The school appears to have been developed as an MSBA project as most of the spaces and areas comport with the MSBA guidelines.
  - b. Based on current class size, there is capacity in each grade level for additional students and still be within District guidelines. More capacity exists if using MSBA guidelines.
  - c. Increased enrollment from the development could be accommodated, but would exacerbate some already undersized areas.

### 3. Existing Building Analysis

#### Background

In commissioning this study, the goals of the Sudbury Public Schools were to determine the ability of the schools to accommodate growth in regards to classroom space and to determine whether interior reconfiguration or expansion or both were required to meet the anticipated needs. In order to determine the best way of accomplishing these goals, space must be considered inside the existing facilities before making a determination about constructing additional new space. A thorough look at space use and efficiency is necessary to making the case for improvements. Regardless of whether space is able to be found within the existing buildings or not, if the process reveals that space is not available for all needs then it supports the need for additional space.

This school utilization study for Sudbury's four elementary schools provides analysis of the schools which includes grades kindergarten to five. Utilization metrics include both time and space: the actual percentage of time a room is in use and the space allocation for the intended use. The Massachusetts School Building Authority recommendations as to space allotment for use types were used as the basis for spatial utilization analysis. The number of periods (or time) a week a space or room was used by the schools' inhabitants as a percentage of periods available during the school week is the basis for time utilization analysis and is compared to MSBA recommendations as well.

These two measures occasionally reveal a room that is both over utilized as to time and underutilized as to space. A prime example of this type of space is the gymnasium which is simultaneously oversized by MSBA standards, but is utilized almost constantly. Where underutilization exists, this condition may offer space planning opportunities for more efficient reconfiguration.

The study presents space allocation analysis in a spreadsheet for the school with side by side comparisons with the MSBA standard for K-5 schools. The spreadsheet analysis is broken down into groupings determined by the MSBA with the following areas represented:

- Core Academic Areas
- Special Education
- Art and Music
- Health and Physical Education:
- Media Center
- Dining & Food Service
- Medical
- Administration and Guidance
- Custodial and Maintenance
- Other



These areas for each school are indicated on plan drawings with a color code legend for each grouping. Core academic areas (classrooms) are further defined by an overlay hatch indicating grade level use. These functional plans were developed to give an overview as to the plan organization and functional adjacencies of the school.

A second set of plans for the school depict the utilization (by time and area) of each room by a simple color coding of green, red and yellow.

**Green** - Rooms with the color green are rooms utilized fully for time (approximately 75 to 95 % of the time for their intended use) and/or within 80 to 105% of their recommended MSBA size.

**Red** - Rooms depicted in red are undersized by MSBA standards, have additional uses outside of the intended use which interfere with the efficient use of the space, or are utilized 100% of the available time. Many spaces are both undersized in that they are below the size recommended by MSBA and are used by multiple programs.

**Yellow** - Rooms illustrated in yellow are underutilized either by time or space allocation. Underutilization appears primarily in the auditorium and gymnasium spaces that are larger than recommended.

### **Space Utilization Analysis**

The following pages include outline analysis for each school followed by existing space summary spreadsheets, existing space use plans, and utilization plans for the current school. Analysis is organized by topic following those listed in the MSBA spreadsheet to allow reference for details on specific spaces.

The Noyes, Nixon, Haynes, and Loring also comment on a comparison between the as-built condition and the projected conditions with 30 students added to Noyes and Nixon and 48 students added to Haynes based on projected enrollment from proposed developments. The Loring was analyzed as to its ability to accommodate 30 additional students to facilitate a district-wide comparison, though there is no known source for this impact at this time.

### **Schedule**

The schedules are attached to the end of this report. The percentage of time in periods or minutes that each general classroom and each specialized classroom are used is noted in the table on each of the rendered utilization sheets.

### **Net and Gross Building Areas**

- Noyes School
  - Existing to MSBA – total area is within 3% of MSBA. Grossing factor is in line. Space is allocated quite different from the MSBA standards.
  - Existing to Projected – total area is in line with MSBA, while net area drops to 89%.
- Nixon School
  - Existing to MSBA – both net and gross areas are in line with MSBA guidelines for a school of this enrollment. However, space is very high in some categories and very low in others.
  - Existing to Projected – the gross area decreases to 88% of the guideline, and net area a bit over 2000 sf below the guideline.
- Haynes School
  - Existing to MSBA – the school appears to be right sized for the current enrollment. Gross area is exactly 100% of the recommended, while net area is actually 11% greater than recommended.
  - Existing to Projected – The total gross area drops to 91% of the MSBA standard, but net is still 5% above.
- Loring School
  - Existing to MSBA – The school appears to have been designed on the MSBA model. Areas are mostly in line with MSBA recommendations. The net area is 102% and the gross 110%.
  - Existing to test projection - The net drops to 93%, due to the need for additional classrooms and art rooms, and the gross to 103% of the MSBA model.

### Core Academic Areas

- Noyes School
  - Existing to MSBA – total area is 7% lower than MSBA, and the total number of classrooms is the same as MSBA. Three classrooms are for the preschool program. Most classrooms are adequately sized, including kindergarten. Preschool classrooms are outside the standard, but their size is adequate for the age and population.
  - Existing to Projected – Total area is drops to 86% of the MSBA and should have 29 classrooms – requiring two general classrooms to be found. Additionally, the class sizes for K-2 exceed the district's maximum size. Should the distribution not be equal across grades, it is likely that a third classroom would be needed to comply with the maximum class sizes.
- Nixon School
  - Existing to MSBA – Nixon has four more classrooms (19) than the MSBA guideline (15) for a school with this enrollment. One classroom is unprogrammed, another is district storage, and two more could be consolidated. Classrooms are all sized adequately. Kindergarten enrollment doesn't require a third room, but one is present and used for other purposes.
  - Existing to Projected – MSBA guidelines would require 17 classrooms, two more than currently. The school has one classroom readily available and another that would displace storage. Total classroom area is still 5% above the recommended area.
- Haynes School
  - Existing to MSBA – MSBA recommends 16 classrooms for the current enrollment. Most classrooms are adequately sized, with a few being slightly smaller. Three kindergarten classrooms are recommended and provided, however one is much smaller and without a dedicated bathroom. Haynes has 21 classrooms with one being a foreign language room.
  - Existing to Projected – Increased enrollment requires 18 classrooms per MSBA. As three are dedicated to kindergarten it may mean taking over the foreign language classroom, moving the teachers' lounge and a conference room. Total area is still slightly above the standard at 105%.
- Loring School
  - Existing to MSBA – Total area is only 8% larger than the model, but there are four more classrooms than the model (25 vs. 21). One of the additional is a foreign language classroom. All grades 1-5 classrooms are below the 950 sf recommended, but comply with 35 sf per student minimum set by MSBA.
  - Existing to test projection – Total area is on par with the recommended. The MSBA standard would now require 23 classrooms.

### Special Education

- Noyes School

- Existing to MSBA – total area is 11% higher than MSBA. Total number of rooms is 3 less than MSBA, but Sudbury dedicates larger classrooms to programs than MSBA guidelines. One space is as large as two classrooms and could be reconfigured to suite the needs better.
  - Existing to Projected – No change between the existing and the standard. This does not indicate that to be true as the Town's demographics may dictate otherwise.
- Nixon School
  - Existing to MSBA – total area is 14% higher than MSBA. As the school is arranged with full sized classrooms, that is what is occupied. Some programs may not need full sized rooms. Total rooms dedicated is two less than MSBA standards.
  - Existing to Projected – No change.
- Haynes School
  - Existing to MSBA – Like the other schools the total area dedicated to special education is greater than the MSBA standard – 30% greater at the Haynes. The school houses a couple of district-wide programs that skew the numbers more than the other schools. Two kindergarten sized classrooms with bathrooms are occupied by the Partners program.
  - Existing to Projected – No change.
- Loring School
  - Existing to MSBA – In line with MSBA. Fewer full sized rooms have been dedicated rather than more half sized rooms as seems to be the practice of SPS.
  - Existing to test projection – Total area is now 89% of the MSBA standard as it would require an additional 500 sf of space, or one more resource room.

### Art and Music

- Noyes School
  - Existing to MSBA – The space at Noyes is about 2/3rds of the recommended area, primarily due to the MSBA recommendation for two art classrooms. Music practice rooms are not provided.
  - Existing to Projected – Space provided would be half of the recommended owing to the need for two music rooms. The increase in number anticipate the need for more staff to allow time in the schedule for all sections to have two periods per week.
- Nixon School
  - Existing to MSBA – Total area is 86% of the standard. The art room is right sized, but the music room is about 3/4ths the size recommended. No practice rooms were observed.
  - Existing to Projected – No substantial change as the next tipping point is not reached in the MSBA model.
- Haynes School

- Existing to MSBA – Both the art and music room are underized by about 1/3<sup>rd</sup> the recommended area. Total area is 72% of the MSBA standard. Workroom and storage is very low as well. No music practice rooms were observed.
  - Existing to Projected – No substantial change in space, net area drops from 72% to 70%.
- Loring School
  - Existing to MSBA – At 91% of the MSBA model, the lower area is attributed to smaller storage rooms and no music practice rooms.
  - Existing to test projection – The existing area is 40% smaller than the recommended as the increased population would require an additional art classroom as associated spaces.

### Health and Physical Education

- Noyes School
  - Existing to MSBA – The size of the gym is 88% of the recommended size. While sufficient, there was no separate gym storeroom or office observed – a portion of the stage is used for these functions.
  - Existing to Projected – No change.
- Nixon School
  - Existing to MSBA – At 73% of the recommended total area, the gym is 2/3rds the recommended size, but the storeroom and office are about double.
  - Existing to Projected – No change.
- Haynes School
  - Existing to MSBA – The gym is in line with the recommendations as are the storeroom and office in total.
  - Existing to Projected – No change.
- Loring School
  - Existing to MSBA – At 91% of the MSBA model, the lower area is attributed to a gym 10% smaller than the model. The storeroom is larger than the model and may double as an office as there does not appear to be a separate room.
  - Existing to test projection – No change.

### Media Center

- Noyes School
  - Existing to MSBA – The library is about 80% of the recommended size.
  - Existing to Projected – The library would be about 3/4ths the recommended size.
- Nixon School
  - Existing to MSBA – The total area allocated to media is 130% of the MSBA recommended. There is a separate computer lab (full sized classroom).
  - Existing to Projected – Still oversized at 117% of the MSBA recommended.

- Haynes School
  - Existing to MSBA – Overall area is 112% of the recommendation with the reading room about 10% too small, but some other specialized areas provided outside of the standard.
  - Existing to Projected – Media space would be in line overall with MSBA, but the reading room is now 20% too small.
- Loring School
  - Existing to MSBA – Media space is 48% larger than the recommendation. Much of this is due to a dedicated computer lab of over 1200 sf in addition to the reading room that is close to the MSBA standard.
  - Existing to test projection – The area is still 35% larger than the standard, but the reading room is approximately 400 sf less than the standard. No computer lab is required.

### **Dining & Food Service**

- Noyes School
  - Existing to MSBA – Currently the Noyes cafeteria is about 16% larger than the standard for a school of this population. Much of the area is taken up with before and after school program needs, so the area available for dining is at or just below the standard. The teachers' lounge is 2.5 times the size recommended by MSBA.
  - Existing to Projected – The cafeteria remains sufficient at still 8% larger than the standard. Scheduling may be affected. Additional tables would likely be needed to accommodate one or more seatings.
- Nixon School
  - Existing to MSBA – The overall area dedicated is adequate at about 91% of the recommended area. The cafeteria is 20% larger, but is also the auditorium. Stage is about 60% the recommended size as is the kitchen. Staff lunch room is twice as big as the MSBA standard, however it may also be the workroom as a separate one was not observed.
  - Existing to Projected – Cafeteria is still sufficient for the increased load. However the overall area drops to 83% of the recommended area.
- Haynes School
  - Existing to MSBA – At 138% of the recommended area, this would seem oversized. However, the numbers are skewed by the multi-purpose room that is conjoined or separated from the cafeteria with a movable wall. The wall is used daily to allow for separate programming. The cafeteria side is about 10% small, but the entire combined area is used for dining. The kitchen appears to be adequate as does the stage. Staff dining is 3.5 times the recommended area, though a separate workroom was not observed.

- Existing to Projected – No substantial change to the way the space is understood to be currently used and the overall area is still 29% larger than MSBA guidelines. However, the cafeteria area is decreases to about 80% of the MSBA recommendation.
- Loring School
  - Existing to MSBA – At 105% of the MSBA standard, the spaces provided are adequate and are distributed similar to the recommendation.
  - Existing to test projection – Total area is 2% less than the standard, but the cafeteria is on par with the standard. The stage is about 10% too small.

### **Medical**

- Noyes School
  - Existing to MSBA – The nurse's office is 57% of the MSBA standard and is not provided with the spaces recommended.
  - Existing to Projected – No change, but the demand will increase.
- Nixon School
  - Existing to MSBA – Separate recommended spaces are missing and the whole suite is 77% the size it should be.
  - Existing to Projected – No change, but the demand will increase.
- Haynes School
  - Existing to MSBA – The recommended area is about 500 sf. At 426 sf, the Nurse's office is 84% the size it should be. The waiting area is often used for small group workspace as it is separated from the nurse's office and treatment with a door.
  - Existing to Projected – No change, but the demand will increase.
- Loring School
  - Existing to MSBA – Loring has the only medical suite in line with the MSBA and with all spaces recommended.
  - Existing to test projection – The medical suite is missing two exam rooms and is 100 sf shy of the standard. Demand would increase, making the missing space more apparent.

### **Administration and Guidance**

- Noyes School
  - Existing to MSBA – Total area is 122% of the MSBA standard. This is due to the oversized teacher's work room at almost 3 times the recommended size. Other individual areas are small or missing. Reallocation of space is recommended.
  - Existing to Projected – No substantial change.
- Nixon School
  - Existing to MSBA – Space allocated for faculty and staff is 15% below the recommended total and is missing many spaces.



- Existing to Projected – No substantial change.
- Haynes School
  - Existing to MSBA – Total area is 20% more than the standard. The guidance office is four times the size at 622 sf, not including the psychologist office at 373 sf. Most of the main office is in the lobby and appears spacious, if exposed, but the other office spaces are smaller than recommended or are not present.
  - Existing to Projected – No substantial change, still 17% more than the standard.
- Loring School
  - Existing to MSBA – Space provided is in line with MSBA in both area and allocation.
  - Existing to test projection – No substantial change.

### Custodial and Maintenance

- Noyes School
  - Existing to MSBA – At about 80% of the recommended area, many spaces are not found. There is a large storage room adjacent to the cafeteria that was not observed. There are also storage trailers around the building. Required spaces appear to be missing.
  - Existing to Projected – No substantial change.
- Nixon School
  - Existing to MSBA – Severely lacking in total space and program. The MSBA recommends almost 2000 sf and several functions while the Nixon has just over 600 sf of space observed.
  - Existing to Projected – No substantial change.
- Haynes School
  - Existing to MSBA – Space for maintenance and storage are severely lacking at 23% of the recommended area. It is possible that spaces are available outside or on a lower level and were not observed.
  - Existing to Projected – No change.
- Loring School
  - Existing to MSBA – Like the other schools there is a severe lack of space for maintenance, storage and custodial work. The school has only 26% of the MSBA recommended area. Same comments as the Haynes, it is possible space is provided elsewhere.
  - Existing to test projection – No change, the space is well shy of the standard.

### Other

- Noyes School – no comments
- Nixon School – no comments
- Haynes School – no comments
- Loring School – no comments



Sudbury Elementary Schools  
Space Needs Study

**Enrollment Analysis**

Enrollment Analysis									Analysis by Classrooms Only						Develop + Projection	
									Capacity per SPS As-Built	Sections per SPS Minimum	Post Develop	Capacity per MSBA		NESDEC Projections		
	Pre-K	K	1	2	3	4	5	Totals	As-Built	Available		As-Built		SY '18-'19	SY '21-'22	
District maximum	16	20	22	22	24	24	24									
Enrollment Increase - Sudbury Station		9.33	9.33	9.33	9.33	9.33	9.33	84 (K-8) 32 (9-12)								
Enrollment Increase - Melone (Quarry North)		7.78	7.78	7.78	7.78	7.78	7.78	70 (K-8) 27 (9-12)								
Noyes (including Pre-K)									**Pre-K included			**Pre-K included		**Pre-K included		
Students Enrolled	48	77	87	86	86	84	73	541	592		597	563		572	599	655
Sections (Classrooms)	3	4	4	4	4	4	4	27		27	OVER	27	1 to 3	28	29	32
Class Size Current	16.00	19.25	21.75	21.50	21.50	21.00	18.25	20.04	**Over with Pre-K							
Class Size w/ Station		21.58	24.08	23.83	23.83	23.33	20.58	22.11								
Delta with "maximum"		(1.58)	(2.08)	(1.83)	0.17	0.67	3.42									
Nixon																
Students Enrolled		35	53	44	69	58	78	337	390		393	440		347	328	384
Sections (Classrooms)		2	3	2	3	3	4	17		17	OK	17	2 to 4	15	14	17
Class Size Current		17.50	17.67	22.00	23.00	19.33	19.50	19.82								
Class Size w/ Station		22.17	20.78	26.67	26.11	22.44	21.83	23.12								
Delta with "maximum"		(2.17)	1.22	(4.67)	(2.11)	1.56	2.17									
Haynes																
Students Enrolled		53	53	60	64	73	54	357	432		404	480		367	377	424
Sections (Classrooms)		3	3	3	3	4	3	19		19	OK	21	1 to 2	16	17	19
Class Size Current		17.67	17.67	20.00	21.33	18.25	18.00	18.79								
Class Size w/ Melone		20.26	20.26	22.59	23.93	20.19	20.59	21.25								
Delta with "maximum"		(0.26)	1.74	(0.59)	0.07	3.81	3.41									
Loring																
Students Enrolled		74	67	83	90	64	97	475	544		531	575		486	488	544
Sections (Classrooms)		4	4	4	4	3	5	24		24	OK	25	1	21	22	24
Class Size Current		18.50	16.75	20.75	22.50	21.33	19.40	19.79								
Class Size w/ Station		20.83	19.08	23.08	24.83	24.44	21.27	22.13								
Delta with "maximum"		(0.83)	2.92	(1.08)	(0.83)	(0.44)	2.73									
Elementary Totals	48	239	260	273	309	279	302	1710	1958		1925	2058		1772	1792	



Sudbury Elementary Schools  
Space Needs Study

Enrollment Analysis

Enrollment Analysis									Analysis by Classrooms Only						Develop + Projection	
									Capacity per SPS As-Built	Sections per SPS Minimum	Post Develop	Capacity per MSBA		NESDEC Projections		
	Pre-K	K	1	2	3	4	5	Totals	As-Built	Available		As-Built	Available	SY '18-'19	SY '21-'22	
District maximum	16	20	22	22	24	24	24									
Enrollment Increase - Sudbury Station		9.33	9.33	9.33	9.33	9.33	9.33	84 (K-8)								
Enrollment Increase - Melone (Quarry North)		7.78	7.78	7.78	7.78	7.78	7.78	32 (9-12)								
								70 (K-8)								
								27 (9-12)								
Noyes (excluding Pre-K)									**Pre-K excluded			**Pre-K excluded		**Pre-K excluded		
Students Enrolled	48	77	87	86	86	84	73	493	544		549	563		524	551	607
Sections (Classrooms)	3	4	4	4	4	4	4	24		24	OK	24	1 to 3	23	24	27
Class Size Current	16.00	19.25	21.75	21.50	21.50	21.00	18.25	20.54	**Over with Pre-K							
Class Size w/ Station		21.58	24.08	23.83	23.83	23.33	20.58	22.88								
Delta with "maximum"		(1.58)	(2.08)	(1.83)	0.17	0.67	3.42									
Nixon																
Students Enrolled		35	53	44	69	58	78	337	390		393	440		347	328	384
Sections (Classrooms)		2	3	2	3	3	4	17		17	OK	17	2 to 4	15	14	17
Class Size Current		17.50	17.67	22.00	23.00	19.33	19.50	19.82								
Class Size w/ Station		22.17	20.78	26.67	26.11	22.44	21.83	23.12								
Delta with "maximum"		(2.17)	1.22	(4.67)	(2.11)	1.56	2.17									
Haynes																
Students Enrolled		53	53	60	64	73	54	357	432		404	480		367	377	424
Sections (Classrooms)		3	3	3	3	4	3	19		19	OK	21	1 to 2	16	17	19
Class Size Current		17.67	17.67	20.00	21.33	18.25	18.00	18.79								
Class Size w/ Melone		20.26	20.26	22.59	23.93	20.19	20.59	21.25								
Delta with "maximum"		(0.26)	1.74	(0.59)	0.07	3.81	3.41									
Loring																
Students Enrolled		74	67	83	90	64	97	475	544		531	575		486	488	544
Sections (Classrooms)		4	4	4	4	3	5	24		24	OK	25	1	21	22	24
Class Size Current		18.50	16.75	20.75	22.50	21.33	19.40	19.79								
Class Size w/ Station		20.83	19.08	23.08	24.83	24.44	21.27	22.13								
Delta with "maximum"		(0.83)	2.92	(1.08)	(0.83)	(0.44)	2.73									
Elementary Totals	48	239	260	273	309	279	302	1662	1910		1877	2058		1724	1744	







FIRST FLOOR PLAN

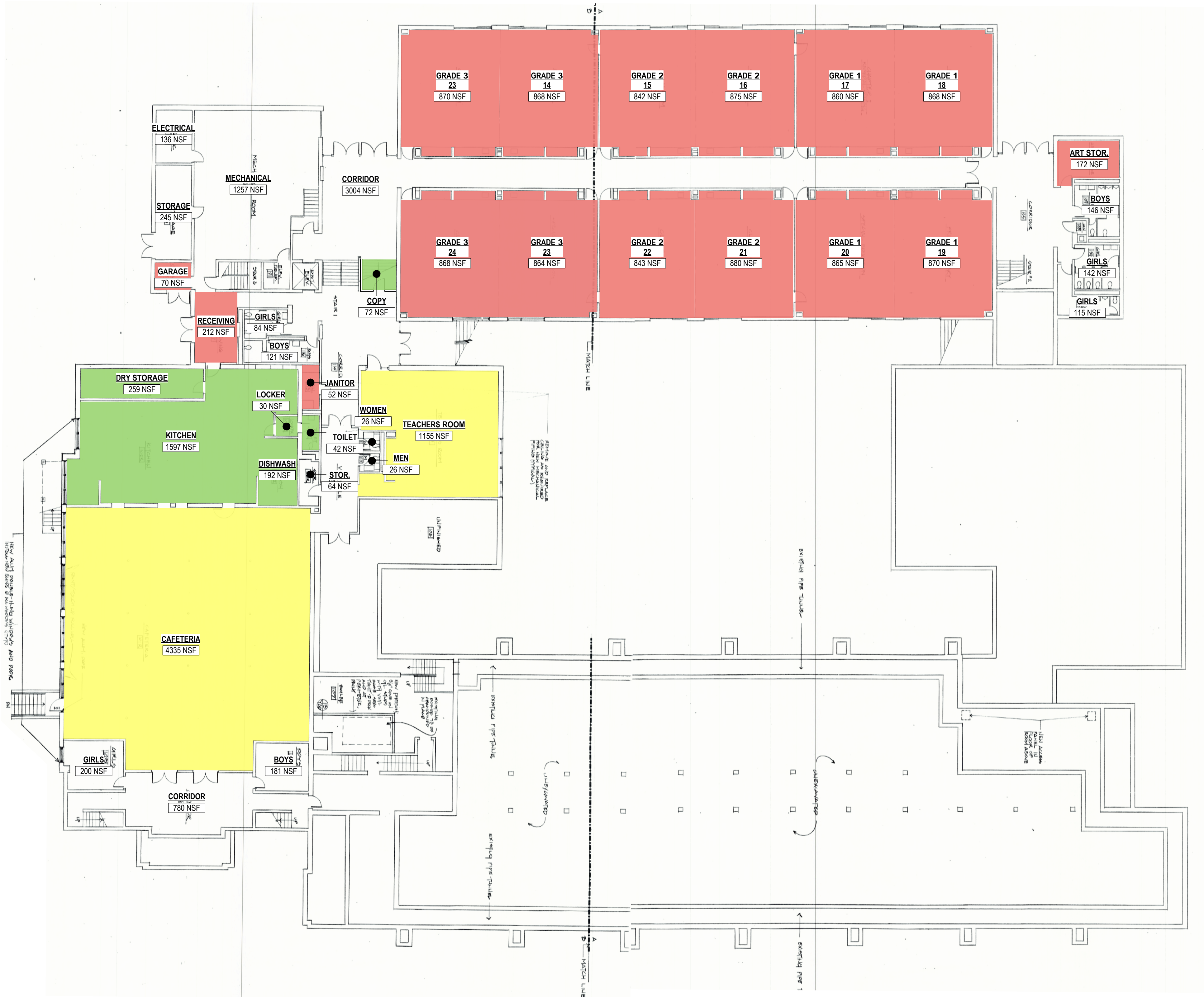


SECOND FLOOR PLAN

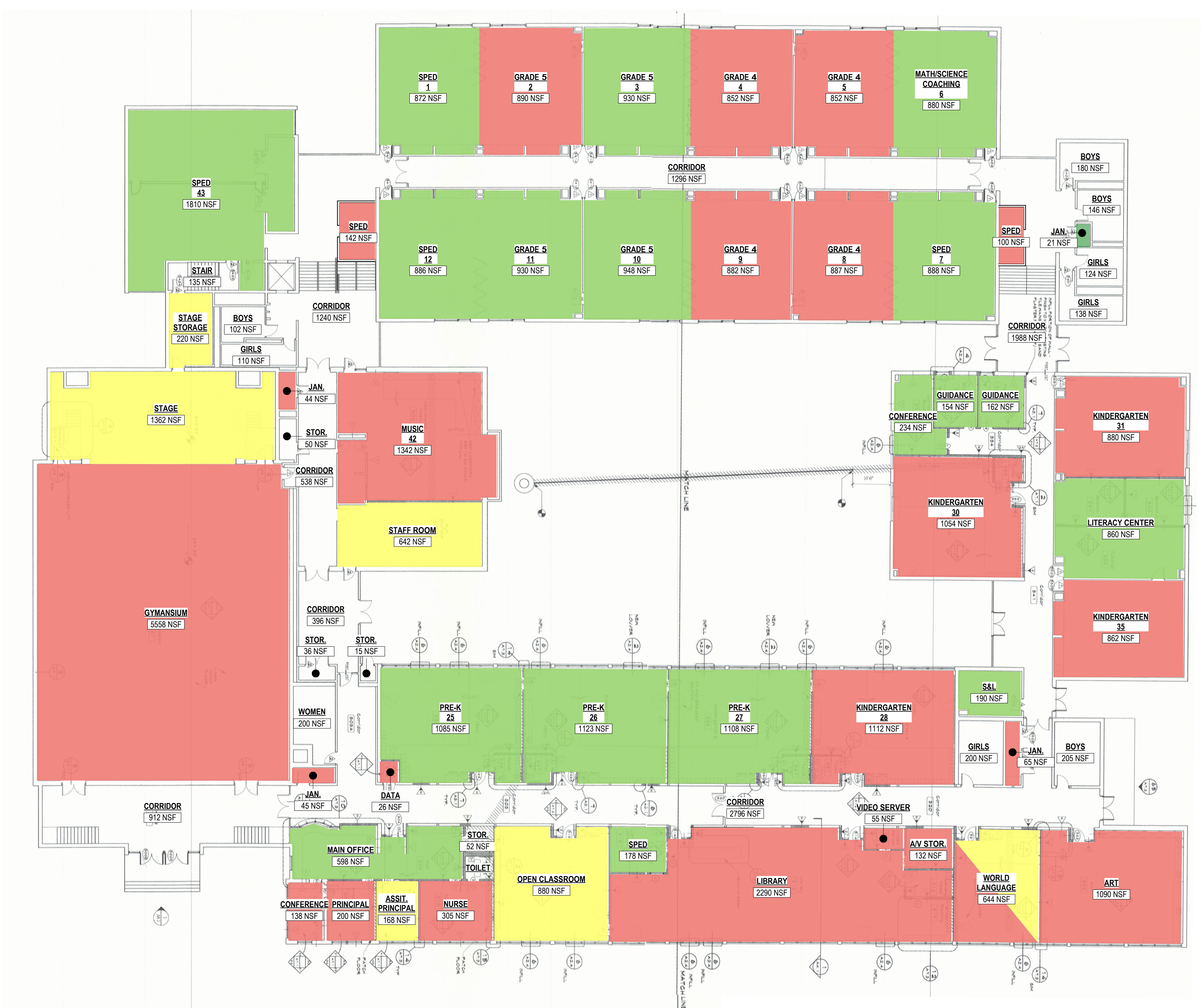
SPACE LEGEND

ADMIN/ GUIDANCE	ARTS & MUSIC	GUIDANCE	HEALTH & PE	DISTRICT WIDE	PERFORMING ARTS
MEDIA CENTER	NURSE	DINING SERVICES	IT DEPT	STORAGE	CUSTODIAL
MEP	SPED	SHARED CLASSROOM	PRE-K	KINDERGARTEN	GRADE 1
GRADE 2	GRADE 3	GRADE 4	GRADE 5	FOREIGN LANGUAGE	WORKSPACE





LOWER LEVEL FLOOR PLAN



UPPER LEVEL FLOOR PLAN

ENROLLMENT

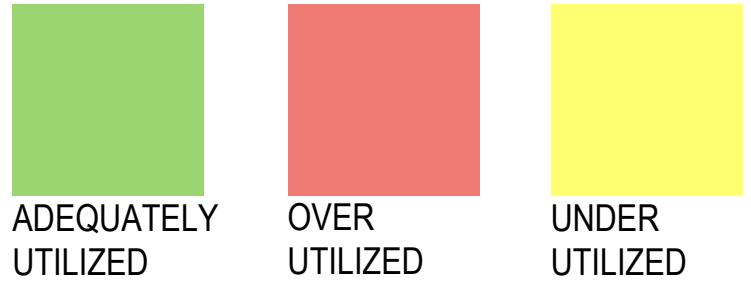
	2018-2019
Peter Noyes Elementary School	541
Israel Loring Elementary School	476
General John Nixon Elementary School	337
Josiah Haynes Elementary School	357

UTILIZATION: PETER NOYES ELEMENTARY SCHOOL

	# Periods/ week	% Used
Total Periods	35	
Gym	25	71%
Art	25	71%
Library	25	71%
Music	25	71%
Spanish	21	60%
Core Classroom	25	71%

UTILIZATION LEGEND

DETERMINED BY TIME (NUMBER OF PERIODS / WEEK) USED AND/OR BY ROOM SIZE (SQUARE FOOTAGE).











**ENROLLMENT**

	2018-2019
Peter Noyes Elementary School	541
Israel Loring Elementary School	476
General John Nixon Elementary School	337
Josiah Haynes Elementary School	357

**UTILIZATION: GENERAL JOHN NIXON ELEMENTARY SCHOOL**

	minutes/day	% Used
Total Periods	380	
Gym	280	73%
Art & Music	280	73%
Library	280	73%
Computer	280	73%
Foreign Language	280	73%
Core Classroom	90	76%





#### SPACE LEGEND

ADMIN/ GUIDANCE	ARTS & MUSIC	GUIDANCE	HEALTH & PE	DISTRICT WIDE	PERFORMING ARTS
MEDIA CENTER	NURSE	DINING SERVICES	IT DEPT	STORAGE	CUSTODIAL
MEP	SPED	SHARED CLASSROOM	PRE-K	KINDERGARTEN	GRADE 1
GRADE 2	GRADE 3	GRADE 4	GRADE 5	FOREIGN LANGUAGE	WORKSPACE





ENROLLMENT

	2018-2019
Peter Noyes Elementary School	541
Israel Loring Elementary School	476
General John Nixon Elementary School	337
Josiah Haynes Elementary School	357

UTILIZATION: JOSIAH HAYNES ELEMENTARY SCHOOL

	# Periods/ week	% Used
Total Periods	40	
Gym	30	75%
Art	30	75%
Library	24	60%
Music	31	78%
Spanish	21	53%

UTILIZATION LEGEND

DETERMINED BY TIME (NUMBER OF PERIODS / WEEK) USED AND/OR BY ROOM SIZE (SQUARE FOOTAGE).

ADEQUATELY UTILIZED

OVER UTILIZED

UNDER UTILIZED





FIRST FLOOR PLAN



SECOND FLOOR PLAN

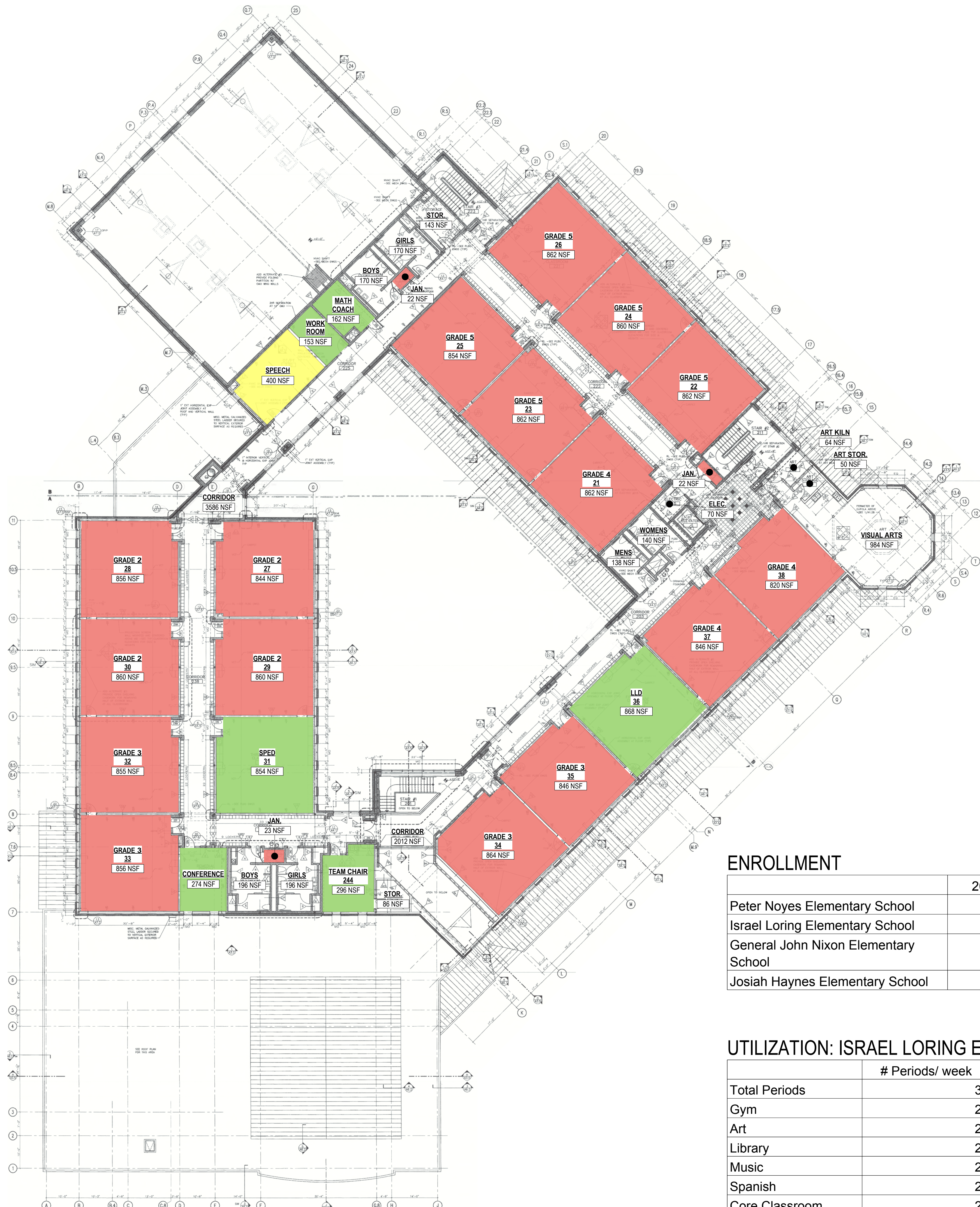
**SPACE LEGEND**

ADMIN/ GUIDANCE	ARTS & MUSIC	GUIDANCE	HEALTH & PE	DISTRICT WIDE	PERFORMING ARTS
MEDIA CENTER	NURSE	DINING SERVICES	IT DEPT	STORAGE	CUSTODIAL
MEP	SPED	SHARED CLASSROOM	PRE-K	KINDERGARTEN	GRADE 1
GRADE 2	GRADE 3	GRADE 4	GRADE 5	FOREIGN LANGUAGE	WORKSPACE





FIRST FLOOR PLAN



SECOND FLOOR PLAN

**ENROLLMENT**

	2018-2019
Peter Noyes Elementary School	541
Israel Loring Elementary School	476
General John Nixon Elementary School	337
Josiah Haynes Elementary School	357

**UTILIZATION: ISRAEL LORING ELEMENTARY SCHOOL**

	# Periods/ week	% Used
Total Periods	35	
Gym	25	71%
Art	25	71%
Library	25	71%
Music	25	71%
Spanish	21	60%
Core Classroom	25	71%

**UTILIZATION LEGEND**  
 DETERMINED BY TIME (NUMBER OF PERIODS / WEEK) USED AND/OR BY ROOM SIZE (SQUARE FOOTAGE).

ADEQUATELY UTILIZED
OVER UTILIZED
UNDER UTILIZED



***Existing School Compared to MSBA Model w/ Pre-K***

Noyes Elementary		Existing Conditions		MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)						
Room Type	Room NFA <sup>1</sup>	# OF RMS	area totals	Room NFA <sup>1</sup>	# OF RMS	area totals	Comments			
CORE ACADEMIC SPACES										
(List classrooms of different sizes separately)										
Pre-Kindergarten w/ toilet	1,100	3	3,300	93%						
Kindergarten w/ toilet	1,100	1	1,100		1,200	3	3,600	1,100 SF min - 1,300 SF max		
	1,054	1	1,054		1,200	4	4,800	1,100 SF min - 1,300 SF max		
	862	1	862							
	880	1	880							
General Classrooms - Grade 1-6	852	2	1,704		950	20	19,000	900 SF min - 1,000 SF max		
	885	2	1,770							
	890	1	890							
	930	2	1,860							
	948	1	948							
	870	8	6,960							
	842	2	1,684							
	880	2	1,760							
World Language	644	1	644							
SPECIAL EDUCATION										
(List rooms of different sizes separately)										
Self-Contained SPED	178	1	178	111%						
S&L	190	1	190		950	4	3,800	900-1,300 SF equal to surrounding classrooms		
	142	1	142							
Self-Contained SPED - toilet										
Resource Room					60	4	240			
Literacy Center	860	1	860		500	3	1,500	1/2 size Genl. Clrm.		
Math/Science Coaching	880	1	880							
	888	1	888							
SPED 1	872	1	872							
SPED 12	886	1	886							
SPED 43	1,810	1	1,810							
Small Group Room / Reading					500	1	500	1/2 size Genl. Clrm.		
ART & MUSIC										
Art Classroom - 25 seats	1,000	1	1,000		69%	1,000	2	2,000	assumed schedule 2 times / week / student	
Art Workroom w/ Storage & kiln	90	1	90	150		2	300			
	172	1	172							
Music Classroom / Large Group - 25-50 seats	1,342	1	1,342	1,200		1	1,200	assumed schedule 2 times / week / student		
Music Practice / Ensemble				75		4	300			
HEALTH & PHYSICAL EDUCATION										
Gymnasium	5,558	1	5,558	88%						
Gym Storeroom						6,000	1	6,000	6000 SF Min. Size	
Health Instructor's Office w/ Shower & Toilet						150	1	150		
						150	1	150		
MEDIA CENTER										
Media Center / Reading Room	2,290	1	2,290			80%				
A/V Storage	132	1	132		3,105		1	3,105		
Video Server	55	1	55							
DINING & FOOD SERVICE										
Cafeteria / Dining	4,335	1	4,335		116%		4,058	1	4,058	2 seatings - 15SF per seat
Stage	1,362	1	1,362				1,000	1	1,000	
Stage Storage	220	1	220							
Chair / Table / Equipment Storage			0	380			1	380		
Kitchen	1,597	1	1,597	1,841			1	1,841	1600 SF for first 300 + 1 SF/student Add'l	
Dishwash	192	1	192							
Dry Storage	259	1	259							
Locker	30	1	30							
Kitchen Staff Toilet	42	1	42							
Staff Lunch Room	642	1	642	235			1	235	20 SF/Occupant	
MEDICAL										
Medical Suite Toilet	45	1	45	57%						
Nurses' Office / Waiting Room	305	1	305			60	1	60		
Examination Room / Resting						250	1	250		
					100	3	300			
ADMINISTRATION & GUIDANCE										
General Office / Waiting Room / Toilet	398	1	398		122%	421	1	421		
Teachers' Mail and Time Room	200	1	200			100	1	100		
Duplicating Room	72	1	72			150	1	150		
Records Room	52	1	52			110	1	110		
Principal's Office w/ Conference Area	200	1	200			375	1	375		
Principal's Secretary / Waiting			0			125	1	125		
Assistant Principal's Office	168	1	168			120	0	-		
Supervisory / Spare Office			0			120	1	120		
Conference Room	138	1	138			250	1	250		
Guidance Office	155	2	310	150		2	300			
Guidance conference	234	1	234							
Guidance Storeroom			0	35		1	35			
Teachers' Work Room	1,155	1	1,155	421		1	421			
CUSTODIAL & MAINTENANCE										
Custodian's Office			0	80%						
Custodian's Workshop			0		150	1	150			
Custodian's Storage	1,184	1	1,184		375	1	375			
Recycling Room / Trash	70	1	70		375	1	375			
Receiving and General Supply	212	1	212		400	1	400			
Storeroom	45	1	45		280	1	280			
	65	1	65		361	1	361			
	21	1	21							
	44	1	44							
	52	1	52							
Network / Telecom Room	26	1	26		200	1	200			
OTHER										
Other (specify)			0		#DIV/0!					
			0							
				</						

Noyes Elementary		Existing Conditions		
Room Type	Room NFA <sup>1</sup>	# of RMS	Area Totals	
CORE ACADEMIC SPACES		27	25,416	
(List classrooms of different sizes separately)				
Pre-Kindergarten w/ toilet	1,100	3	3,300	
Kindergarten w/ toilet	1,100	1	1,100	
	1,054	1	1,054	
	862	1	862	
	880	1	880	
General Classrooms - Grade 1-6	852	2	1,704	
	885	2	1,770	
	890	1	890	
	930	2	1,860	
	948	1	948	
	870	8	6,960	
	842	2	1,684	
	880	2	1,760	
World Language	644	1	644	
SPECIAL EDUCATION			6,706	
(List rooms of different sizes separately)				
Self-Contained SPED	178	1	178	
S&L	190	1	190	
	142	1	142	
Self-Contained SPED - toilet				
Resource Room				
Literacy Center	860	1	860	
Math/Science Coaching	880	1	880	
	888	1	888	
SPED 1	872	1	872	
SPED 12	886	1	886	
SPED 43	1,810	1	1,810	
Small Group Room / Reading				
ART & MUSIC			2,604	
Art Classroom - 25 seats	1,000	1	1,000	
Art Workroom w/ Storage & kiln	90	1	90	
	172	1	172	
Music Classroom / Large Group - 25-50 seats	1,342	1	1,342	
Music Practice / Ensemble				
HEALTH & PHYSICAL EDUCATION			5,558	
Gymnasium	5,558	1	5,558	
Gym Storeroom				
Health Instructor's Office w/ Shower & Toilet				
MEDIA CENTER			2,477	
Media Center / Reading Room	2,290	1	2,290	
A/V Storage	132	1	132	
Video Server	55	1	55	
DINING & FOOD SERVICE			8,679	
Cafeteria / Dining	4,335	1	4,335	
Stage	1,362	1	1,362	
Stage Storage	220	1	220	
Chair / Table / Equipment Storage			0	
Kitchen	1,597	1	1,597	
Dishwash	192	1	192	
Dry Storage	259	1	259	
Locker	30	1	30	
Kitchen Staff Toilet	42	1	42	
Staff Lunch Room	642	1	642	
MEDICAL			350	
Medical Suite Toilet	45	1	45	
Nurses' Office / Waiting Room	305	1	305	
Examination Room / Resting				
ADMINISTRATION & GUIDANCE			2,927	
General Office / Waiting Room / Toilet	398	1	398	
Teachers' Mail and Time Room	200	1	200	
Duplicating Room	72	1	72	
Records Room	52	1	52	
Principal's Office w/ Conference Area	200	1	200	
Principal's Secretary / Waiting			0	
Assistant Principal's Office	168	1	168	
Supervisory / Spare Office			0	
Conference Room	138	1	138	
Guidance Office	155	2	310	
Guidance conference	234	1	234	
Guidance Storeroom			0	
Teachers' Work Room	1,155	1	1,155	
CUSTODIAL & MAINTENANCE			1,719	
Custodian's Office			0	
Custodian's Workshop			0	
Custodian's Storage	1,184	1	1,184	
Recycling Room / Trash	70	1	70	
Receiving and General Supply	212	1	212	
Storeroom	45	1	45	
	65	1	65	
	21	1	21	
	44	1	44	
	52	1	52	
Network / Telecom Room	26	1	26	
OTHER			0	
Other (specify)			0	
Total Building Net Floor Area (NFA)			56,436	
Proposed Student Capacity / Enrollment			541	
NON-PROGRAMMED SPACES			17,452	
Other Occupied Rooms (list separately)			0	
			0	
			0	
			0	
Unoccupied MEP/FP Spaces	1,257.00	1	1,257	
Boiler	546.00	1	546	
electrical	136.00	1	136	
Unoccupied Closets, Supply Rooms & Storage Rooms	245.00	1	245	
	64.00	1	64	
	36.00	1	36	
	15.00	1	15	
	50.00	1	50	
Toilet Rooms	2,446.00	1	2,446	
Circulation (corridors, stairs, ramps & elevators)	12,657.00	1	12,657	
Remaining <sup>3</sup>	10,658.00	1	10,658	
Total Building Gross Floor Area (GFA) <sup>2</sup>			84,546	
Grossing factor (GFA/NFA)			1.50	

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
Room NFA <sup>1</sup>	# of RMS	Area Totals	Comments
86%			
	29	29,550	
	1,200	3,600	1,100 SF min - 1,300 SF max
	1,200	6,000	1,100 SF min - 1,300 SF max
	950	19,950	900 SF min - 1,000 SF max

### ***Existing School Compared to MSBA Model***

Nixon Elementary		Existing Conditions		MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals	ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES		19	17,670				
(List classrooms of different sizes separately)							
Pre-Kindergarten w/ toilet				1,200		-	1,100 SF min - 1,300 SF max
Kindergarten w/ toilet	1,180	2	2,360	1,200	3	3,600	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-6				950	12	11,400	900 SF min - 1,000 SF max
	892	11	9,812				
	875	2	1,750				
	1,014	1	1,014				
	883	1	883				
Open CR 10	892	1	892				
Foreign Language	959	1	959				
SPECIAL EDUCATION			5,142				
(List rooms of different sizes separately)							
Self-Contained SPED							
SPED 3	450	1	450	950	3	2,850	900-1,300 SF equal to surrounding classrooms
SPED 39	285	1	285				
SPED 24	893	1	893				
SPED 25	883	1	883				
Learning Center 27	883	1	883				
ELL/METCO Rm 31	870	1	870				
Self-Contained SPED - toilet							
Resource Room	878	1	878	60	3	180	
Small Group Room / Reading				500	2	1,000	1/2 size Genl. Cirm.
				500	1	500	1/2 size Genl. Cirm.
ART & MUSIC			2,154				
Art Classroom - 25 seats	1,100	1	1,100	1,000	1	1,000	assumed schedule 2 times / week / student
Art Workroom w/ Storage & kiln	25	1	25	150	1	150	
Art Storage	80	1	80				
Music Classroom / Large Group - 25-50 seats	949	1	949	1,200	1	1,200	assumed schedule 2 times / week / student
Music Practice / Ensemble				75	2	150	
HEALTH & PHYSICAL EDUCATION			4,627				
Gymnasium	3,962	1	3,962				
Gym Storeroom	300	1	300	6,000	1	6,000	6000 SF Min. Size
Health Instructor's Office w/ Shower & Toilet	365	1	365	150	1	150	
				150	1	150	
MEDIA CENTER			2,845				
Media Center / Reading Room	1,662	1	1,662			2,187	
Rm 2	137	1	137	2,187	1	2,187	
Rm 40	152	1	152				
Computer Lab 22	894	1	894				
DINING & FOOD SERVICE			5,146				
Cafeteria / Dining	3,000	1	3,000			5,677	
Stage	682	1	682	2,528	1	2,528	2 seatings - 15SF per seat
Chair / Table / Equipment Storage	90	1	90	1,000	1	1,000	
Kitchen	866	1	866	312	1	312	
cooler	60	1	60	1,637	1	1,637	1600 SF for first 300 + 1 SF/student Add'l
Staff Lunch Room	448	1	448	200	1	200	20 SF/Occupant
MEDICAL			394				
Medical Suite Toilet	20	1	20			510	
Nurses' Office / Waiting Room	374	1	374	60	1	60	
Examination Room / Resting				250	1	250	
				100	2	200	
ADMINISTRATION & GUIDANCE			1,754				
General Office / Waiting Room / Toilet	70	1	70			2,052	
Teachers' Mail and Time Room				319	1	319	
Duplicating Room				100	1	100	
Records Room				150	1	150	
Principal's Office w/ Conference Area	161	1	161	110	1	110	
Principal's Secretary / Waiting	225	1	225	375	1	375	
Assistant Principal's Office	160	1	160	125	1	125	
Supervisory / Spare Office				120	0	-	
Conference Room	363	1	363	120	1	120	
Guidance Office	452	1	452	250	1	250	
Guidance Storeroom				150	1	150	
Adjustment Counselor	165	1	165	35	1	35	
Psychologist	158	1	158				
Teachers' Work Room				319	1	319	
CUSTODIAL & MAINTENANCE			626				
Custodian's Office						1,937	
Custodian's Workshop				150	1	150	
Custodian's Storage	378	1	378	375	1	375	
Recycling Room / Trash				375	1	375	
Receiving and General Supply				400	1	400	
Storeroom	60	1	60	212	1	212	
	64	1	64	225	1	225	
	124	1	124				
Network / Telecom Room				200	1	200	
OTHER			864				
Other (specify)						0	
Districtwide Science Curriculum Storage 30	864	1	864				
Total Building Net Floor Area (NFA)			41,222				
Proposed Student Capacity / Enrollment			337				
NON-PROGRAMMED SPACES			11,979				
Other Occupied Rooms (list separately)							
PTO	218.00	1	218				
Unoccupied MEP/FP Spaces	594.00	1	594				
Unoccupied Closets, Supply Rooms & Storage Rooms							
	70.00	1	70				
	100.00	1	100				
Toilet Rooms	2,181.00	1	2,181				
Circulation (corridors, stairs, ramps & elevators)	8,816.00	1	8,816				
Remaining <sup>3</sup>	57,498.00	1	57,498				
Total Building Gross Floor Area (GFA) <sup>2</sup>			58,362				
Grossing factor (GFA/NFA)			1.42				

### Existing School Compared to Projected Enrollment MSBA Model

Nixon Elementary		Existing Conditions	
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
CORE ACADEMIC SPACES		19	17,670
(List classrooms of different sizes separately)			
Pre-Kindergarten w/ toilet			
Kindergarten w/ toilet	1,180	2	2,360
General Classrooms - Grade 1-6			
	892	11	9,812
	875	2	1,750
	1,014	1	1,014
	883	1	883
Open CR 10	892	1	892
Foreign Language	959	1	959
SPECIAL EDUCATION			5,142
(List rooms of different sizes separately)			
Self-Contained SPED			
SPED 3	450	1	450
SPED 39	285	1	285
SPED 24	893	1	893
SPED 25	883	1	883
Learning Center 27	883	1	883
ELL/METCO Rm 31	870	1	870
Self-Contained SPED - toilet			
Resource Room	878	1	878
Small Group Room / Reading			
ART & MUSIC			2,154
Art Classroom - 25 seats	1,100	1	1,100
Art Workroom w/ Storage & kiln	25	1	25
Art Storage	80	1	80
Music Classroom / Large Group - 25-50 seats	949	1	949
Music Practice / Ensemble			
HEALTH & PHYSICAL EDUCATION			4,627
Gymnasium	3,962	1	3,962
Gym Storeroom	300	1	300
Health Instructor's Office w/ Shower & Toilet	365	1	365
MEDIA CENTER			2,845
Media Center / Reading Room	1,662	1	1,662
Rm 2	137	1	137
Rm 40	152	1	152
Computer Lab 22	894	1	894
DINING & FOOD SERVICE			5,146
Cafeteria / Dining	3,000	1	3,000
Stage	682	1	682
Chair / Table / Equipment Storage	90	1	90
Kitchen	866	1	866
cooler	60	1	60
Staff Lunch Room	448	1	448
MEDICAL			394
Medical Suite Toilet	20	1	20
Nurses' Office / Waiting Room	374	1	374
Examination Room / Resting			
ADMINISTRATION & GUIDANCE			1,754
General Office / Waiting Room / Toilet	70	1	70
Teachers' Mail and Time Room			
Duplicating Room			
Records Room			
Principal's Office w/ Conference Area	161	1	161
Principal's Secretary / Waiting	225	1	225
Assistant Principal's Office	160	1	160
Supervisory / Spare Office			
Conference Room	363	1	363
Guidance Office	452	1	452
Guidance Storeroom			
Adjustment Counselor	165	1	165
Psychologist	158	1	158
Teachers' Work Room			
CUSTODIAL & MAINTENANCE			626
Custodian's Office			
Custodian's Workshop			
Custodian's Storage	378	1	378
Recycling Room / Trash			
Receiving and General Supply			
Storeroom	60	1	60
	64	1	64
	124	1	124
Network / Telecom Room			
OTHER			864
Other (specify)			
Districtwide Science Curriculum Storage 30	864	1	864
Total Building Net Floor Area (NFA)			41,222
Proposed Student Capacity / Enrollment			337
NON-PROGRAMMED SPACES			11,979
Other Occupied Rooms (list separately)			
PTO	218.00	1	218
Unoccupied MEP/FP Spaces	594.00	1	594
Unoccupied Closets, Supply Rooms & Storage Rooms			
	70.00	1	70
	100.00	1	100
Toilet Rooms	2,181.00	1	2,181
Circulation (corridors, stairs, ramps & elevators)	8,816.00	1	8,816
Remaining <sup>3</sup>	57,498.00	1	57,498
Total Building Gross Floor Area (GFA) <sup>2</sup>			58,362
Grossing factor (GFA/NFA)			1.42

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
	17	16,900	
1,200		-	1,100 SF min - 1,300 SF max
1,200	3	3,600	1,100 SF min - 1,300 SF max
950	14	13,300	900 SF min - 1,000 SF max
60	3	180	
500	2	1,000	1/2 size Genl. Clrm.
500	1	500	1/2 size Genl. Clrm.
		2,575	
1,000	1	1,000	assumed schedule 2 times / week / student
150	1	150	
1,200	1	1,200	assumed schedule 2 times / week / student
75	3	225	
		6,300	
6,000	1	6,000	6000 SF Min. Size
150	1	150	
150	1	150	
		2,439	
2,439	1	2,439	

Existing School Compared to MSBA Model

Haynes Elementary		Existing Conditions	
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
CORE ACADEMIC SPACES		21	18,745
(List classrooms of different sizes separately)			
Pre-Kindergarten w/ toilet			
Kindergarten w/ toilet	1,190	2	2,380
Kindergarten 10, no toilet	879	1	879
General Classrooms - Grade 1-6			
	880	3	2,640
	846	1	846
	816	1	816
	835	3	2,505
	875	2	1,750
	863	3	2,589
	855	2	1,710
	900	2	1,800
Spanish 23	830	1	830
SPECIAL EDUCATION			5,899
(List rooms of different sizes separately)			
Self-Contained SPED			
STEPS	865	1	865
PARTNERS Program Rms 8 and 9	1,135	2	2,270
Self-Contained SPED - toilet	50	2	100
Resource Room	916	1	916
ELL	290	1	290
Learning Center	858	1	858
OT/PT	600	1	600
Small Group Room / Reading			
ART & MUSIC			1,809
Art Classroom - 25 seats	894	1	894
Art Workroom w/ Storage & kiln	54	2	108
Music Classroom / Large Group - 25-50 seats	807	1	807
Music Practice / Ensemble			
HEALTH & PHYSICAL EDUCATION			6,253
Gymnasium	5,896	1	5,896
Gym Storeroom	265	1	265
Health Instructor's Office w/ Shower & Toilet	92	1	92
MEDIA CENTER			2,547
Media Center / Reading Room	2,072	1	2,072
Media Work	205	1	205
Library Office	128	1	128
A/V	142	1	142
DINING & FOOD SERVICE			8,088
Cafeteria / Dining	2,410	1	2,410
Stage	1,045	1	1,045
Auditorium	2,346	1	2,346
Chair / Table / Equipment Storage			
Kitchen	1,035	1	1,035
Food Storage	144	1	144
Cooler/Freezer	148	1	148
Dishroom	140	1	140
Kitchen Toilet	72	1	72
Staff Lunch Room	748	1	748
MEDICAL			426
Medical Suite Toilet	48	1	48
Nurses' Office / Waiting Room	78	1	78
Examination Room / Resting	300	1	300
ADMINISTRATION & GUIDANCE			2,484
General Office / Waiting Room / Toilet	170	1	170
Teachers' Mail and Time Room			
Duplicating Room			
Records Room			
Principal's Office w/ Conference Area	200	1	200
Principal's Secretary / Waiting	727	1	727
Assistant Principal's Office			
Supervisory / Spare Office			
Conference Room	277	1	277
Guidance Office	622	1	622
Office	115	1	115
Psychologist	373	1	373
Guidance Storeroom			
Teachers' Work Room			
CUSTODIAL & MAINTENANCE			455
Custodian's Office			
Custodian's Workshop			
Custodian's Storage	308	1	308
Recycling Room / Trash			
Receiving and General Supply			
Storeroom	33	1	33
	30	1	30
Network / Telecom Room	20	1	20
	64	1	64
OTHER			0
Other (specify)			
Total Building Net Floor Area (NFA)			46,706
Proposed Student Capacity / Enrollment			
NON-PROGRAMMED SPACES			10,072
Other Occupied Rooms (list separately)			
Unoccupied MEP/FP Spaces			
Boiler Room	290.00	1	290
Electrical	150.00	1	150
Electrical	20.00	1	20
Electrical	92.00	1	92
Unoccupied Closets, Supply Rooms & Storage Rooms			
	84.00	1	84
	95.00	1	95
	118.00	1	118
	68.00	1	68
	58.00	1	58
	40.00	2	80
Outdoor Storage	42.00	1	42
Toilet Rooms	1,035.00	1	1,035
Circulation (corridors, stairs, ramps & elevators)	7,940.00	1	7,940
Remaining <sup>3</sup>	5,089.00	1	5,089
Total Building Gross Floor Area (GFA) <sup>2</sup>			61,867
Grossing factor (GFA/NFA)			1.32

Date: 10/4/2018      Enter Submittal			
MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
118%	16	15,950	
1,200		-	1,100 SF min - 1,300 SF max
1,200	3	3,600	1,100 SF min - 1,300 SF max
950	13	12,350	900 SF min - 1,000 SF max
130%		4,530	
950	3	2,850	900-1,300 SF equal to surrounding classrooms
60	3	180	
500	2	1,000	1/2 size Genl. Clrm.
500	1	500	1/2 size Genl. Clrm.
72%		2,500	
1,000	1	1,000	assumed schedule 2 times / week / student
150	1	150	
1,200	1	1,200	assumed schedule 2 times / week / student
75	2	150	
99%		6,300	
6,000	1	6,000	6000 SF Min. Size
150	1	150	
150	1	150	
112%		2,277	
2,277	1	2,277	
138%		5,853	
2,678	1	2,678	2 seatings - 15SF per seat
1,000	1	1,000	
319	1	319	
1,657	1	1,657	1600 SF for first 300 + 1 SF/student Add'l
200	1	200	20 SF/Occupant
84%		510	
60	1	60	
250	1	250	
100	2	200	
120%		2,072	
329	1	329	
100	1	100	
150	1	150	
110	1	110	
375	1	375	
125	1	125	
120	0	-	
120	1	120	
250	1	250	
150	1	150	
35	1	35	
329	1	329	
23%		1,957	
150	1	150	
375	1	375	
375	1	375	
400	1	400	
219	1	219	
238	1	238	
200	1	200	
#DIV/0!		0	
111%		41,949	
		357	
#DIV/0!			Non-Programmed space areas are required to be included in the following submittals: Schematic Design Submittal Design Development Submittal
			60% Construction Documents
			90% Construction Documents Final Construction Documents
100%		61,886	
90%		1.48	

### Existing School Compared to Projected Enrollment MSBA Model

Haynes Elementary		Existing Conditions		MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals	ROOM NFA <sup>1</sup>	# OF RMS	area totals	Comments
CORE ACADEMIC SPACES		21	18,745				
(List classrooms of different sizes separately)							
Pre-Kindergarten w/ toilet							
Kindergarten w/ toilet	1,190	2	2,380	1,200		-	1,100 SF min - 1,300 SF max
Kindergarten 10, no toilet	879	1	879	1,200	3	3,600	1,100 SF min - 1,300 SF max
General Classrooms - Grade 1-6				950	15	14,250	900 SF min - 1,000 SF max
	880	3	2,640				
	846	1	846				
	816	1	816				
	835	3	2,505				
	875	2	1,750				
	863	3	2,589				
	855	2	1,710				
	900	2	1,800				
Spanish 23	830	1	830				
SPECIAL EDUCATION			5,899				
(List rooms of different sizes separately)							
Self-Contained SPED				950	3	2,850	900-1,300 SF equal to surrounding classrooms
STEPS	865	1	865				
PARTNERS Program Rms 8 and 9	1,135	2	2,270				
Self-Contained SPED - toilet	50	2	100	60	3	180	
Resource Room	916	1	916	500	2	1,000	1/2 size Genl. Clrm.
ELL	290	1	290				
Learning Center	858	1	858				
OT/PT	600	1	600				
Small Group Room / Reading				500	1	500	1/2 size Genl. Clrm.
ART & MUSIC			1,809				
Art Classroom - 25 seats	894	1	894				
Art Workroom w/ Storage & kiln	54	2	108				
Music Classroom / Large Group - 25-50 seats	807	1	807				
Music Practice / Ensemble							
HEALTH & PHYSICAL EDUCATION			6,253				
Gymnasium	5,896	1	5,896				
Gym Storeroom	265	1	265				
Health Instructor's Office w/ Shower & Toilet	92	1	92				
MEDIA CENTER			2,547				
Media Center / Reading Room	2,072	1	2,072				
Media Work	205	1	205				
Library Office	128	1	128				
A/V	142	1	142				
DINING & FOOD SERVICE			8,088				
Cafeteria / Dining	2,410	1	2,410				
Stage	1,045	1	1,045				
Auditorium	2,346	1	2,346				
Chair / Table / Equipment Storage							
Kitchen	1,035	1	1,035				
Food Storage	144	1	144				
Cooler/Freezer	148	1	148				
Dishroom	140	1	140				
Kitchen Toilet	72	1	72				
Staff Lunch Room	748	1	748				
MEDICAL			426				
Medical Suite Toilet	48	1	48				
Nurses' Office / Waiting Room	78	1	78				
Examination Room / Resting	300	1	300				
ADMINISTRATION & GUIDANCE			2,484				
General Office / Waiting Room / Toilet	170	1	170				
Teachers' Mail and Time Room							
Duplicating Room							
Records Room							
Principal's Office w/ Conference Area	200	1	200				
Principal's Secretary / Waiting	727	1	727				
Assistant Principal's Office							
Supervisory / Spare Office							
Conference Room	277	1	277				
Guidance Office	622	1	622				
Office	115	1	115				
Psychologist	373	1	373				
Guidance Storeroom							
Teachers' Work Room							
CUSTODIAL & MAINTENANCE			455				
Custodian's Office							
Custodian's Workshop							
Custodian's Storage	308	1	308				
Recycling Room / Trash							
Receiving and General Supply							
Storeroom	33	1	33				
	30	1	30				
Network / Telecom Room	20	1	20				
	64	1	64				
OTHER			0				
Other (specify)							
Total Building Net Floor Area (NFA)			46,706				
Proposed Student Capacity / Enrollment							
NON-PROGRAMMED SPACES			10,072				
Other Occupied Rooms (list separately)							
Unoccupied MEP/FP Spaces							
Boiler Room	290.00	1	290				
Electrical	150.00	1	150				
Electrical	20.00	1	20				
Electrical	92.00	1	92				
Unoccupied Closets, Supply Rooms & Storage Rooms							
	84.00	1	84				
	95.00	1	95				
	118.00	1	118				
	68.00	1	68				
	58.00	1	58				
	40.00	2	80				
Outdoor Storage	42.00	1	42				
Toilet Rooms	1,035.00	1	1,035				
Circulation (corridors, stairs, ramps & elevators)	7,940.00	1	7,940				
Remaining <sup>3</sup>	5,089.00	1	5,089				
Total Building Gross Floor Area (GFA) <sup>2</sup>			61,867				
Grossing factor (GFA/NFA)			1.32				

105%			18	17,850	
	1,200			-	1,100 SF min - 1,300 SF max
	1,200	3		3,600	1,100 SF min - 1,300 SF max
	950	15		14,250	900 SF min - 1,000 SF max
130%				4,530	
	950	3		2,850	900-1,300 SF equal to surrounding classrooms
	60	3		180	
	500	2		1,000	1/2 size Genl. Clrm.
	500	1		500	1/2 size Genl. Clrm.
70%				2,575	
	1,000	1		1,000	assumed schedule 2 times / week / student
	150	1		150	
	1,200	1		1,200	assumed schedule 2 times / week / student
	75	3		225	
99%				6,300	
	6,000	1		6,000	6000 SF Min. Size
	150	1		150	
	150	1		150	
102%				2,488	
	2,488	1		2,488	
129%				6,270	
	3,030	1		3,030	2 seatings - 15SF per seat
	1,000	1		1,000	
	335	1		335	
	1,704	1		1,704	1600 SF for first 300 + 1 SF/student Add'l
	201	1		201	20 SF/Occupant
84%				510	
	60	1		60	
	250	1		250	
	100	2		200	
117%				2,119	
	352	1		352	
	100	1		100	
	150	1		150	
	110	1		110	
	375	1		375	
	125	1		125	
	120	0		-	
	120	1		120	
	250	1		250	
	150	1		150	
	35	1		35	
	352	1		352	
23%				2,004	
	150	1		150	
	375	1		375	
	375	1		375	
	400	1		400	
	235	1		235	
	269	1		269	
	200	1		200	
#DIV/0!				0	
105%				44,646	
				404	
#DIV/0!					
					Non-Programmed space areas are required to be included in the following submittals:
					Schematic Design Submittal
					Design Development Submittal



### Existing School Compared to MSBA Model

Loring Elementary		Existing Conditions	
ROOM TYPE	ROOM NFA <sup>1</sup>	# OF RMS	area totals
CORE ACADEMIC SPACES		25	22,651
(List classrooms of different sizes separately)			
Pre-Kindergarten w/ toilet			
Kindergarten w/ toilet	1,121	3	3,363
	1,106	1	1,106
General Classrooms - Grade 1-6	850	2	1,700
	840	2	1,680
	864	6	5,184
	846	3	2,538
	820	1	820
	855	4	3,420
	860	2	1,720
Spanish 2 w/ Toilet	1,120	1	1,120
SPECIAL EDUCATION			5,383
(List rooms of different sizes separately)			
Self-Contained SPED	1,054	1	1,054
Self-Contained SPED - toilet	60	1	60
LLD	868	1	868
SPED 31	854	1	854
ELL 9	856	1	856
Resource Room			
Literacy 11	840	1	840
OT/PT	467	1	467
Small Group Room / Reading			
Testing	140	1	140
Team Chair Office	244	1	244
ART & MUSIC			2,348
Art Classroom - 25 seats	984	1	984
Art Workroom w/ Storage & kiln	64	1	64
	50	1	50
Music Classroom / Large Group - 25-50 seats	1,130	1	1,130
Music Storage	120	1	120
Music Practice / Ensemble			
HEALTH & PHYSICAL EDUCATION			5,706
Gymnasium	5,462	1	5,462
Gym Storeroom	244	1	244
Health Instructor's Office w/ Shower & Toilet			
MEDIA CENTER			4,144
Media Center / Reading Room	2,658	1	2,658
Library Office	100	1	100
Book Room	142	1	142
Computer Lab	1,244	1	1,244
DINING & FOOD SERVICE			7,249
Cafeteria / Dining	4,010	1	4,010
Stage	915	1	915
Chair / Table / Equipment Storage	224	1	224
Kitchen	1,182	1	1,182
Dry Storage	214	1	214
Cold Storage	210	1	210
Toilet	54	1	54
Office	56	1	56
Staff Lunch Room	384	1	384
MEDICAL			498
Medical Suite Toilet	86	1	86
Nurses' Office / Waiting Room	230	1	230
Examination Room / Resting	78	1	78
	104	1	104
ADMINISTRATION & GUIDANCE			2,435
General Office / Waiting Room / Toilet	140	1	140
Teachers' Mail and Time Room	68	1	68
Duplicating Room	128	1	128
Records Room			
Principal's Office w/ Conference Area	213	1	213
Principal's Secretary / Waiting	252	1	252
Assistant Principal's Office			
Supervisory / Spare Office			
Conference Room	155	1	155
	274	1	274
Guidance Office	200	1	200
Psychologist	170	1	170
Speech	400	1	400
Guidance Storeroom			
Teachers' Work Room	435	1	435
CUSTODIAL & MAINTENANCE			541
Custodian's Office			
Custodian's Workshop	210	1	210
Custodian's Storage			
Recycling Room / Trash			
Receiving and General Supply			
Storeroom	23	1	23
	20	1	20
	35	1	35
	22	1	22
	22	1	22
	23	1	23
Network / Telecom Room	166	1	166
	20	1	20
OTHER			0
Other (specify)			
Total Building Net Floor Area (NFA)			50,955
Proposed Student Capacity / Enrollment			
NON-PROGRAMMED SPACES			16,679
Other Occupied Rooms (list separately)			
Water Service	73.00	1	73
Unoccupied MEP/FP Spaces	620.00	1	620
Electrical Sub	22.00	1	22
Elevator Machine	84.00	1	84
Electrical	210.00	1	210
Electrical Sub	20.00	1	20
Electrical Sub	70.00	1	70
Unoccupied Closets, Supply Rooms & Storage Rooms			
Supply Room	180.00	1	180
	44.00	1	44
	25.00	1	25
	115.00	1	115
	143.00	1	143
	86.00	1	86
Toilet Rooms	2,068.00	1	2,068
Circulation (corridors, stairs, ramps & elevators)	12,919.00	1	12,919
Remaining <sup>2</sup>	15,987.00	1	15,987
Total Building Gross Floor Area (GFA) <sup>2</sup>			83,621
Grossing factor (GFA/NFA)			1.64

MSBA Guidelines (refer to MSBA Educational Program &amp			
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### ***Existing School Compared to Projected Enrollment MSBA Model***

Loring Elementary		Existing Conditions			MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)			
Room Type	Room NFA <sup>1</sup>	# OF RMS	area totals	Room NFA <sup>1</sup>	# OF RMS	area totals	Comments	
CORE ACADEMIC SPACES				99%				
(List classrooms of different sizes separately)								
Pre-Kindergarten w/ toilet		25	22,651	1,200		-	1,100 SF min - 1,300 SF max	
Kindergarten w/ toilet	1,121	3	3,363	1,200	4	4,800	1,100 SF min - 1,300 SF max	
General Classrooms - Grade 1-6	1,106	1	1,106	950	19	18,050	900 SF min - 1,000 SF max	
	850	2	1,700					
	840	2	1,680					
	864	6	5,184					
	846	3	2,538					
	820	1	820					
	855	4	3,420					
	860	2	1,720					
Spanish 2 w/ Toilet	1,120	1	1,120					
SPECIAL EDUCATION				89%				
(List rooms of different sizes separately)								
Self-Contained SPED	1,054	1	1,054	950	4	3,800	900-1,300 SF equal to surrounding classrooms	
Self-Contained SPED - toilet	60	1	60	60	4	240		
LLD	868	1	868					
SPED 31	854	1	854					
ELL 9	856	1	856					
Resource Room				500	3	1,500	1/2 size Gent. Clrm.	
Literacy 11	840	1	840					
OT/PT	467	1	467					
Small Group Room / Reading				500	1	500	1/2 size Gent. Clrm.	
Testing	140	1	140					
Team Chair Office	244	1	244					
ART & MUSIC				62%				
Art Classroom - 25 seats	984	1	984			3,800		
Art Workroom w/ Storage & kiln	64	1	64	1,000	2	2,000	assumed schedule 2 times / week / student	
	50	1	50	150	2	300		
Music Classroom / Large Group - 25-50 seats	1,130	1	1,130					
Music Storage	120	1	120	1,200	1	1,200	assumed schedule 2 times / week / student	
Music Practice / Ensemble				75	4	300		
HEALTH & PHYSICAL EDUCATION				91%				
Gymnasium	5,462	1	5,462	6,000	1	6,000	6000 SF Min. Size	
Gym Storeroom	244	1	244	150	1	150		
Health Instructor's Office w/ Shower & Toilet				150	1	150		
MEDIA CENTER				135%				
Media Center / Reading Room	2,658	1	2,658	3,060	1	3,060		
Library Office	100	1	100					
Book Room	142	1	142					
Computer Lab	1,244	1	1,244					
DINING & FOOD SERVICE				98%				
Cafeteria / Dining	4,010	1	4,010	3,983	1	3,983	2 seatings - 15SF per seat	
Stage	915	1	915	1,000	1	1,000		
Chair / Table / Equipment Storage	224	1	224	377	1	377		
Kitchen	1,182	1	1,182	1,831	1	1,831	1600 SF for first 300 + 1 SF/student Admtr	
Dry Storage	214	1	214					
Cold Storage	210	1	210					
Toilet	54	1	54					
Office	56	1	56					
Staff Lunch Room	384	1	384	233	1	233	20 SF/Occupant	
MEDICAL				82%				
Medical Suite Toilet	86	1	86	60	1	60		
Nurses' Office / Waiting Room	230	1	230	250	1	250		
Examination Room / Resting	78	1	78	100	3	300		
	104	1	104					
ADMINISTRATION & GUIDANCE				102%				
General Office / Waiting Room / Toilet	140	1	140	416	1	416		
Teachers' Mail and Time Room	68	1	68	100	1	100		
Duplicating Room	128	1	128	150	1	150		
Records Room				110	1	110		
Principal's Office w/ Conference Area	213	1	213	375	1	375		
Principal's Secretary / Waiting	252	1	252	125	1	125		
Assistant Principal's Office				120	0	-		
Supervisory / Spare Office				120	1	120		
Conference Room	155	1	155	250	1	250		
	274	1	274					
Guidance Office	200	1	200	150	2	300		
Psychologist	170	1	170					
Speech	400	1	400					
Guidance Storeroom				35	1	35		
Teachers' Work Room	435	1	435	416	1	416		
CUSTODIAL & MAINTENANCE				25%				
Custodian's Office				150	1	150		
Custodian's Workshop	210	1	210	375	1	375		
Custodian's Storage				375	1	375		
Recycling Room / Trash				400	1	400		
Receiving and General Supply				277	1	277		
Storeroom	23	1	23	354	1	354		
	20	1	20					
	35	1	35					
	22	1	22					
	22	1	22					
	23	1	23					
Network / Telecom Room	166	1	166	200	1	200		
	20	1	20					
OTHER				#DIV/0!				
Other (specify)								
Total Building Net Floor Area (NFA)				93%				
Proposed Student Capacity / Enrollment								
NON-PROGRAMMED SPACES				#DIV/0!				
Other Occupied Rooms (list separately)								
Water Service	73.00	1	73					
Unoccupied MEP/FP Spaces	620.00	1	620					
Electrical Sub	22.00	1	22					
Elevator Machine	84.00	1	84					
Electrical	210.00	1	210					
Electrical Sub	20.00	1	20					
Electrical Sub	70.00	1	70					
Unoccupied Closets, Supply Rooms & Storage Rooms								
Supply Room	180.00	1	180					
	44.00	1	44					
	25.00	1	25					
	115.00	1	115					
	143.00	1	143					
	86.00	1	86					
Toilet Rooms	2,068.00	1	2,068					
Circulation (corridors, stairs, ramps & elevators)	12,919.00	1	12,919					
Remaining <sup>3</sup>	15,987.00	1	15,987					
Total Building Gross Floor Area (GFA) <sup>2</sup>				103%				
Grossing factor (GFA/NFA)				110%				



Haynes	Full Day K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total Enrolled
Students Enrolled	53	53	60	64	73	54	357
Sections	3	3	3	3	4	3	19
Class Size	17.67	17.67	20.00	21.33	18.25	18.00	18.82
Net change	0	0	0	0	0	0	0
M/F	31/22	27/26	30/30	33/31	46/27	29/25	196/161

#### Haynes Notes

Loring	Full Day K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total Enrolled
Students Enrolled	74	67	83	90	64	97	475
Sections	4	4	4	4	3	5	24
Class Size	18.50	16.75	20.75	22.50	21.33	19.40	19.79
Net Change	0	0	0	0	0	0	0
M/F	42/32	38/29	37/46	43/47	36/28	52/45	248/227

#### Loring Notes

Nixon	Full Day K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total Enrolled
Students Enrolled	35	53	44	69	58	78	337
Sections	2	3	2	3	3	4	17
Class Size	17.50	17.67	22.00	23.00	19.33	19.50	19.83
Net change	1	0	0	0	0	0	1
M/F	19/16	27/26	28/16	34/35	35/23	41/37	184/153

#### Nixon Notes

Noyes	Pre-K	Full Day K	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Total Enrolled
Students Enrolled	48	77	87	86	86	84	73	541
Sections		4	4	4	4	4	4	20
Class Size	#DIV/0!	19.25	21.75	21.50	21.50	21.00	18.25	20.54
Net Change	1	0	0	0	0	0	0	1
M/F	29/19	35/42	45/42	47/39	51/35	42/42	36/37	285/256

#### Noyes Notes

[illegible]

Total Number of Staff in SPS Elementary Schools		
Haynes E.S.	82	
Loring E.S.	71	
Nixon E.S.	63	
Noyes E.S.	94	

# PETER NOYES SCHOOL

## 2018-2019 MASTER SCHEDULE

	MONDAY						TUESDAY						THURSDAY						FRIDAY						
	Lib	Span	Mus	Gym	Art		Lib	Span	Mus	Gym	Art		Lib	Span	Mus	Gym	Art		Lib	Span	Mus	Gym	Art		
9:30-10:10	5	5A	5B		5C	5D		5C	5B	5D	5A	5A	5B	5D	5C	5A			5C	5A	5D		5B		
10:20-11:00	4	4C	4D	4A	4B		4B		4C	4A	4D	4D	4D	4A			4C	4B			4C	4B	4A		
11:10-11:50	3	3B	3D	3A		3C	3D		3C	3B	3A	3A		3C	3D	3A	3A	3B	3A	3B		3C	3D		
11:50-12:55		Lunch/Planning						Lunch/Planning						Lunch/Planning						Lunch/Planning					
12:55-1:35	K	KB		KC	KD	KA	KA		KB	KC	KD	KD	KD		KA	KB	KC	KC	KC		KD	KA	KB		
1:45-2:25	1	1A	1C		1D	1B	1B		1A	1C	1D	1D	1C	ID	1B		1A	1A	1D	1B	1C	1A			
2:30-3:10	2	2D	2C	2A	2B		2A		2B	2C	2D	2D		2D	2C	2A	2B	2B	2C	2B	2D		2A		
		6	5	4	5	4	5	1	6	6	6	4		5	6	6	5	5	5	5	5	4	5		

### WEDNESDAY

		Lib	Spanish	Mus	Gym	Art
1	9:00-9:40		1A	1D	1B	1C
2	9:40-10:20	2B	2A		2D	2C
3	10:20-11:00	3C	3A	3B	3D	
4	11:05-11:45	4A	4B	4D		4C
5	11:50-12:30	5D		5A	5B	5C
		4	4	4	4	4

KA	Campbell	1A	Gordon	2A	Nawrocki	3A	Irving	4A	Beverly	5A	Lance
KB	La Marre	1B	Caires	2B	Murphy	3B	Hanks	4B	Iacobucci	5B	Cohen Mong.
KC	N. Iacobucci	1C	Loomes	2C	Carney	3C	Haheer	4C	Valukis	5C	Bearfield
KD	Chen	1D	A. Donahue	2D	Allen	3D	Dube	4D	Bennett	5D	Huelin



Kinder	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 5
Arrival/ Morning Meeting 8:55-9:15	Arrival/ Morning Work 8:55-9:15 Meeting/ Number Corner 9:15-9:35	Arrival/Morning Work 8:55-9:15	Arrival/Morning Work 8:55-9:15	Arrival/Morning Work 8:55-9:15	Hart, Smith, Eddy	Jones, Chandler
ELA 9:15-10:15	ELA 9:35-10:30	ELA 9:15-10:00	Number Corner 9:15-9:30 Math 9:30-10:30	Specials 9:15 - 9:55	Science/Math/ Writing 9:00-10:00	Science/Math 9:00-10:00
Math 10:15-11:05	Brain Break 10:30-10:40	Special 10:00 - 10:40	Open Circle/ _____ 10:30-10:50 Brain Break 10:50-11:00	Math 9:55-10:55	Literacy 10:00 -10:45	Literacy 10:00-10:45
Brain Break 11:05-11:15	ELA 10:40-11:15	Brain Break 10:40-10:50	RTI 11:00-11:30	ELA 11:10-11:40	Specials 10:45-11:25	Specials 10:45-11:25
Lunch 11:15 - 11:40	Recess 11:15 - 11:40	RTI 11:35-12:05	Specials 11:30 - 12:10	Recess 11:40 - 12:05	Science/Math/ Writing 11:25-12:25	Science/Math/ Writing 11:25-12:25
Math/Number Corner 11:40-12:05	Lunch 11:40 - 12:05	Recess 12:05 - 12:30	ELA 12:10-12:55	RTI 12:30-1:00	Recess 12:30 - 12:55	Recess 12:30 - 12:55
ELA 12:05-12:35	Math 12:05-1:05 (60)	Lunch 12:30 - 12:55	Recess 12:55 - 1:20	Number Corner 1:00-1:20	Lunch 12:55 - 1:20	Lunch 12:55 - 1:20
Specials 12:35 - 1:15	Open Circle/ _____ 1:20-1:05	Math 12:55-1:55 (60)	Lunch 1:20 - 1:45	Brain Break 1:20-1:30	Number Corner/Open Circle 1:20-1:40	Number Corner/Open Circle 1:20-1:40
RTI 1:15-12:45	Specials 1:20 - 2:00	Science/SS 1:55-2:45	ELA 1:45-2:30 (45)	ELA 1:30-2:30	Science/Math/ Writing 1:50-2:50	Literacy 1:50-2:50
Open Circle/ _____ 1:45-2:05	Open Circle/ _____ 2:00-2:45	Open Circle/ _____ 2:45-3:00	Science/SS 2:30-3:20	Science/SS 2:30-3:20	RTI 2:50-3:20	RTI 2:50-3:20
Recess 2:05 - 2:30	RTI 2:00-2:30 (30)	Number Corner 3:00-3:15	3:20 - 3:25 Dismissal	Science/SS 2:30-3:20	3:20 - 3:25 Dismissal	3:20 - 3:25 Dismissal



	Gregg	Kenosian	Nash
	<b>MONDAY</b>		
9:00-9:25	School Meeting		
9:25-9:55	ELA		
9:55-10:25	(Readers' Workshop & Vocabulary or Word Study)		
10:25-10:40	Writer's Workshop		
10:40-11:20	Specials		
11:20-12:20	Science/Social Studies		
12:20-12:35	Number Corner		
12:35-1:25	Recess & Lunch		
1:25-1:55	RtI		
1:55-2:55	Math		
2:55-3:10	Open Circle		
3:15-3:25	Dismissal		

	Gregg	Kenosian	Nash
	<b>TUESDAY</b>		
9:00-10:00	Math		
10:00-10:40	Writer's Workshop		
10:40-11:20	Specials		
11:20-11:50	ELA		
11:50-12:20	(Readers' Workshop & Vocabulary or Word Study)		
12:20-12:35	Number Corner		
12:35-1:25	Recess & Lunch		
1:25-1:55	RtI		
1:55-2:55	Science/Social Studies		
2:55-3:10	Open Circle		
3:15-3:25	Dismissal		

	Gregg	Kenosian	Nash
	<b>WEDNESDAY</b>		
9:00-10:00	Math		
10:00-10:40	Writer's Workshop		
10:40-11:20	Specials		
11:20-11:50	ELA		
11:50-12:20	(Readers' Workshop & Vocabulary or Word Study)		
12:20-12:35	Number Corner		
12:35-1:25	Recess & Lunch		
1:25-1:55	RtI		
1:55-2:55	Science/Social Studies		
2:55-3:10	Open Circle		
3:15-3:25	Dismissal		

	Gregg	Kenosian	Nash
	<b>WEDNESDAY ILAP</b>		
9:00-9:30	Number Corner		
9:30-10:00	ELA		
10:00-10:30	(Readers' Workshop & Vocabulary or Word Study)		
10:35-11:15	Specials		
11:20-12:20	Math		
12:20-12:35			
12:35-12:45	Dismissal		

	Gregg	Kenosian	Nash
	<b>THURSDAY</b>		
9:00-10:00	Math		
10:00-10:40	Writer's Workshop		
10:40-11:20	Specials		
11:20-11:50	ELA		
11:50-12:20	(Readers' Workshop & Vocabulary or Word Study)		
12:20-12:35	Number Corner		
12:35-1:25	Recess & Lunch		
1:25-1:55	RtI		
1:55-2:55	Science/Social Studies		
2:55-3:10	Open Circle		
3:15-3:25	Dismissal		

	Gregg	Kenosian	Nash
	<b>FRIDAY</b>		
9:00-10:00	Science/Social Studies		
10:00-10:40	Writer's Workshop		
10:40-11:20	Specials		
11:20-11:50	ELA		
11:50-12:20	(Readers' Workshop & Vocabulary or Word Study)		
12:20-12:35	Number Corner		
12:35-1:25	Recess & Lunch		
1:25-2:25	Math		
2:25-2:45	RtI		
2:45-3:15	School Meeting		
3:15-3:25	Dismissal		

	Monday					Tuesday					Wednesday					Thursday					Friday									
	A	PE	M	L	S	A	PE	M	L	S	A	PE	M	L	S	A	PE	M	L	S	A	PE	M	L	S					
9:05-9:45	SCHOOL MEETING / PREP					4M	4L		4W	4S	4S	4W	4M	4L			4M	4L	4S	4W		4W	PREP	4S		4L				
9:55-10:35	4L	4S	4W	4M		PREP					PREP					PREP					PREP					2S	2D	PRTRS		2M
10:40-11:20	3N	APE	3G	3K		3G	3K			3N	3K	3G		3N				3N	3G	3K		PREP	3N	3K		3G				
11:25-12:05	5S		5C	5D		5D	5C			5S		5D	5S	5C				5D	5S	5C		5C	5S	PREP		5D				
12:05-1:00	LUNCH/DUTY					LUNCH/DUTY					LUNCH/DUTY					LUNCH/DUTY					LUNCH/DUTY					LUNCH/DUTY				
1:00-1:40	1Bu	APE	1H	1Br			1H		1Bu	1Br	1Br		1Bu	1H				1Bu	1Br		1H	1H	1Br	KR		1Bu				
1:45-2:25	KR		KW	KB		KW	KB		KR		KB	KW	KR					KR	KB	KW		KB	KW	Setup		4M				
2:30-3:10	2D		2M	2S		2M	2S			2D		2M	2S	2D					2D	2M	2S	SCHOOL MEETING / PREP								

	ILAP Wednesday				
	A	PE	M	L	S
9:05-9:45	4S	4W	4M	4L	
9:50-10:30	KB	2M	2S	2D	
10:35-11:15	3K	3G	KR	3N	
11:20-12:00	1Br	KW	1Bu	1H	
12:00-12:40		5D	5S	5C	

## KR (Kindergarten Rotating)

## Special Schedule

Trimester:	1	2	3
Burgess	PE	Art	Mus
Raffaele	Art	Mus	PE
Weart	Mus	PE	Art

Tuesday	
BAND (Music Room)	
10:15-10:55	Clemons
1:00-1:40	Duckett
1:40-2:20	Sugermeyer

Thursday	
ORCHESTRA (Art Room)	
10:15-10:55	Lamoureaux
10:55-11:35	Marshall
12:30-1:10	Skahan/White
1:15-1:55	Grade 5



## NIXON MASTER SCHEDULE 2018-2019

KINDERGARTEN	
8:55-9:45	Choice/Morning Meeting/Fundations
9:45-10:00	Reading Mini-Lesson
10:00-10:30	Reader's Workshop/Reading Intervention
10:30-10:55	Classroom Math Intervention/RTI Block
11:00-11:25	RECESS
11:25-11:50	LUNCH
11:50 - 12:30	Writing
12:30-12:45	Rest
12:45-1:25	SPECIAL
1:25-2:15	Math & Number Corner
2:15-2:45	Open Circle/Science/Social Studies
2:45-3:10	Snack/Recess

GRADE 1	
8:55-9:30	Morning Meeting/Fundations
9:30-10:10	Writer's Workshop (sped in for 30 min- new person, 9:40-10:10)
10:10-10:30	Number Corner
10:30 - 10:45	Recess
10:45 - 11:00	Open Circle
11:00 - 11:25	Reading Mini Lesson
11:25-11:50	RECESS
11:50-12:15	LUNCH
12:15 - 12:45	DI/Reader's Workshop* (sped reading out 12:15-12:45- new person)
12:45- 1:15	Classroom Math Intervention/RTI Block
1:15 - 1:45	Sci/SS
1:45-2:25	SPECIAL
2:25-3:15	Math (sped in- new person 2:45-3:15)

GRADE 2	
8:55-9:45	Writing (sped in 9:15-9:45, Tattelman)
9:45-10:05	Fundations
10:05-11:00	Math (sped in 10:30-11, new person)
11:00-11:25	RECESS
11:25-11:50	LUNCH
11:50-12:35	Science/Social Studies
12:35-1:00	Number Corner
1:00 - 1:15	Reading mini lesson
1:15-1:45	DI/Reader's Workshop
1:45-2:15	Classroom Math Intervention/RTI Block (sped out 1:45-2:15, Tattelman)
2:15-2:30	Open Circle
2:30-3:10	SPECIAL

GRADE 3	
8:55-9:05	Morning work
9:05-9:45	SPECIAL
9:45-10:45	Math (sped in 9:45-10:15, sped out 10:15-10:45 Tattelman)
10:45- 11:15	Reading Mini Lesson
11:15 - 11:45	Reader's Workshop/Reading Intervention (sped reading out, Tattelman)
11:45-12:15	Classroom Math Intervention/RTI Block (sped reading out, Tattelman)
12:15-12:40	RECESS
12:40-1:05	LUNCH
1:05 - 1:50	Writing (in/out 1:15-1:45, Tattelman)
1:50 - 2:10	Number Corner
2:10 - 2:25	Open Circle
2:25 - 3:15	Sci/SS

GRADE 4	
8:55-9:25	DI Block (reading 4x out 9-9:30 new person, 2x reading & 2x math out 9-9:30 Chase)
9:25-9:55	Classroom Math Intervention/RTI Block
9:55-10:35	SPECIAL
10:35 - 11:50	Reading/ELA/Writing mini lesson and follow up work (writing support 11:00 - 11:30, Chase/Access)
11:50-12:15	RECESS
12:15-12:40	LUNCH
12:40 - 1:00	Open Circle
1:00 - 2:00	Math (sped in 1:30 - 2:00 new person)
2:00 - 2:45	Sci/SS
2:45 - 3:15	Number Corner

GRADE 5	
<b>Smaldone</b>	
8:55-9:30	Number Corner
9:30-10:30	Math (Sped in 10:10-10:30, Chase)
10:30 - 10:45	Writing mini lesson
10:45-11:25	SPECIAL
11:30-12:00	Writing (Sped in 11:30-12, new person)
12:00 - 12:40	Sci/SS
12:40-1:05	RECESS
1:05-1:30	LUNCH
1:30 - 1:45	Open Circle
1:45 - 2:15	Reading mini lesson
2:15-2:45	Reader's Workshop/Reading Intervention(2x30 Reading, Math out, Chase)
2:15-3:15	Classroom Math Intervention/RTI Block (2x30 Reading, Math out, Chase)
GRADE 5	
<b>Durkin</b>	
8:55-10:00	Math (Sped in 9:30-10, Chase)
10:00-10:30	Snack/Read Aloud/Open Circle
10:30-10:45	Writing mini lesson
10:45-11:25	SPECIAL
11:30 - 12:00	Writing (sped in 11:30 - 12:00, Chase)
12:00-12:40	Sci/SS
12:40-1:05	RECESS
1:05-1:30	LUNCH
1:30 - 1:50	Number Corner
1:50 - 2:15	Reading mini lesson
2:15-2:45	Reader's Workshop/Reading Intervention(2x30 Reading, Math out, Chase, Reading 4x45 out Tattelman)
2:15-3:15	Classroom Math Intervention/RTI Block (2x30 Reading, Math out, Chase)

KINDERGARTEN	
8:55-9:45	Choice/Morning Meeting/Fundations
9:45-10:00	Reading Mini-Lesson
10:00-10:30	Reader's Workshop/Reading Intervention
10:30-10:55	Classroom Math Intervention/RTI Block
11:00-11:25	RECESS
11:25-11:50	LUNCH
11:50 - 12:05	Rest time
12:05-12:45	Writing
12:45-1:25	SPECIAL
1:25-2:15	Math & Number Corner
2:15-2:45	Open Circle/Science/Social Studies
2:45-3:10	Snack/Recess

KINDERGARTEN	
8:55-9:45	Morning Meeting/Choice/Fundations
9:45-10:00	Reading Mini-Lesson
10:00-10:30	Reader's Workshop/Reading Intervention
10:30-10:55	Classroom Math Intervention/RTI Block
11:00-11:25	RECESS
11:25-11:50	LUNCH
11:50 - 12:05	Rest time
12:05-12:45	Writing
12:45-1:25	SPECIAL
1:25-2:15	Math & Number Corner
2:15-2:45	Open Circle/Science/Social Studies
2:45-3:10	Snack/Recess