

## Massachusetts School Building Authority

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School District West BridgewaterDistrict Contact Patricia Oakley TEL: (508) 894-1230Name of School West Bridgewater Jr-SrSubmission Date 11/9/2009

### Note

#### The following Priorities have been included in the Statement of Interest:

1.  Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of school children, where no alternative exists.
2.  Elimination of existing severe overcrowding.
3.  Prevention of the loss of accreditation.
4.  Prevention of severe overcrowding expected to result from increased enrollments.
5.  Replacement, renovation or modernization of school facility systems, such as roofs, windows, boilers, heating and ventilation systems, to increase energy conservation and decrease energy related costs in a school facility.
6.  Short term enrollment growth.
7.  Replacement of or addition to obsolete buildings in order to provide for a full range of programs consistent with state and approved local requirements.
8.  Transition from court-ordered and approved racial balance school districts to walk-to, so-called, or other school districts.

**Potential Project Scope:** Renovation/ Addition

**Is this SOI the District Priority SOI?** YES

**The MSBA ID for the District Priority SOI:** 2010 West Bridgewater Jr-Sr

#### District Goal for School: Please explain the educational goals of any potential project at this school

The district goal for the West Bridgewater Public Schools is to support and enhance all aspects of the educational program and support services for student learning which can be achieved through more square footage per student, advanced technologies, and a safe and secure environment. The current Middle Senior High School is over 55 years old and needs a major renovation and upgrade to meet today's standards of teaching and learning for 21st Century skills. The West Bridgewater Public School's mission statement is to work together with home and community to provide our students a safe environment in which to acquire the knowledge, skills and values needed for success in a diverse and global society of the 21st Century.

#### District's Proposed Schedule: What is the District's proposed schedule to achieve the goal(s) stated above?

The district is ready to proceed with the renovation as soon as MSBA Approval is provided. The School Committee meets monthly and Finance Committee and Board of Selectmen are willing to vote at any time. A Special Town Meeting can be held to make a final vote. All voting can be completed within 2 months of being approved by the MSBA. The Middle Senior High School is on warning by NEASC due to the facility and something must be done within 2 years to avoid losing accreditation.

**Is this part of a larger facilities plan?** NO

**If "YES", please provide the following:**

**Facilities Plan Date:**

**Planning Firm:**

**Please provide an overview of the plan including as much detail as necessary to describe the plan, its goals and how the school facility that is the subject of this SOI fits into that plan:**

**Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 15 students per teacher.**

**Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 15 students per teacher.**

**Is there overcrowding at the school facility? NO**

**If "YES", please describe in detail, including specific examples of the overcrowding.**

**Has the district had any recent teacher layoffs or reductions NO**

**If "YES", how many teaching positions were affected? 0**

**At which schools in the district?**

**Please describe the types of teacher positions that were eliminated(i.e art, math, science, physical education, etc.):**

**Has the district had any recent staff layoffs or reductions NO**

**If "YES", how many staff positions were affected? 0**

**At which schools in the district?**

**Please describe the types of staff positions that were eliminated(i.e guidance, administrative, maintenance, etc.):**

**Please provide a description of the program modifications as a consequence of these teacher and/or staff reductions,including the impact on district class sizes and curriculum.**

Does Not Apply

**Please provide a detailed description of your recent budget approval process including a description of any budget reductionsand the impact of those reductions on te District's school facilities, class sizes and educational program.**

After the Superintendent and Business Manager build the budget, it is presented and approved to the School Committee in March. The School Committee presents the budget to the Board of Selectmen and the Finance Committee in May. In June, the budget is approved during an open Town Meeting. In June 2009, the Town appropriated a level-funded budget of \$9,303,100 which meant a reduction of \$150,000 from a service-funded budget. We were able to achieve this reduction by energy savings, retirement savings, a 0.25 FTE reduction in a Business Clerk, Agricultural Tuition reduction, and an increased athletic fee. Due to budget reductions, there are fewer funds to dedicate to building improvements that are required by NEASC for accreditation. Per NEASC, the following items need to be addressed to be taken off warning: Unreliable and inconsistent heating system which frequently disrupts teaching and learning, ventilation in the science labs, relocating gas shutoffs outside science labs, lack of handicap accessible lavatories, outdated wiring and limited outlets, presence of open wiring, limited network drops, inadequate storage, outdated, mismatched and non-functioning furniture and electronic equipment, no running water in some science labs, lack of privacy and confidentiality in the wellness center.

## General Description

**BRIEF BUILDING HISTORY: Please provide a detailed description of when the original building was built, and the date(s) and project scopes(s) of any additions and renovations (maximum of 5000 characters).:**

This 1950 facility, originally containing 95,780 gross square feet and built on a 21.2 acre site has undergone two small additions; one in 1971 of 20,000 gross square feet and a second in 2002 of 2,000 gross square feet. In 2000, the school underwent a \$900,000 renovation to upgrade the library area to a Media Center and the relocate the main office at the front entrance of the building for security purposes. For the most part, while the building has benefited from sustained maintenance and appears to have the benefit of quality materials when constructed, currently the building is “tired” and in need of major system replacements and up-grades as additional repairs are not yielding the results required by today’s educational standards.

Included as part of the up-grade and/or replacement are the following:

1. Roofing- 20% of the roof is at the end of its life cycle and has failed causing significant leaks throughout the building, especially this winter. From 2007 - 2009, 10 sections have been replaced but more are in desperate need of repair.
2. Masonry/brick repairs – Water infiltration is occurring at various locations in the building, especially the gymnasium and auditorium.
3. Windows Replacements- 26 of the 38 classrooms have been retro-fitted with high performance windows as well as the hallways in the front of the building. Limited funds have not permitted additional replacements in the remaining 12 classrooms, remaining hallways, or the gymnasium.
4. Interior doors, walls, flooring, and ceilings – The original materials have been repaired, resurfaced and repainted and after 55+ years, need replacement. Some classrooms have suspended ceilings installed, but others are the original 15 feet high that are not efficient for heating. Classrooms with carpet are slowly being replaced with tile. The wood floor is buckling in the gymnasium.
5. Electrical service – Over the last 55+ years, electrical wiring has been added and the electrical panel upgraded to maintain and operate the necessary needs of the building regarding lighting, sound systems, alarms and computer labs. The usage of technology is increasing in the classroom with the use of items such as digital lab equipment, laptops, and smart board technology, but the existing system is already overloaded and a means of expansion is not possible with the present conditions.
6. Plumbing & septic – The restrooms are well maintained but need to be replaced with new efficient units. The septic system is beyond its life cycle and the Town is starting a 3-year plan this summer to construct a facility to handle the waste. The locker room was remodeled 20 years ago but the design does not allow for privacy so it is seldom if ever used by students. This area needs a complete replacement and redesign. A sump pump with high water alarm needs to be installed in the electrical room in the basement which would be tied to the EMS system. There is not running water in some science labs.
7. Fire & Life Safety – The fire alarm system is 12 years old and functions well. The intercom is functioning, but not in all sections of the building so announcements can't be heard. The building has one elevator that is over 20 years old and needs replacement. Along with electrical upgrades, roof top light fixtures need to be replaced and added around the perimeter of school. Corridor and foyer lighting needs upgrading throughout the school. Magnetic hold opens should be installed on the corridor doors and door hardware needs to be replaced with lever-type hardware. Sprinkler system needs to be installed throughout the building.
9. Technology – All teachers have a desk top computer for attendance and grades and there are 3 computer labs for classes in the building. There are 5 smart boards for use in the building that were purchased in part through the budget and through a private Technology Fund organized by parent volunteers.

**TOTAL BUILDING SQUARE FOOTAGE: Please provide the original building square footage PLUS the square footage of any additions.:**

117780

**SITE DESCRIPTION: Please provide a detailed description of the current site and any known existing conditions that would impact a potential project at the site (maximum of 5000 characters).:**

Two major parking areas are in poor condition and need replacement. Walkways need to be redesigned to coordinate pedestrians and vehicles with the traffic flow of today rather than that of 55 years ago. The entrance circular drive needs to be

reconfigured to allow a safe egress into heavy traffic on the community's major road. Playing fields need grading and sloping to prevent "ponding". All fields appear to have heavy use and require renovation to keep them usable. Fences also need repairing as there are gaps and broken sections around the school grounds. Handicap parking and accessibility into the building need to be improved.

**BUILDING ENCLOSURE: Please provide a detailed description of the building enclosure, types of construction materials used, and any known problems or existing conditions (maximum of 5000 characters):**

The Building exterior is masonry with concrete sills. The building is structurally sound but the interior is tired. Masonry is repointed when cracked but no major repairs have been completed on the exterior of the building.

**Age of EXTERIOR WALLS (In Years):** 54

**Year of Last Repair or Replacement:** 1955

**Description of Last Repair or Replacement:**

original walls

**Age of ROOF(In Years):** 20

**Year of Last Repair or Replacement:** 2009

**Type Of ROOF** Tar and Gravel

**Description of Last Repair or Replacement:**

Replaced 3 larges sections of roof for \$340,000 allocated by Town Article.

**Age of WINDOWS(In Years):** 54

**Year of Last Repair or Replacement:** 1999

**Type Of WINDOWS** Half of the windows are Single Pane and half are Double Pane

**Description of Last Repair or Replacement:**

single paned windows were replaced with double paned windows. The windows in the front of the school still need to be replaced.

**MECHANICAL and ELECTRICAL SYSTEMS: Please provide a detailed description of the current mechanical and electrical systems, and any known problems or existing conditions (maximum of 5000 characters):**

The current mechanical and electrical systems are below par for the technology advances of today. Wiring has been added over the years and the electrical panel upgraded to maintain and operate the necessary needs of the building but the system is overloaded to meet the increase usage of technology in the classrooms. Per the 2009 NEASC report, there are limited electrical outlets, usually only one per classroom, and network drops and therefore unable to support the increased use of technology needed to teach 21st century skills. Also, there is a presence of open wiring and extension cords throughout the main corridors and over door casings. Intercoms need to be updated so announcements can be heard throughout the entire school. Emergency lights and exit signs need upgrading. The NEASC report also notes that the heating system is unreliable and inconsistent which frequently disrupts teaching and learning. Although one boiler was replaced in 2008, there is another boiler that still needs to be replaced. Also, there are over 80 return gate valves for the domestic hot, cold and steam returns that are in danger of failing in closed position should they be utilized due to their advanced age.

**Age of BOILERS(In Years):** 54

**Year of Last Repair or Replacement:** 2008

**Description of Last Repair or Replacement:**

Replaced one boiler at the Middle Senior High School for \$88,500.00

**Age of HVAC SYSTEM (In Years):** 54

**Year of Last Repair or Replacement:** 2007

**Description of Last Repair or Replacement:**

Installed an EMS system

**Age of ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM(In Years):** 54

**Year of Last Repair or Replacement:** 2000

**Description of Last Repair or Replacement:**

Installed 2 new services and 1 new transformer

**BUILDING INTERIOR: Please provide a detailed description of the current building interior including a description of the flooring systems, finishes, ceilings, lighting, etc. (maximum of 5000 characters):**

The paint on the walls are peeling and many walls have water damage due to the roof leaks. All walls and ceilings have been repaired, resurfaced and painted throughout the years but need replacement. Some classrooms have suspended ceilings but others have the original 15 feet high ceilings that are insufficient for heating. The original ceiling tiles are falling in classrooms and hallways. Carpet is worn and stained. Many rooms have had the carpet removed and tile installed. The wood floors in the gym are buckling and fitness rooms need rubber flooring. The emergency lighting needs to be upgraded so the hallways are better lighted and exit signs visible. The building interior is tired and old and in need of repair. Corridor lockers are failing and do not meet the needs of the the current students. Asbestos is present in the walls, floors, and ceilings as well as the basement.

**PROGRAMS and OPERATIONS: Please provide a detailed description of the current programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc.:**

West Bridgewater Middle Senior High School is an academic high school that offers the following program of studies:

English - 4 years

Social Studies - 4 years

Mathematics - 4 years

Science - 4 Years

Foreign Language - 2 years

Fine Arts - 2 years

Communications - 0.5 year

Business/Technology - elective

Science, Technology, and Engineering – Currently, the three high school science labs are too small and outdated to support a hands-on inquiry based approach to science and engineering. Computer technology, which includes data collection software, probes, engineering design software such as CAD and architecture programs are needed in order to be able to collect data in an organized way, analyze and interpret experimental results, and to implement the design process. In engineering, students are asked to design and build prototypes, test the prototypes, and make modifications as needed. An outdated, undersized science lab with limited computer stations does not allow for this type of hands-on approach. The outdated electrical system and lack of network drops hinders a fully functional science, technology and engineering programs that would sufficiently support the teaching of 21st century skills.

Health and Physical Education – Currently students in grades 7 –12 take physical education and all students in grades 7-10 take health. The building currently houses one gymnasium and a small weight room. More space is needed to run a full health and wellness program for all students. Space is limited and therefore, middle school and high school students must share the gymnasium during the same teaching blocks. The health and wellness areas of the school do not provide privacy and confidentiality.

Foreign Language and ELL Tutoring Programs – Language acquisition research supports that language learners must internalize a language’s components such as its sound system, basic lexicon, and grammatical structure, all of which takes time and practice. Currently Grade 8 students take Spanish or French I, and high school students have a two-year requirement in a foreign language. The building does not currently house a language lab to support language acquisition. A language lab would support both an interpretive approach of teaching skills through listening and reading, and a presentational approach of teaching skills through speaking and writing. In addition, ELL students would benefit from a language lab.

Business/ Instructional Technology – The building currently houses three high school computer labs, one middle school computer lab and 16 computers in the library media center. The two high school labs are outdated and have computer classes scheduled throughout the day. Therefore, there is not equal access to computers for teachers to incorporate instructional technology into their everyday curriculum. In addition, teachers would be able to integrate technology into the everyday

curriculum by taking their classes to the lab for writing workshops, research, SAT and MCAS tutorials, and many other software programs available to help enhance curriculum.

The Arts – The building currently has two classrooms that house middle school and high school art classes. General art, art I-IV, portfolio art, illustration/calligraphy, and art history are currently offered in grades 7-12. Additional classroom space, upgraded facilities, and computer technology would allow the offering of a variety of graphic arts and photography classes. For music instruction, classes have use of one music room and an auditorium. The music room design is not conducive to a large ensemble and there is not proper seating for instruments and music stands. Many practices take place in the auditorium however, it lacks proper lighting and a pit area, and many times other events are booked for the auditorium and practices must be moved.

**CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core Educational Spaces within the facility, a description the number and sizes (in square feet) of classrooms, a description of science rooms/labs including ages and most recent updates, and a description of the media center/library (maximum of 5000 characters):**

Per the School Facility Strategic Planning Study conducted, the core educational spaces are as follows:

English Classrooms - 6 rooms - average of 789 square feet - 75% space utilization

Foreign Language Classrooms - 5 rooms - average of 739 square feet - 63% space utilization

Math Classrooms - 6 rooms - average of 691 square feet - 81% space utilization

Social Studies Classrooms - 5 rooms - average of 793 square feet - 84% space utilization

Science rooms & labs - The 3 high school science labs are outdated and undersized with limited computer stations does not allow for this type of hands-on approach. New computers have been purchased and neutralizing tanks were removed and replaced with new limestone and re-piped neutralizing tanks.

Library and media - The town voted in June 2007 to raise and appropriate funds in the amount \$25,000. This article has been spent on books and computers over the past 2 years but more is needed to meet today's 21st century skills. The current library/media room is currently 4,510 square feet housed with 20 computers and 4 copier machines for student and teacher use. There is also a separate tv/media room that is 2,462 square feet with another 12 computers that were purchased this year. Public broadcasts are done via the tv/media room. There is limited technology in the library/media center due to space and budget restrictions.

**CAPACITY and UTILIZATION: Please provide a detailed description of the current capacity and utilization of the school facility. If the school is overcrowded, please describe steps taken by the administration to address capacity issues. Please also describe in detail any spaces that have been converted from their intended use to be used as classroom space (maximum of 5000 characters):**

Per the School Facility Strategic Planning Study conducted, the core educational spaces are as follows:

English Classrooms - 6 rooms - average of 789 square feet - 74% schedule utilization

Foreign Language Classrooms - 5 rooms - average of 739 square feet - 80% schedule utilization

Math Classrooms - 6 rooms - average of 691 square feet - 76% schedule utilization

Social Studies Classrooms - 5 rooms - average of 793 square feet - 77% schedule utilization

Art Classrooms - 2 rooms - average of 1072 square feet - 61% schedule utilization

Science Classrooms - 5 rooms - average of 893 square feet - 73% schedule utilization

Computer lab Classrooms - 3 rooms - average of 921 square feet - 44% schedule utilization

Resource Rooms - 3 rooms - average of 513 square feet - 89% schedule utilization

Music Rooms - 3 rooms - average of 1,655 square feet - 56% schedule utilization

Gymnasium - 1 room - 6,750 square feet - 100% schedule utilization

Overcrowding is not an issue; however, physical education classes are crowded due to only one gymnasium. More space is needed to run a full health and wellness program for all students. Students must share the gymnasium during the same teaching blocks to accommodate the program. An increase in space is needed, not for overcrowding, but, to meet today's standards of

teaching and learning. Also, the lack of space hinders privacy and confidentiality.

In addition, the small cramped classrooms do not support delivery of instruction for the 21st century.

**MAINTENANCE and CAPITAL REPAIR: Please provide a detailed description of the district's current maintenance practices, its capital repair program, and the maintenance program in place at the facility that is the subject of this SOI. Please include specific examples of capital repair projects undertaken in the past, including if any override or debt exclusion votes were necessary (maximum of 5000 characters).:**

West Bridgewater has an outstanding Grounds and Maintenance crew. We have daily maintenance practices which include cleaning, maintaining the fields, small repairs including electrical work. Every summer, the maintenance department does bigger repairs on the Middle Senior High School. New lockers are installed, rooms painted, repair broken chairs, steam clean carpets, remove rugs and install tile, strip and wax hallway floors, and inspect, test and upgrade emergency lighting and fire extinguishers. For large capital projects, the town calls for a special meeting to appropriate funds to the school. Over the past few years, the town has appropriated \$50,000 for repairs to the EMS system, \$20,000 for a consultant to do a feasibility study to the Middle Senior High School and \$35,000 for a new phone system. In 2008, the School Department funded a new boiler installation in the amount of \$88,500 through the town appropriated budget. In 2009, \$340,000 was spent on repairing 3 roof sections through a Town Article. The Town of West Bridgewater has been very supportive of capital repairs but the current economic state and aging building is hindering the commencement of capital projects.

**Priority 1**

***Please provide a detailed description of the perceived health and safety problems below. Attach copies of orders or citations from state and/or local building and/or health officials.***

Under the West Bridgewater Middle Senior High School Auditorium stage, there is a mold problem due to the dirt floor and ground water coming into the basement. This is harmful for the students and staff and could lead to dangerous respiratory problems and skin irritations.

Per the West Bridgewater Public School Asbestos Management report, there is asbestos in the disabled boiler, around the domestic hot and cold water piping, around the HVAC piping, behind walls and above ceilings. The asbestos insulation is falling off and the clamps have rusted off the pipes from the moisture and age of the insulation. It is deteriorating quickly which makes it friable. If there is a leak in the pipes, the asbestos needs to be professionally removed before any repairs can be made. Many respiratory health concerns are probable if the asbestos is not removed.

The Emergency Lighting is currently running on battery power and stays on only long enough to evacuate the building and does not give enough time for emergency and maintenance staff to address some situations. The emergency lighting needs to be hard wired to the circuit board.

Since there is still the original ceiling in some classrooms and hallways, there is a threat of ceiling tiles falling on students and staff. Many tiles have fallen and then replaced. A drop ceiling needs to be installed for safety reasons.

The ventilation in the first floor labs is not fully operational which is dangerous for the students and staff. The maintenance staff has repaired many units but new ventilation needs to be installed to avoid any health hazards when conducting chemistry and biology experiments. Also, the gas shutoffs are located outside the science labs and are in the hallways. These need to be reinstalled in the classrooms so the teachers are able to access them more quickly and easily in case of an accident.

Each year per School Committee policy, all schools conduct two lockdown drills under the supervision of town safety officials. The lack of a public address system in all areas of the school building is cause for confusion among students and staff. This confusion has severe safety implications that could compromise the health, safety and welfare of students, faculty and staff. In addition, it is difficult to implement required safety protocols such as bomb scares, lockdowns, canine searches, etc. The broadcast system needs to be expanded to reach locker rooms, the cafeteria offices and the maintenance department.

There is one twenty year old elevator in the Middle Senior High School. It has taken many site visits and repairs to pass the Annual State Inspection. There was an electrical fire in the elevator room within the past year. The motor was replaced but the electrical system and elevator need to be upgraded before there is a problem while occupied.

Leaking roof sections need to be repaired to prevent more water damage and mold from spreading in the Middle Senior High School. Also, roof top fixtures need to be installed to provide security in the dark as the Middle Senior High School holds many evening activities, games, dances, and private use for the community.

Fire Safety is a concern also. A sprinkler system needs to be installed throughout the building and magnetic hold opens should be installed on all corridor doors to allow for an safe evacuation during emergencies and drills.

ADA Accessibility is an issue in the parking lots, walkways, and restrooms. More handicap parking spaces are needed and the front drive through should be widened to accommodate vans. The curbing needs to be repaired to allow wheelchair access. Walkways need to be paved to allow for easy access to all entrances. More handicap lavatories need to be installed in the media center, library and teacher's room.

More storage is needed to reduce clutter in the hallways and auditorium stage. Evacuation routes and emergency exits are compromised by the lack of storage and blocked with teaching supplies, extra-curricular activity supplies and furniture.

There are over 80 valves for the domestic hot and cold water and heating system that are either unable to be opened or if opened, will not be able to be closed or will fail and then there would be a flood in the basement. This would result in closing the school for repairs since we are unable to isolate the problems due to inoperable valves and an increased threat of mold and asbestos problems.

**Priority 1**

*Please describe the measures the School District has taken to mitigate the problem(s) described above.*

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At Special Town Meeting in May 2007, voters agreed to divert funds approved in June 2006 for repair of the roof at one of the elementary schools to the high school to begin replacement of sections that leaked and failed. In 2009, The Town approved a \$340,000 article to replace three more sections of the roof that were leaking. The major sections have been repaired but there are still leaking areas that need to be repaired.

Parking spaces were taken away from the general public to accommodate more handicap parking spaces. The lavatories need a large capital funding to be renovated for handicap accessibility.

In October 2007, an Asbestos Management Report was initiated. Building occupants were notified of the presence of asbestos and warning signs have been posted adjacent to any friable and non-friable ACM in routine maintenance areas. Employees of the maintenance department will attend classes to learn more about the proper care of asbestos.

The basement is kept as dry as possible to assist in keeping the mold problem to a minimum.

Valves are changed in the domestic hot and cold water pipes and the heating system when problems arise.

Due to budget constraints, we have been unable to correct the broadcast system, emergency lighting, elevator and sprinkler system. All funds have been assigned to emergency repairs as they arise.

**Priority 1**

***Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.***

The district goal for the West Bridgewater Public Schools is to support and enhance all aspects of the educational program and support services for student learning which can be achieved through more square footage per student, advanced technologies, and a safe and secure environment. The current Middle Senior High School is over 55 years old and needs a major renovation and upgrade to meet today's standards of teaching and learning. The district has attempted to enhance the facility, however, these are just band-aids to a much larger infrastructure problem. The building as it exists does not support the programmatic demands and current standards of a 21<sup>st</sup> century education. The heating system has failed in the past to certain parts of the school building. Students had to be shuffled to areas of the school that still received heat. The below par electrical system prohibits certain technology to be installed in the classrooms which does not support today's standards of education. Adequate ventilation needs to be installed in the science labs and kiln room to prevent any health issues. Better office, nurse's office and resource rooms need to be created to ensure privacy and confidentiality. The tired school is a distraction for the students and teachers while they are trying learn and teach. The lack of an intercom system in all parts of the building were found to cause confusion for the students and teachers during the policy mandated lock down drills.

**Please also provide the following:****Name of Firm that performed the Study/Report:**

Strategic Building Solutions

**Date of Study/Report:** 6/1/2007**Synopsis of Study/Report:**

The report states that the school building is structurally sound but the interior and systems are tired, old, obsolete and in need of repair and placement.

**Is the perceived Health and Safety problem related to asbestos?:** YES

**If "YES", please describe the location in the facility, if it is currently friable, and the mitigation efforts that the district has undertaken to date.:**

Asbestos is located in the walls, ceilings and flooring. It is also located around the domestic hot and cold water pipes, the heating system pipes, and old boiler. Some of the asbestos around the piping has become friable. The West Bridgewater School Department has an Asbestos Management Plan but budget constraints have hindered the removal of the friable asbestos.

**Is the perceived Health and Safety problem related to an electrical condition?:** YES

**If "YES", please describe the electrical condition, any imminent threat, and the mitigation efforts that the district has undertaken to date.:**

The electrical system needs upgrade and additional power is needed in classrooms and offices. Lighting is dated and should be replaced with higher efficiency lighting. Lights are slowly being replaced but we are unable to upgrade electrical system due to budget constraints. Also, new emergency lighting and exits signs need to be installed to ensure safety in the case of an emergency.

**Is the perceived Health and Safety problem related to a structural condition?:** NO

**If "YES", please describe the structural condition, any imminent threat, and the mitigation efforts that the district has undertaken to date.:**

**Is the perceived Health and Safety problem related to the building envelope?:** NO

**If "YES", please describe the building envelope condition, any imminent threat, and the mitigation efforts that the**

**district has undertaken to date.:**

**Is the perceived Health and Safety problem related to the roof?:** YES

**If "YES", please describe the roof condition, any imminent threat, and the mitigation efforts that the district has undertaken to date.:**

Although 10 sections of the roof have been replaced from 2007 - 2009, the leaks are not fully corrected which creates water damage and the potential of mold. Each year, the West Bridgewater School Department requests funding through Town Articles to correct sections, the public has made it clear that they would prefer a renovation of the high school instead of doing it piece meal.

**Is the perceived Health and Safety problem related to accessibility?:** YES

**If "YES", please describe the areas that lack accessibility and the mitigation efforts that the district has undertaken to date. In addition, please submit to the MSBA copies of any federally-required ADA Self-Evaluation Plan and Transition Plan.:**

Elevator needs to be replaced for handicap accessibility. Parking areas and walkways need to be repaved for safety entering the building. Small parts of parking lots have been repaved. Lavatories in the library, media center and teacher's room need to be renovated to accomodate handicap accessibility.

**Priority 3**

***Please provide a detailed description of the "facility-related" issues that are threatening accreditation. Please include in this description details related to the program or facility resources (i.e. Media Center/Library, Science Rooms/Labs, general Classroom space, etc.) whose condition or state directly threatens the facility's accreditation status.***

The Middle Senior High School (MSHS) had its latest decennial accreditation visit in March 2009. Most recently the Commission on Public Secondary Schools voted in September of 2009 to place the MSHS on "warning" in the standards of instruction, school resources for learning, and community resources for learning. In a letter from the Commission dated October 20, 2009, it states that the "warning" status is based on the following facility related issues:

- the aging, and outdated facility which does not adequately support the instructional needs of teachers and the learning needs of students in order for students to achieve the school's learning expectations
- the lack of widespread access to computer labs, significantly limiting teacher and student use on a regular basis
- the need for science teachers to employ the use of virtual labs because the facility does not support authentic laboratory experiences
- the lack of running water in some science labs
- the small, cramped classrooms which do not support delivery of instruction for the 21st century
- the 1950's facility which severely impedes the delivery of an appropriate educational program and support services for all students
- the unreliable and inconsistent heating system which frequently disrupts teaching and learning
- the ventilation in first floor science labs that is not fully operational
- the location of gas shutoffs that are outside the science labs and in hallways
- the lack of handicapped accessible lavatories
- the absence of fire blankets in some science rooms
- the outdated wiring throughout the building with limited electrical outlets (one) in most classrooms
- the presence of open wiring and extension cords throughout the main corridors and over door casings
- the location of the limited network drops that also prohibit wireless technology
- the inadequate storage with valuable learning space encroached upon for storage, including the rear stage and locker rooms
- The limited space and location of the health services office which lacks confidentiality and privacy for students

**Priority 3**

*Please describe the measures the School District has taken to mitigate the problem(s) described above.*

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Electrical wiring has been upgraded in some areas of the school building specifically, the computer labs.

New computers were added to the library media center in the summer of 2009 and one of the high school computer labs was upgraded summer 2007.

Lab tables were replaced in the chemistry lab and the neutralization tanks have been replaced.

The Nurses office was moved and renovated in 2002 however; the Commission still feels that the new location does not provide enough confidentiality

A new boiler was added in 2008 and an EMS system was installed to control the temperatures in some of the school wings.

A grant has been submitted to acquire wireless technology.

A feasibility study was completed in 2007 in order to create a plan to address facility related issues.

A technology committee was formed in Spring 2009 to devise a 5 year building technology plan.

A Buildings and Grounds committee has been formed as a subcommittee of the Strategic Planning Committee in order to address the facility related issues put forth through the NEASC report.

**Priority 3**

***Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.***

Indicator #3 of the NEASC community resources standard states, *the school site and school plant shall support and enhance all aspects of the educational program and support services for student learning*. The present classroom size and structure of the building is the original design from 55 years ago. Today's standards based approach of teaching and learning requires more square footage per student, advanced technologies, and a safe and secure environment to meet the needs of all learners, in order to ensure that all students have sufficient opportunity to achieve the school-wide academic expectations for student learning.

The district has attempted to enhance the facility as described throughout this statement of interest however; these are just band-aids to a much larger infrastructure problem. As stated in the overview of findings section of the 2009 NEASC report, "The community is diligently fighting an uphill battle to maintain a tired and antiquated facility which is beyond its useful life and significantly hinders the school's ability to provide all students with a suitable education". The building as it currently exists is no longer able to support the programmatic demands and current standards of a 21<sup>st</sup> century education.

Many of the general classrooms are small and cramped and are unable to address program needs and to meet current standards. Small classrooms promote teacher centered instruction, and limit the amount of technology resources used in instruction. Teachers find it difficult to vary instructional practices in order to meet the needs of all learners. Due to the structural limitations of many classrooms, student centered activities such as cooperative learning, role playing, and group work that allow students to be actively engaged in their learning process are limited. These same activities that promote the integration of 21<sup>st</sup> century skills such as communication and collaboration are also limited in an undersized environment. In addition, space constraints limit the use of instructional technology such as interactive white boards, use of video, and internet and computer applications.

The science labs are small, antiquated, and too few to support the full implementation of a 21<sup>st</sup> century science curriculum rich in inquiry and problem solving. Each science classroom has the dual function of a lab and a general classroom. In most cases the undersized rooms cannot fit enough student desks and therefore students must sit at the lab tables during general classroom instruction. The antiquated science facilities do not fully support an authentic hands-on laboratory experience. In addition, the science labs are not wired with sufficient internet drops to allow for multiple computers with internet access, depriving students the skills needed to be competitive in college and the workplace. Due to the lack of a science preparation area, teachers must prepare for labs in the regular classroom. Oftentimes, lab equipment and chemicals are left in the lab areas while classes are shared or unattended due to the lack of science storage space.

The lack of proper storage areas for all departments is evident throughout the building and was first identified in the 1999 NEASC report and is still a problem in 2009. Teachers must store instructional materials, educational equipment, and books in their classrooms, taking up precious instructional space in the already undersized classroom. In addition, the lack of storage space has forced the inadequate storage of chemicals in the science classrooms.

The outdated and undersized auditorium has only one adjacent music room for practice and instruction. Oftentimes multiple sections of music are scheduled at the same time. Therefore, classes are displaced to the small cafeteria or other general classrooms that lack sound proofing and proper acoustics. The auditorium has no pit, lacks proper lighting, and has a small stage area which has limited the types of performances the school can perform. In addition there can be no school wide assemblies due to its small seating capacity.

The outdated wiring and inadequate technological infrastructure impedes the efforts to integrate technology effectively as a tool for teaching and learning in all subject areas. Technology is a 21<sup>st</sup> century tool that can be used as a vehicle to teach all other 21<sup>st</sup> century skills and is a great motivator in the classroom. The use of various advanced technologies is extremely limited due to the

infrastructure of the antiquated facility.

**Please also provide the following:**

**Current Accreditation Status: Please provide appropriate number as 1=Passed, 2=Probation, 3=Warning:** 3

**If "WARNING", indicate the date accreditation may be switched to Probation or lost::** 10/1/2011

**If "PROBATION", indicate the date accreditation may be lost::**

**Please provide the date of the first accreditation visit that resulted in your current accreditation status.:**

3/15/1999

**Please provide the date of the follow-up accreditation visit::** 3/14/2009

**Are Facility related issues related to Media Center/Library? If yes, please describe in detail in Question 1 below.:**

NO

**Are Facility related issues related to Science Rooms/Labs? If yes, please describe in detail in Question 1 below.:**

YES

**Are Facility related issues related to general Classroom spaces? If yes, please describe in detail in Question 1 below.:**

YES

**Are Facility related issues related to SPED? If yes, please describe in detail in Question 1 below:** NO

**Are Facility related issues related to support spaces? If yes, please describe in detail in Question 1 below.:** YES

**Are Facility related issues related to "Other"? If yes, please identify the other area below and describe in detail in Question 1 below.:** NO

**Please describe(maximum of 100 characters):**

**Priority 5**

*Please provide a detailed description of the energy conservation measures that are needed and include an estimation of resultant energy savings as compared to the historic consumption.*

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New double paned windows should replace the single paned windows to increase energy conservation.

One boiler was replaced in 2008 which resulted in a 20% energy savings in the town appropriated budget. There is one more boiler that is in need of replacement to ensure a better environment for the students, faculty and staff and to also increase energy conservation measures.

Lighting should be upgraded to energy efficient ballasts and bulbs.

The District has spent over \$300,000 on materials, supplies and labor in the past 6 years to keep this heating system functioning.

If these measures are taken, the district could estimate a 30% energy savings and these maintenance funds could be spent directly on educational supplies, technology and instruction.

**Priority 5**

*Please describe the measures the School District has already taken to reduce energy consumption.*

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Lock Boxes were placed over all thermostats to prevent staff and student tampering when the EMS manages the heating needs of the building.

At Town Meeting in May 2007, the voters approved \$50,000 for the purchase of a new Energy Management System for the boilers to be installed this summer.

In 2008, a new boiler was installed for \$88,500.00.

Notices sent to all staff to clear papers, books, etc from all uni-vents areas to increase heat and ventilation flow.

All window AC units removed if possible and insulation and covers placed on all others.

All exterior doors inspected weekly and weather stripping added.

Teachers removed all refridgerators, microwaves, coffee makers and small appliances from their classrooms to reduce energy consumption.

All computers are shut down daily to limit energy use.

**Priority 5**

*Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.*

Over the years, fluctuations in temperature and classroom climate have caused the shuffling of some classes to other areas in the building during extreme weather conditions. The archaic system with these extreme changes in temperature in different parts of the building can negatively affect teaching and learning when students and teachers are displaced and are too cold or hot. In addition, appropriate and adequate ventilation needs to be ensured in all classroom areas in order to avoid the increase of potential respiratory issues such as asthma related ailments.

**Please also provide the following:**

**Age of Exterior Walls (Years):** 54

**Were any major repairs or renovations of the exterior walls undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the exterior walls:** 1955

**Age of Roof (Years):** 20

**Were any major repairs or renovations of the roof undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the roof:** 2009

**Age of Windows (Years):** 54

**Were any major repairs or renovations of the windows undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the windows:** 1999

**Age of Boilers (Years):** 54

**Were any major repairs or renovations of the boilers undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the boilers:** 2008

**Age of HVAC (Years):** 54

**Were any major repairs or renovations of the HVAC undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the HVAC:** 2007

**Age of Electrical System (Years):** 54

**Were any major repairs or renovations the electrical system undertaken in the past?:** YES

**If "YES", please provide the year of the last major repair/renovation of the electrical system:** 2000

**Have the systems identified above been examined by an engineer or other trained building professionals?:** YES

**If "YES", please provide the name of the individual and his/her professional affiliation:**

Chip Phillips, Strategic Building Solutions and Russo Bar Associates (Architects)

**Please also provide the date of the inspection::** 6/1/2007

**Please describe how addressing the system will extend the useful life of the facility that is the subject of this SOI (maximum of 5000 characters):**

New electrical and HVAC systems will improve not only the energy and technology, it will allow the school to focus on other repairs and budgetary issues. Energy Management is needed to keep costs down and the proper climate for students in.

**Priority 7**

*Please provide a detailed description of the programs not currently available due to facility constraints, the state or local requirement for such programs and the facility limitations precluding the programs from being offered.*

Teaching and learning has been enhanced over the past several years to comply with the state curriculum frameworks, local academic expectations, mandates of NCLB, and the need to teach 21<sup>st</sup> century skills as described by the Partnership for 21<sup>st</sup> Century Skills. However, the building is over 50 years old and the infrastructure is no longer able to support the programmatic demands and advanced resources and technologies needed to meet the standard of education required in 2010 and beyond.

**Science, Technology, and Engineering** – Inquiry, experimentation, innovation, design, critical thinking, and problem solving build essential scientific skills needed for students in the 21<sup>st</sup> century. Currently, the three high school science labs are too small, few, and outdated to support and enhance a hands-on inquiry based approach to science and engineering. Computer technology, which includes data collection software, probes, engineering design software such as CAD and architectural programs are needed in order to be able to collect data in an organized way, analyze and interpret experimental results, and to implement the design process. The antiquated infrastructure of the building and outdated electrical wiring extremely limits the use of this type of technological integration. In engineering, students are asked to design and build prototypes, test the prototypes, and make modifications as needed. Outdated, undersized science labs with limited student work stations and technology does not allow for a hands-on, authentic and relevant science, technology, and engineering curriculum experience.

**Health and Physical Education** – Currently students in grades 7 –12 take physical education and all students in grades 7-10 take health. The Massachusetts Health/PE Frameworks suggest that all students need to learn the aspects of health and wellness to be able to apply these concepts to their lives and to live a physically, socially, and mentally healthy lifestyle. In addition, during our recent Coordinated Program Review, the district was cited for a civil rights violation for offering physical education to grades 11 and 12 as an elective only. The building currently houses one gymnasium and a small weight room. More space is needed to run a full health and wellness program that is required for all students. Space is limited and therefore, middle school and high school students must share the gymnasium during the same teaching blocks. Fitness rooms off the gymnasium would allow more choices for students, allow teachers to integrate health into the physical education curriculum, teach fitness for life, and allow for the separation of middle and high school students.

**Foreign Language and ELL Tutoring Programs** – Language acquisition research, and the Massachusetts Foreign Language Curriculum Frameworks, supports that language learners must internalize a language’s components such as its sound system, basic lexicon, and grammatical structure, all of which takes time and practice. Students need abundant opportunities to speak, listen, read, and write in order to develop communicative fluency, understanding of how the language is constructed, and understanding of culturally appropriate interactions. Currently grade 8 students take Spanish or French I, and high school students have a two-year requirement in a foreign language. The building does not currently house a language lab to support language acquisition. In addition, the small general classrooms and outdated wiring does not support the integration of technology in the classroom to support language acquisition. A language lab would support both an interpretive approach of teaching skills through listening and reading, and a presentational approach of teaching skills through speaking and writing. ELL students who are tutored in English Language Development would also benefit from a language lab.

**Business/ Instructional Technology**- The building currently houses three computer labs and 16 computers in the library media center. Two of the labs are outdated and all three computer labs have computer classes scheduled throughout the day. Therefore, there is not an opportunity for equal access to computers for teachers to incorporate instructional technology into their everyday curriculum. Additional computer lab space, whether through dedicated labs or a reconfiguration of undersized general classroom spaces, which could incorporate wireless technologies, would allow more business technology courses to be offered and ensure the integration of instructional technology into the curriculum. Advanced computer applications, information technology, Microsoft Office certification classes and electronic accounting would enhance the business department offerings. Virtual on-line courses and the use of Moodle would expand the curriculum opportunities for all students. In addition, with an upgraded technological infrastructure, teachers would be able to regularly integrate technology into everyday programs through computerized writing

workshops, on-line research, SAT and MCAS tutorials, blogs, podcasts, smart boards, discussion forums, and many other web 2.0 applications and software programs available to enhance the curriculum.

**The Arts** – Middle school students are required to take an art and music exploratory in grades 7 and 8, and high school students have a 2-year fine arts requirement. The building currently has two classrooms that house middle school and high school art classes. General art, art I-IV, portfolio art, illustration/calligraphy, and art history are currently offered in grades 7-12. Additional classroom space, upgraded facilities, and computer technology would allow the offering of a variety of graphic arts, design and photography classes. For music instruction, classes have use of one music room and an auditorium. The music room design is not conducive to a large ensemble and there is not proper seating for instruments and music stands. Many practices take place in the auditorium however, it lacks proper lighting and a pit area, and many times other events are booked for the auditorium and practices must be moved. There is also a lack of space for small practice rooms for individuals to practice a specific instrument. Additional practice areas would ensure proper musical training for students.

**Priority 7**

*Please describe the measures the School District has taken or is planning to take in the immediate future to mitigate the problem(s) described above.*

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Old lab tables were replaced in one of the high school science labs.

Foreign language software programs have been purchased and some foreign language classes are able to utilize the computer labs when there is not a class scheduled in them.

Health and physical education classes have been split and are run as two weeks of health and then two weeks of physical education so that more students can use the limited facilities.

The town recently approved and financed and upgrade of the town and school computer network. This upgrade allows for the use of more powerful software programs to be utilized in the computer labs. In addition, replacement computers were installed in one of the computer labs and the library.

A grant has been written to purchase two portable netbook labs.

8 Mimios and projectors have been purchased through a donation from a local business.

**Priority 7**

*Please provide a detailed explanation of the impact of the problem described in this priority on your district's educational program. Please include specific examples of how the problem prevents the district from delivering the educational program it is required to deliver and how students and/or teachers are directly affected by the problem identified.*

As mentioned in part one of priority 7, the program spaces in many disciplines do not meet the current standards of educational programming. Therefore, a building designed in the first half of the 20<sup>th</sup> century is pushing its limits in supporting the program needs of a 21<sup>st</sup> century education.

**Science, Technology & Engineering-** Current labs and classrooms do not support an inquiry based and authentic approach to the teaching and learning of science and engineering. This course of study should integrate the scientific method with use of technology, and the design process while promoting the skills needed for the future. The lack of adequate space and technology in the science labs severely limits the type of data collection, analysis, and interpretation of results that students can perform. The lack of development of these scientific skills puts the students at a disadvantage when compared to other students in many other districts when trying to compete in college or the workplace. One of the global challenges for the United States is to produce more scientists and engineers. An inadequate science facility puts our students on an unequal playing field when preparing them for the 21<sup>st</sup> century skills such as innovation, inquiry, problem solving, and design needed to rise to this global challenge.

**Health and Physical Education-**The lack of space for health and wellness programs and the overcrowding of middle and high school students in one gymnasium severely limits student choices for an appropriate wellness plan, and varied course offerings. Students, regardless of individual abilities, wellness needs, and interests must all take the same route to fitness. In addition, teachers are unable to meet the needs of students when varied age levels of middle and high school students share the same facility including locker rooms.

**Foreign Language and ELL Tutoring Programs-** Currently the lack of a dedicated language lab or the reconfiguration of language classrooms to include language lab capabilities promotes a traditional teacher centered approach of foreign language and ELL instruction. Students do not have the opportunity for self-directed learning or individual practice of listening and speaking skills which affects the ability to internalize the language. The lack of technology in the language classrooms also limits the opportunities for West Bridgewater students to have a technological global connection to other French or Spanish speaking countries.

**The Arts-** Lack of space in visual arts classes has limited the course offerings for students in the areas of graphic arts and design. This puts potential art majors at a disadvantage versus students from other districts that will be competing for the same college programs and jobs. The outdated and undersized auditorium has only one adjacent music room for practice and instruction. Oftentimes multiple sections of music are scheduled at the same time. Therefore, classes are displaced to the small cafeteria or other general classrooms that lack sound proofing and proper acoustics. The auditorium has no pit, lacks proper lighting, and has a small stage area which has limited the types of performances the school can perform. In addition, there can be no school wide assemblies due to its small seating capacity.

**Business/Instructional Technology-** Due to the fact that the computer labs have regularly scheduled computer classes throughout the school day, teachers are not always able to bring their students to the computer labs during class time. Therefore, the

integration of technology into the general curriculum has been limited. In addition, the small size of the general classrooms also limits the type and use of technology resources in the classrooms and puts West Bridgewater students at a distinct disadvantage as they enter college and the workplace. Information and technology literacy is not only a mandatory 21<sup>st</sup> century skill but the use of technology is an essential motivational tool for all students. If our goal is to prepare students for their future then the infrastructure of an antiquated building needs to be upgraded to support the use of technology. Technology is one of the factors that has led to our global society and it is imperative that students learn the language of technology in order to be competitive in the world of the future.

## Vote

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Vote of Municipal Governing Body YES: 3 NO: 0 Date: 6/19/2007

Vote of School Committee YES: 5 NO: 0 Date: 6/25/2007

Vote of Regional School Committee YES: NO: Date:

### Form of Vote

The following form of vote should be used by both the City Council/Board of Aldermen, Board of Selectmen/equivalent governing body AND the School Committee in voting to approve this Statement of Interest.

If a regional school district, the regional school district should use the following form of vote.

Resolved: Having convened in an open meeting on \_\_\_\_\_, the \_\_\_\_\_ [City Council/Board of Aldermen, Board of Selectmen/Equivalent Governing Body, School Committee] of \_\_\_\_\_ [City/Town/School District],

in accordance with its charter, by-laws, and ordinances, has voted to authorize the Superintendent to submit to the Massachusetts School Building Authority the Statement of Interest dated \_\_\_\_\_ for the \_\_\_\_\_ [Name of School] located at

\_\_\_\_\_ [Address] which describes and explains the following deficiencies and the priority category(s) for which

\_\_\_\_\_ [Name of City/Town/District] may be invited to apply to the Massachusetts School Building Authority in the future

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ [Insert a description of the priority(s) checked off on the Statement of Interest and a brief description of the deficiency described therein for each priority]; and hereby further specifically

acknowledges that by submitting this Statement of Interest, the Massachusetts School Building Authority in no way guarantees the acceptance or the approval of an application, the awarding of a grant or any other funding commitment from the Massachusetts School Building Authority, or commits the

\_\_\_\_\_ [Name of City/Town/District] to filing an application for funding with the Massachusetts School Building Authority.

**CERTIFICATIONS**

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this statement of Interest and attached hereto are true and accurate and that this Statement of Interest has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Statement of Interest to the Massachusetts School Building Authority. The undersigned also hereby acknowledges and agrees to provide the Massachusetts School Building Authority, upon request by the Authority, any additional information relating to this Statement of Interest that may be required by the Authority.

**LOCAL CHIEF EXECUTIVE OFFICER/DISTRICT SUPERINTENDENT/SCHOOL COMMITTEE CHAIR  
(E.g., Mayor, Town Manager, Board of Selectmen)**

**Chief Executive Officer**

**School Committee Chair**

**Superintendent of Schools**

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