

Marlborough Elementary School Information Campaign

Meeting One

December 16, 2004

Building Assessment and Feasibility Study



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Today's Timeline

- Building Issues TODAY
- Possible Solutions January 6, 2005
- Feedback/Direction January 20, 2005
 - A time for community feedback and town consensus
- School Budget Hearing January 27, 2005
- School District Meeting March 3, 2005



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Yesterday's History

- 75 years ago, or about 3 generations, the Empire State Building was completed.
- 70 years ago the District voted to build a brick school for Grades 1 and 2.



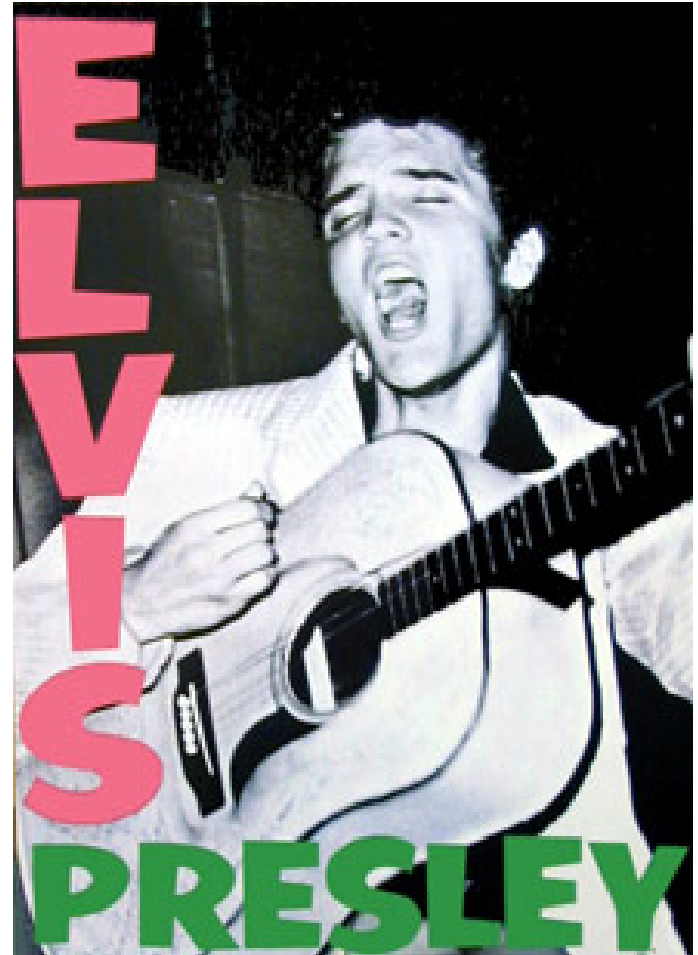
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Yesterday's History

- 49 years ago the District voted to build the gymnasium and make the building a High School.
- The new school and gymnasium was opened in 1957, when Elvis was King.



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Yesterday's History



- In 1963 the Town voted to expand the School.
- In 1969 man walked on the moon in B&W.
- In 1979 the school was considered full and unable to add curriculum.



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Building Issues to Examine

- How well does the building serve the architectural functions it should?
- How good are the mechanical and electrical systems?
- How does the building measure up to Fire and Safety Codes?



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What Was Learned?

- Not much has been done since.
- The school
 - has fire and safety code compliance problems
 - has serious mechanical and electrical shortcomings.
 - is not pretty or pleasant, and has lack of space, particularly recreational and or field space.
 - doesn't meet today's
NH Ed Department building standards

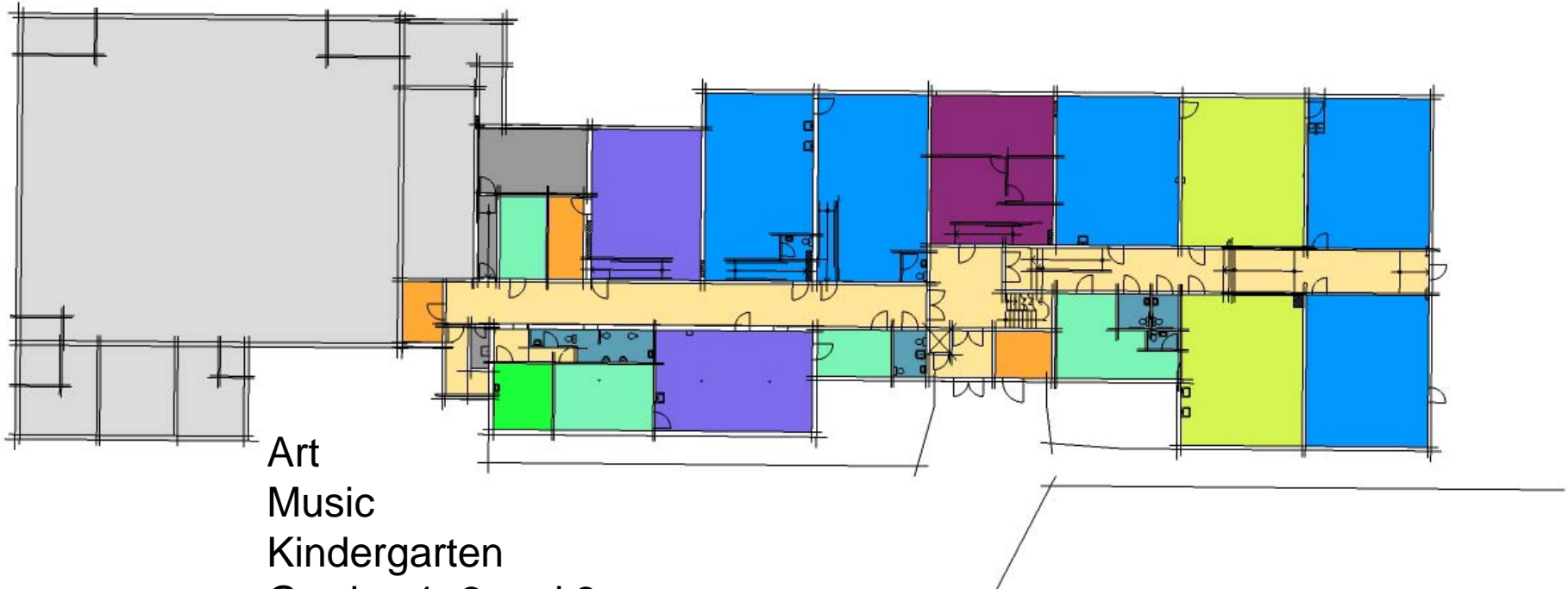


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Existing Lower Level Plan



- Art
- Music
- Kindergarten
- Grades 1, 2 and 3
- Administration
- Health
- Physical Therapy
- SPED

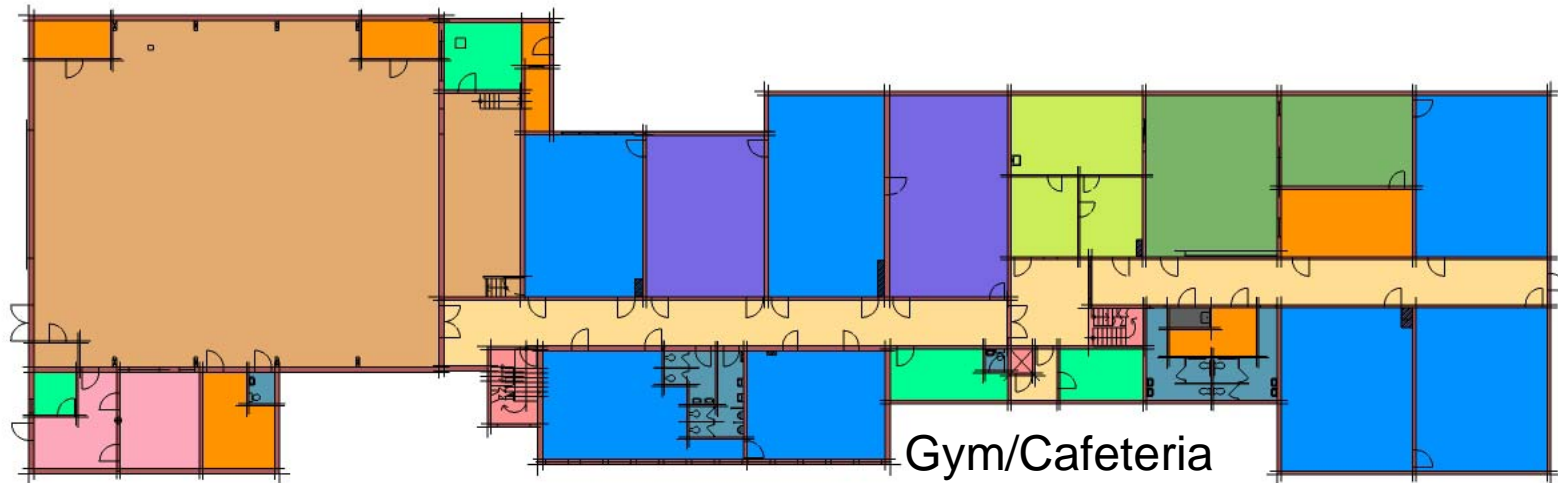


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Existing Upper Level Plan



- Gym/Cafeteria
- Kitchen
- Math
- Grades 4 thru 8
- Library
- Science
- Computer Lab
- Teacher Work Room
- Counseling



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Safety Problems

- The exterior fire escape stairs is dangerous, and must be replaced with a safe, enclosed stairwell.



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Safety Problems

- Existing exposed wood decking does not comply with code requirements intended to prevent **flame-spread and smoke-development in exit corridors.**



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Safety Problems

- Corridor walls need to be 1/2-hour rated with protected openings.
- Corridor doors are required to be 20-minute fire doors.
- All fire doors (rated wall or smoke barriers) are required to have automatic closers.
- Several existing corridor doors are hollow core, and most corridor doors do not have automatic closers.
- Some corridor doors do not comply with accessibility requirements.



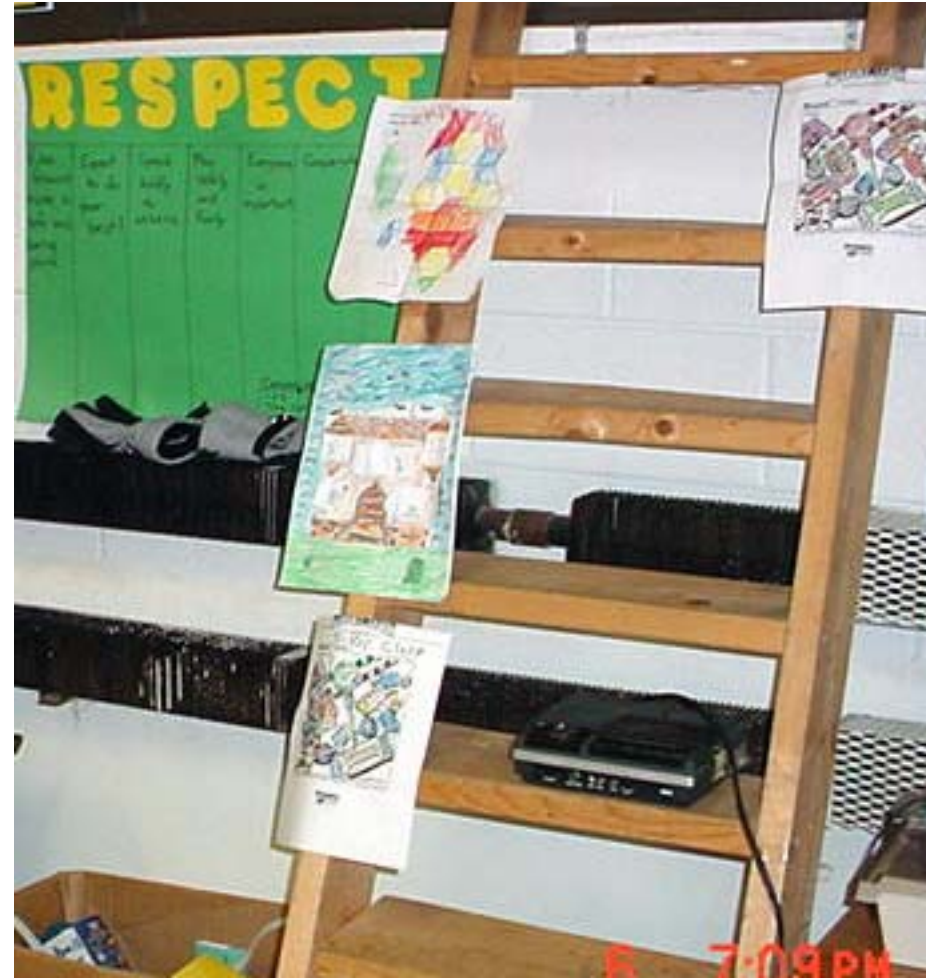
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Safety Problems

- Many classroom window sills do not comply with requirements for emergency rescue window, making them inappropriate for the education of young children.



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Safety Problems

- The gym should be separated from the classroom building. Currently the main exit from the gym is not separated from the classroom corridors, and a hazardous mixed use condition exists. The Gym potential occupancy exceeds 300 persons and requires an automatic sprinkler system.



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Code Problems

- The building lacks significant storage area for lightweight combustibles.



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Code Problems

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Code Problems

- Without defined storage areas and display areas, artwork and teaching material in rooms may exceeds 20% of wall area as permitted in a building that with no sprinkler system.



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Outdated Alarm System

- Fire alarm system is outdated and does not comply with current codes for new construction.
- Older horn light units with red lenses do not comply with current codes for fire alarm visual appliances.
- Pull stations are typically higher than current codes standards allow.



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Incomplete Fire Alarm System

- There are no fire alarm horn and strobe lights in the classrooms or other support spaces.
- With alarm horns only in the corridors, there will probably be insufficiently loud audible alarms within classrooms and other non-corridor spaces.



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Incomplete Fire Alarm System

- There is no kitchen hood suppression system and no fire alarm connection to a kitchen hood suppression system.



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Fire Alarm System

- Options exist to attempt to upgrade but engineers recommend a completely new self-contained fire alarm system be provided with current-technology analog addressable devices.



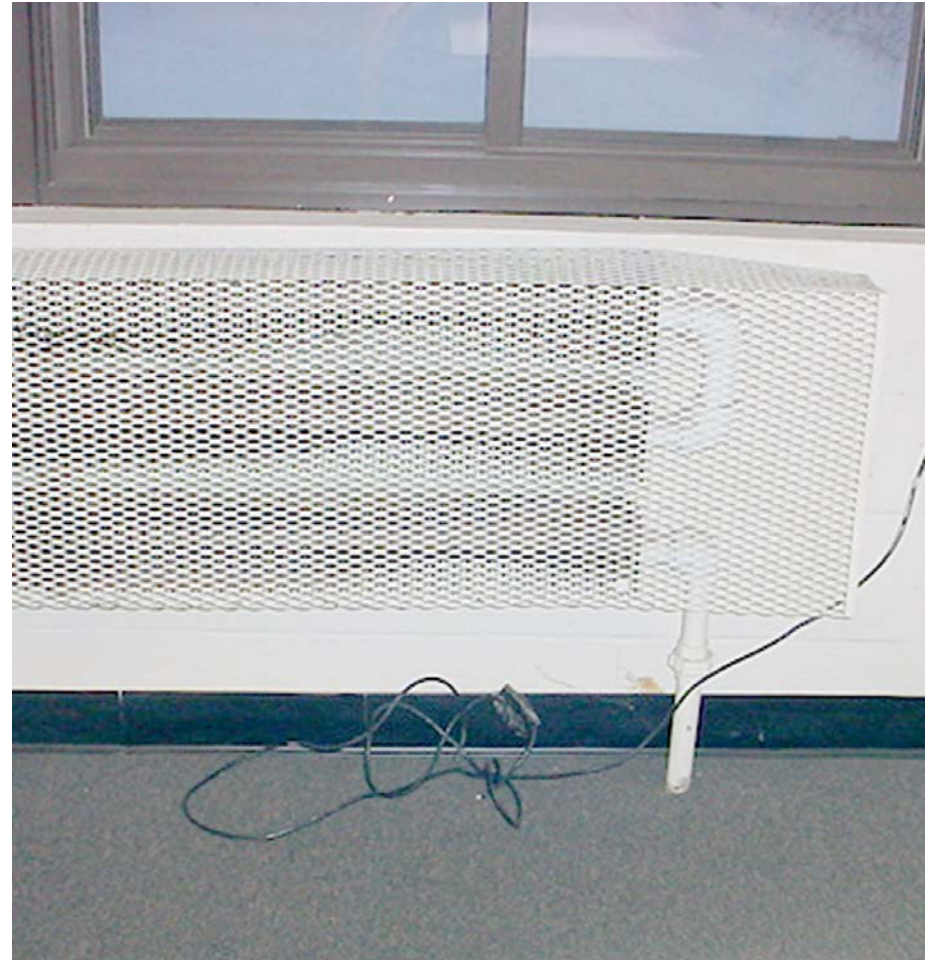
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Heating/Ventilating

- The schools heating and ventilating system, is **old outdated and performs poorly**. It is universally seen as a problem.
- **Ventilation inadequate** to support a comfortable learning space
- **Temperature control inadequate** to support a comfortable learning space



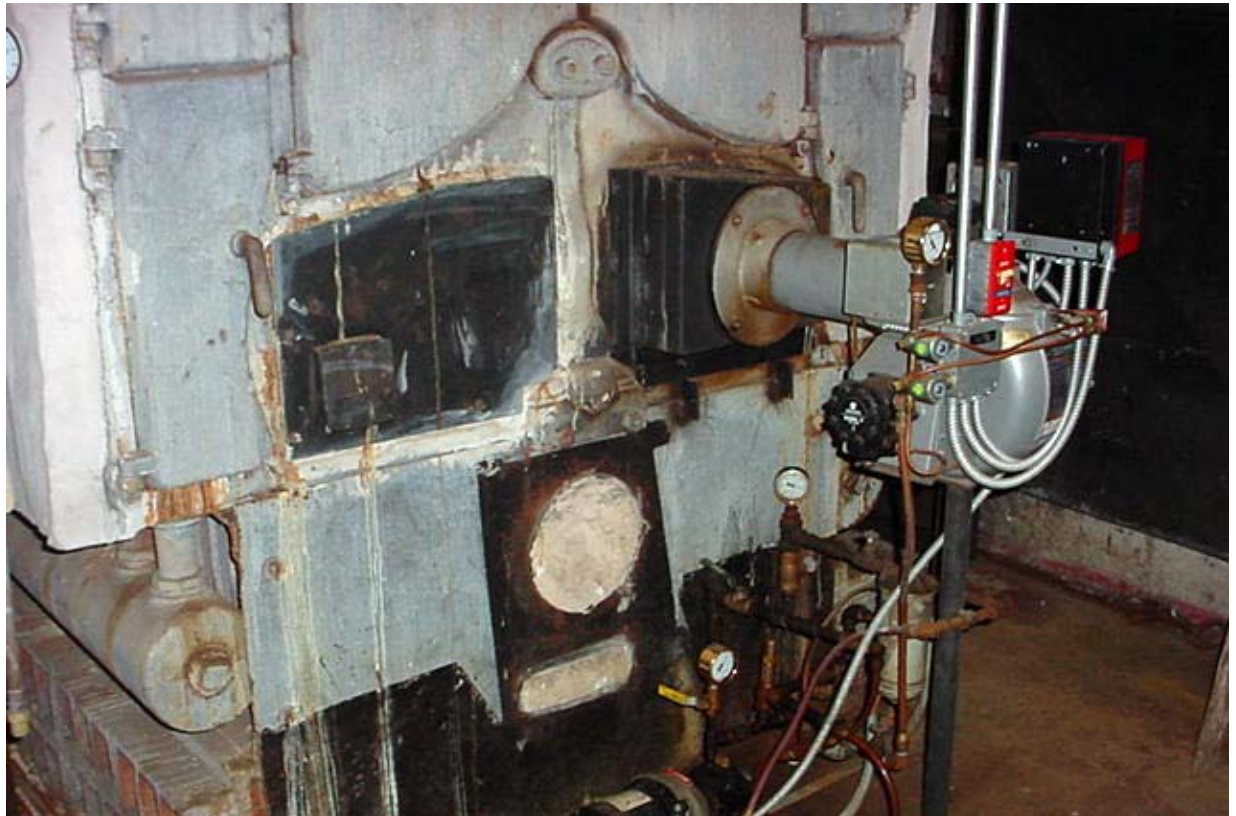
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Heating/Ventilating

- The schools heating and ventilating system, is **old, worn-out and performs poorly**. It is universally seen as a problem.



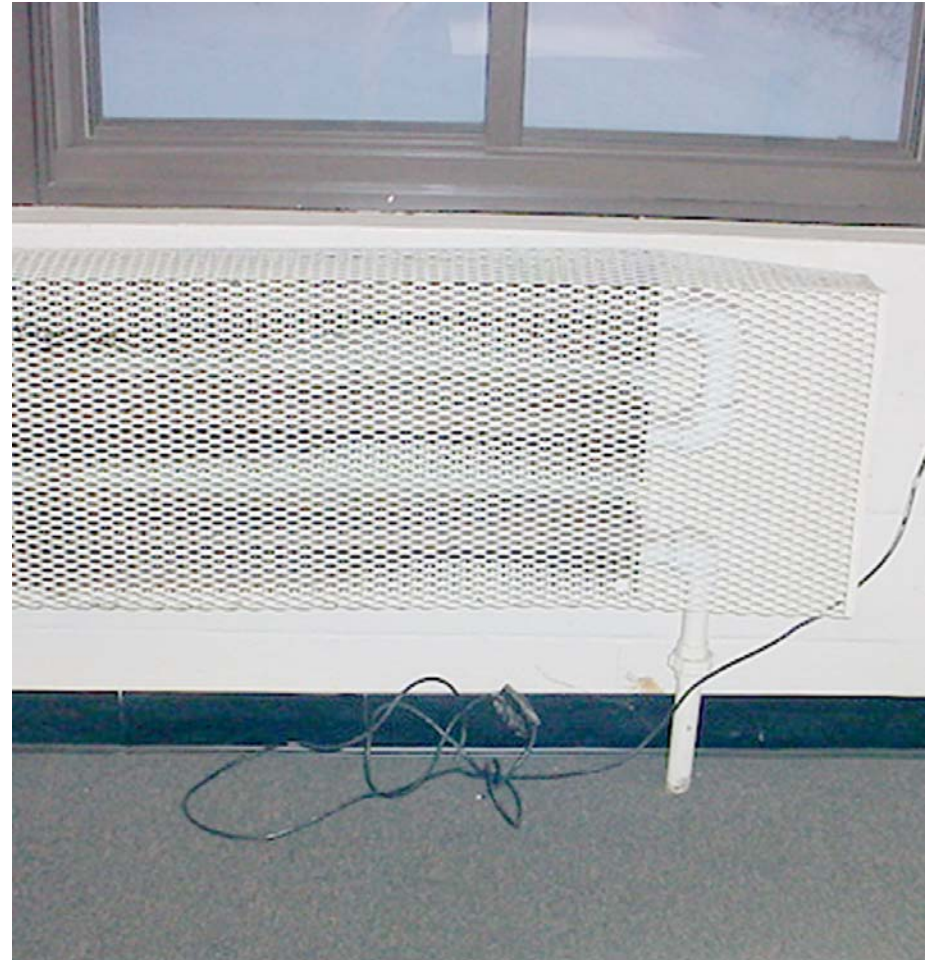
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Heating/Ventilating

- **Ventilation inadequate** to support a comfortable learning space
- **Temperature control inadequate** to support a comfortable learning space



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Electrical Service

- Electrical service and distribution is **old**, in fair to **poor** condition, **offers little room for expansion**, and **includes hard to replace components**.
- Panels have limited or no capacity for expansion. Panels are located in classrooms or corridor spaces, typically flush within block walls making **access for additional circuits difficult and costly**.



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Electrical Systems

- **Recommend a complete replacement** of the electrical power distribution systems including electric service, panels, and feeder wiring.



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Branch Circuits



- Existing conditions likely include overloaded junction boxes, inadequate or non-existent ground wiring, and inadequate or non-existent conduit and cable support for wires above ceilings.



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Receptacles and Outlets

- There are inadequate electrical circuits and outlets to support current technology uses.
- Renovations will trigger electrical code issues



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Branch Circuitry

- **Renovations will trigger code issues** (electrical systems, or related mechanical work or owner equipment work which calls for new electrical circuitry, or architectural work including removal and replacement of presently exposed ceilings or original ceilings above the suspended ceilings.)
- **Recommend replacing the branch circuit wiring within the building completely.**



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Hazardous Materials

- Suspect ACBM and other Hazardous Materials in the building are primarily floor tiles and mastics, which are currently in good condition.
- Other suspect items include:
 - Older green chalkboards
 - Some black lab benches in room 207
 - Any remaining older roofing materials



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IAQ

- Air sampling for Fungus and air-borne Bacteria at three locations at the lower level, which is partially below grade, and one at the upper level.
- For comparison purposes, sampling was done outside the building as well.
- **Bacterial and fungi levels were within recommended guidelines in all areas tested**, and do not represent a significant health concern.
- Levels of air-borne bacteria traditionally associated with human occupancy were higher than outdoors, as is expected.
- **Even though no health hazard appears to exist, better fresh-air ventilation would reduce the air-borne bacterial levels found.**



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Classrooms

- Comparatively, Marlborough classrooms have
 - harsh lighting
 - poor ventilation
 - little natural light
 - Inflexible spaces
 - little sound control
 - are unattractive



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Classrooms

- The nicest school classrooms have
 - soft lighting
 - good ventilation
 - View and natural light
 - Flexible spaces
 - little sound control
 - are pleasant spaces in which to learn and work



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Is There Enough Space?

- School has only 50% of the recommended teacher support area.
- School has 66% of the recommended minimum administrative area.
- School has 80% of the minimum classroom area needed.



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What About Support Spaces?

- Existing support spaces for teachers score poorly, with respect to contemporary standards, with regard to:
 - General Storage
 - Teacher Offices
 - Teacher Break Room
 - Conference Room / Meeting Room
- Spaces fails to meet state standards for teacher workrooms.



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Lower Level Problems

- Art Room
- Kiln Room



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Lower Level Problems

- Necessary and mandated educational functions that didn't exist in 1974 are accommodated in substandard space.



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Comprehensive Assessment

Social Areas

	Susan Leach	Jim Carley	Timothy Ruehr	Cathy Blanchard	Sylvie Rice	Peggy & Bill Heyman	PK Massey	John Norethcott	Bruce Lyman	Group Average
Outside quiet areas for eating	2	1	2	2	1	1	1	1	1	1.4
Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas, etc)	3	1	2	1	2	1	2	1	2	1.7
Public areas fostering a sense of community	2	1	2	2	2	1	2	1	2	1.7
Students personalizing their own places	2	1	2	2	2	1	2	1	2	1.7
Inside quiet areas for eating	2	2	1	2	1	1	3	1	3	1.8
Places where students can be noisy and engage in physical activity	1	1	2	2	3	2	3	2	4	2.2

Media Access

	Susan Leach	Jim Carley	Timothy Ruehr	Cathy Blanchard	Sylvie Rice	Peggy & Bill Heyman	PK Massey	John Norethcott	Bruce Lyman	Group Average
Media and technology access for teachers in the learning environments	2	1	2	2	3	1	1	2	1	1.9
Communications access in the learning environments (phones, etc)	3	1	2	2	2	1	3	2	3	2.1
Media and technology access for students in the learning environments	2	2	1	3	3	2	2	2	1	2.1

Transition Spaces & Circulation Routes

	Susan Leach	Jim Carley	Timothy Ruehr	Cathy Blanchard	Sylvie Rice	Peggy & Bill Heyman	PK Massey	John Norethcott	Bruce Lyman	Group Average
Circulation routes within and among learning environments	2	1	2	2	2	1	3	1	3	2.0
Clear markings for interior circulation routes	2	1	2	2	3	1	3	1	2	2.0
Transition spaces inside and outside of the learning environments	2	1	2	2	2	1	3	1	3	2.1
Hallways as passageways within the school	2	1	2	2	3	3	3	3	3	2.4

RATING SCALE
 1 not well at all - must be changed somehow
 2 just barely - improvements are much needed
 3 unsure-unable to provide an opinion
 4 reasonably well - but could be improved
 5 well - needs very little improvement

Surveys

Post Occupancy Evaluation Classroom Learning Environment

Lower Level
Upper Level

Question 4- Please rate the quality of the CLASSROOM in terms of the following:

atial

- Access to storage
- Adequacy of shared space
- Technological adaptability
- Connection between activities
- Access to lockers
- Adequacy of personal space
- Adequacy of overall space
- Access to outdoors

sical

- Color
- Flexibility of use
- Acoustics
- Esthetic appeal
- Odor
- Temperature
- Visual distraction
- Safety
- Security
- View to the outside
- Lighting
- Ceiling height

niture

- Flexibility in furniture arrangement
- Wall boards for display
- Fixed features (walls, windows)
- Movable furniture (desks & chairs)
- Other

	Kindergarten	K & First grade	First grade	Second grade	Third grade	Grades 4-6	Language Arts 5/6	Language Arts 7/8	Social Studies	Guidance	Elementary special ed	Instructional aide	Speech pathologist	Athletic director	Principal	SAY 29	School Board	School Board	Selectman	Group Average	Lower Level Group Average	Upper Level Group Average
Access to storage	1	1	1	1	1	2	1	1	1	1	1	3	2	2	2	1	1	1	1	1.3	1.1	1.5
Adequacy of shared space	2	2	1	2	2	1	2	1	1	1	4	1	1	2	3	1	1	1	1	1.8	2.3	1.3
Technological adaptability	2	1	1	2	1	1	3	1	1	1	2	3	2	2	3	1	1	1	1	1.8	1.9	1.9
Connection between activities	1	2	2	2	1	3	1	2	1	1	3	2	2	2	2	1	1	1	1	1.9	2.0	1.9
Access to lockers	1	1	1	3	1	4	2	2	1	1	2	2	1	2	1	1	1	1	1	2.0	2.0	2.0
Adequacy of personal space	2	1	1	2	4	1	1	2	3	3	4	1	2	2	3	1	1	1	1	2.1	2.4	1.9
Adequacy of overall space	2	2	1	2	4	1	2	2	3	3	4	1	3	2	3	1	1	1	1	2.3	2.6	2.1
Access to outdoors	2	1	2	4	4	3	4	1	2	1	3	3	3	2	4	1	1	1	1	2.6	2.9	2.6
Color	3	1	1	3	2	1	3	1	1	1	2	2	2	1	2	1	1	1	1	1.6	1.6	1.6
Flexibility of use	2	1	1	2	3	1	1	1	2	2	2	3	1	2	3	1	1	1	1	1.8	2.0	1.9
Acoustics	2	1	1	2	2	1	2	1	3	3	2	2	1	2	3	1	1	1	1	1.8	1.9	1.9
Esthetic appeal	2	1	2	1	2	2	3	2	1	1	2	2	2	1	2	3	1	1	1	1.9	1.9	1.9
Odor	1	1	1	2	3	3	2	2	1	1	2	3	2	3	2	3	1	1	1	2.1	2.0	2.1
Temperature	3	2	1	3	2	2	4	3	2	2	2	2	2	3	2	2	2	2	2	2.2	2.1	2.3
Visual distraction	2	1	2	3	3	1	4	2	2	2	3	3	2	3	2	1	1	1	1	2.4	2.3	2.4
Safety	2	1	2	3	3	3	3	2	3	3	3	3	2	3	3	1	1	1	1	2.6	2.4	2.6
Security	3	1	2	2	3	3	3	1	3	3	3	3	3	3	3	3	3	3	3	2.6	2.4	2.6
View to the outside	2	1	1	3	2	4	4	4	2	4	3	2	4	2	4	4	4	4	4	2.7	2.3	3.3
Lighting	3	2	2	3	3	4	3	3	4	2	4	2	3	3	3	2	2	2	2	2.8	2.6	3.0
Ceiling height	3	1	2	3	4	4	3	4	3	4	3	3	2	2	3	1	1	1	1	2.8	2.7	3.1
Flexibility in furniture arrangement	2	1	2	2	4	1	2	2	3	1	2	1	2	2	3	1	1	1	1	2.0	2.3	1.9
Wall boards for display	3	1	2	3	2	1	1	3	2	3	3	2	2	2	2	2	2	2	2	2.2	2.3	2.0
Fixed features (walls, windows)	2	1	2	3	2	3	3	2	1	3	2	2	2	2	3	1	1	1	1	2.2	2.1	2.3
Movable furniture (desks & chairs)	3	2	2	3	3	1	3	3	1	4	2	2	2	2	3	1	1	1	1	2.4	2.7	2.3
Other	3	1	2	3	3	1	3	3	1	4	2	2	2	2	3	1	1	1	1	2.4	2.7	2.3

RATING SCALE
 1 poor
 2 fair
 3 good
 4 excellent



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Social Areas

- Social areas most lacking within the facility are:
 - Outside quiet and/or soft areas for eating
 - Private spaces for students both inside and outside building (reading areas, quiet places, reflection areas, listening areas, etc)
 - Public areas fostering a sense of community



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The Site

- Seen as too small, poorly laid out and constructed. Scores poorly with regard to:
 - Appropriate pathways to and around the building
 - Routes arranged to reflect one-way flows, regular movement patterns, and potential for traffic congestion.
 - Green (landscaped) areas
 - Outdoor learning environments that include natural elements
- Architectural features that can be improved include:
 - Visibility of main entrance for students and visitors
 - Control of internal and external noise levels



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Needs

- Corrections of all Fire Safety, Code and ADA issues
- Modernizing the Heating & Ventilation system, provide true ventilation in classrooms
- Flexible / adaptable classrooms
- Work centers
- Providing more storage area for teachers
- Larger rooms where rooms are substandard by State Educational Standards
- Better technology accommodation
- More site for recreation / field space



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Wants

- Make the building more attractive, adding character and charm and moving away from a “factory look”
- Changing the school to reflect an image of Marlborough’s community pride, and providing attractive, welcoming space for community events
- Providing ‘softer’ outside spaces, with a well defined ‘true’ front entry to the building
- Providing a better bus drop off, and providing space for parents to meet and/or wait for children
- Improve functioning and aesthetics of classrooms
- Improve acoustics (quiet areas for students, etc) between rooms
- Provide more storage area for teachers



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Wants

- Provide more lockers and/or student storage areas
- Provide more conference space
- Provide an up to date Science classroom
- Modernize the Library (media center)
- Provide Cafeteria improvements, perhaps a space for lunch and a space for gym
- Provide an outside loading dock and service door
- Provide softer lighting
- Eliminate exposed piping in corridors
- Provide healthy materials / finishes in classrooms



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I wish my school....

- Had lockers in the locker rooms
- Was “healthier” air & mold
- Had adjacent athletic facilities and greenspace for sports fields
- Was a little bigger
- Was visually impressive and looked nicer
- Had no maintenance
- Had different rooms for gym and lunch
- **Had French classes**
- Had better parking facilities
- Did not have classrooms in the basement
- Is safe
- Had more space around it to play
- Had nice ceilings



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I wish my school....

- Had larger middle school area
- Had a separate cafeteria for lunch
- **Was more welcoming from the outside**
- Had an adequate media center
- Had more variety of classes
- Had separate eating areas
- Had higher ceilings (more open)
- Had home economic classes
- **Had cooking classes**
- Had an efficient heating system
- Had a first rate fire detection system and adequate egress routes
- Had its own gym that is separate from the cafeteria
- Had a welcoming space for community events
- Had more storage
- Had wider corridors



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I wish my school....

- Had more class options
- Would continue as a wonderful place to learn!
- Had an air exchange system
- Had better chairs
- Had more interior space so it didn't feel so crowded
- Had even heat and fresh air
- Had newer text books
- Let us help with the rules (we have a say)
- Was a central or focal point of the town
- Had newer text books and better sport stuff
- Incorporated all the latest design features to make it the best K-8 learning facility in the state
- Was built to last another 50 years



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Common Sense

“Use it up, make it do, wear it out,
or do without”

The school is over 50 years old. It has been
used up, you have made do, you have worn it
out.

Do you really want to do without?



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What Happens Next

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