

## Massachusetts School Building Authority

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### Next Steps to Finalize Submission of your FY 2018 Statement of Interest

Thank you for submitting your FY 2018 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete.** The District is required to mail all required supporting documentation, which is described below.

**VOTES: Each SOI must be submitted with the proper vote documentation.** This means that (1) the required governing bodies have voted to submit each SOI, (2) the specific vote language required by the MSBA has been used, and (3) the District has submitted a record of the vote in the format required by the MSBA.

- i **School Committee Vote:** Submittal of all SOIs must be approved by a vote of the School Committee.
  - i For documentation of the vote of the School Committee, Minutes of the School Committee meeting at which the vote was taken must be submitted with the original signature of the Committee Chairperson. The Minutes must contain the actual text of the vote taken which should be substantially the same as the MSBA's SOI vote language.
- i **Municipal Body Vote:** SOIs that are submitted by cities and towns must be approved by a vote of the appropriate municipal body (e.g., City Council/ Aldermen/Board of Selectmen) in addition to a vote of the School Committee.
  - i Regional School Districts do not need to submit a vote of the municipal body.
  - i For the vote of the municipal governing body, a copy of the text of the vote, which shall be substantially the same as the MSBA's SOI vote language, must be submitted with a certification of the City/Town Clerk that the vote was taken and duly recorded, and the date of the vote must be provided.

**ADDITIONAL DOCUMENTATION FOR SOI PRIORITIES #1 AND #3:** If a District selects Priority #1 and/or Priority #3, the District is required to submit additional documentation with its SOI.

- i If a District selects Priority #1, Replacement or renovation of a building which is structurally unsound or otherwise in a condition seriously jeopardizing the health and safety of the school children, where no alternative exists, the MSBA requires a hard copy of the engineering or other report detailing the nature and severity of the problem and a written professional opinion of how imminent the system failure is likely to manifest itself. The District also must submit photographs of the problematic building area or system to the MSBA.
- i If a District selects Priority #3, Prevention of a loss of accreditation, the SOI will not be considered complete unless and until a summary of the accreditation report focused on the deficiency as stated in this SOI is provided.

**ADDITIONAL INFORMATION:** In addition to the information required above, the District may also provide any reports, pictures, or other information they feel will give the MSBA a better understanding of the issues identified at a facility.

If you have any questions about the SOI process please contact the MSBA at 617-720-4466 or [SOI@massschoolbuildings.org](mailto:SOI@massschoolbuildings.org).

## **Massachusetts School Building Authority**

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School District    Dudley-Charlton Reg

District Contact   Sandra G Sullivan TEL: (508) 943-6888

Name of School    Shepherd Hill Reg High

Submission Date   2/15/2018


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### **SOI CERTIFICATION**

To be eligible to submit a Statement of Interest (SOI), a district must certify the following:

- ⓑ The district hereby acknowledges and agrees that this SOI is NOT an application for funding and that submission of this SOI in no way commits the MSBA to accept an application, approve an application, provide a grant or any other type of funding, or places any other obligation on the MSBA.
- ⓑ The district hereby acknowledges that no district shall have any entitlement to funds from the MSBA, pursuant to M.G.L. c. 70B or the provisions of 963 CMR 2.00.
- ⓑ The district hereby acknowledges that the provisions of 963 CMR 2.00 shall apply to the district and all projects for which the district is seeking and/or receiving funds for any portion of a municipally-owned or regionally-owned school facility from the MSBA pursuant to M.G.L. c. 70B.
- ⓑ The district hereby acknowledges that this SOI is for one existing municipally-owned or regionally-owned public school facility in the district that is currently used or will be used to educate public PreK-12 students and that the facility for which the SOI is being submitted does not serve a solely early childhood or Pre-K student population.
- ⓑ After the district completes and submits this SOI electronically, the district must mail hard copies of the required documentation described under the "Vote" tab, on or before the deadline.
- ⓑ The district will schedule and hold a meeting at which the School Committee will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is required for cities, towns, and regional school districts.
- ⓑ Prior to the submission of the SOI, the district will schedule and hold a meeting at which the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body will vote, using the specific language contained in the "Vote" tab, to authorize the submission of this SOI. This is not required for regional school districts.
- ⓑ On or before the SOI deadline, the district will submit the minutes of the meeting at which the School Committee votes to authorize the Superintendent to submit this SOI. The District will use the MSBA's vote template and the vote will specifically reference the school and the priorities for which the SOI is being submitted. The minutes will be signed by the School Committee Chair. This is required for cities, towns, and regional school districts.
- ⓑ The district has arranged with the City/Town Clerk to certify the vote of the City Council/Board of Aldermen or Board of Selectmen/equivalent governing body to authorize the Superintendent to submit this SOI. The district will use the MSBA's vote template and submit the full text of this vote, which will specifically reference the school and the priorities for which the SOI is being submitted, to the MSBA on or before the SOI deadline. This is not required for regional school districts.
- ⓑ The district hereby acknowledges that this SOI submission will not be complete until the MSBA has received all of the required vote documentation in a format acceptable to the MSBA. If Priority 1 is selected, your SOI will not be considered complete unless and until you provide the required engineering (or other) report, a professional opinion regarding the problem, and photographs of the problematic area or system. If Priority 3 is selected, your SOI will not be considered complete unless and until you provide a summary of the accreditation report focused on the deficiency as stated in this SOI.

**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
Gregg Desto	Pauline Aucoin	Gregg Desto
<hr/>		
Superintendent		
		
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(signature)	(signature)	(signature)
Date	Date	Date
2/12/2018 1:17:15 PM	2/14/2018 6:25:31 PM	2/14/2018 4:04:35 PM

\* Local chief executive officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.



**subject of this SOI fits into that plan:**

Capital Needs Assessment and Replacement Analysis prepared for Dudley Charlton Regional School District by RECAP Real Estate Advisors , 38 Chauncy Street-Suite 600,Boston MA 02111. Preliminary Report completed June 15th, 2016. Within this report contains the capital planning for Shepherd Hill Regional High School as a public school facility that serves 9-12 and is comprised of one to three story building that was originally constructed circa 1972.

**Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 19 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**

**Does the District have a Master Educational Plan that includes facility goals for this building and all school buildings in District? YES**

**If "YES", please provide the author and date of the District's Master Educational Plan.**

Capital Needs Assessment and Replacement Analysis prepared for Dudley Charlton Regional School District by On Site Insight (RECAP Real Estate Advisors), 38 Chauncy Street-Suite 600,Boston MA 02111. Preliminary Report completed June 15th, 2016. Within this report contains the capital planning for Shepherd Hill Regional High School as a public school facility that serves 9-12 and is comprised of one to three story building that was originally constructed circa 1972.

**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? YES**

**If "YES", how many teaching positions were affected? 24**

**At which schools in the district?** Shepherd Hill, Dudley Middle School, Charlton Middle School, Dudley Elem, Mason Rd, Charlton Elem

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

Eliminated in FY 2013-18: 1 HS English, 1 HS math, 1 HS science, 1 HS Spanish, 1 HS PE, 1 HS at-risk director, 1 Grade 8, 1 Grade 6, 1 grade 5, 1 Grade 4, 1 elem specialist, 1 district speech/language pathologist, 2 team chairs, 2 grade 1, etc.

**Has the district had any recent staff layoffs or reductions? YES**

**If "YES", how many staff positions were affected? 24**

**At which schools in the district?** Shepherd Hill, Charlton Elem, Mason Rd, Dudley Elem, Heritage School

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

Eliminated in FY 2013-18: 1 HS secretary, 1 HS custodian, 1 HS in house suspension supervisor, 1 HS job coach, 3 instructional assistants, 4 elem library coordinators; in FY 16 High School Librarian, 1 Guidance Director

**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.**

Moderate increases to class size, reduction in tutorial instruction for struggling students, at risk efforts assumed by guidance counselors at the high school, job coach services contracted by an outside agency,

**Please provide a description of the local budget approval process for a potential capital project with theMSBA. Include schedule information (i.e. Town Meeting dates, city council/town council meetings dates, regional school committee meeting dates). Provide, if applicable, the District's most recent budget approval process that resulted in a budget reduction and the impact of the reduction to the school district (staff reductions, discontinued programs,**

**consolidation of facilities).**

The budget process at SHRHS begins with an assessment of student learning needs. Department coordinators consider projected enrollments, prioritize departmentalized requests for textbooks/materials and submit a budget request to the principal. The principal meets with the superintendent and the finance director to discuss the operational budget, staffing needs, and capital improvement. A proposed budget is presented to the school council and the school committee. Meetings with the Dudley and Charlton finance committees, the superintendent, finance director and school committee are scheduled and the fiscal budget is presented to both towns through public hearings. The school committee modifies the budget several times, dependent upon each town's financial resources, before voting on a final district budget. Each town's allocation is voted upon by the respective community at annual town meetings. For FY 2017, the District again requested slightly above the minimum local contribution required by the Education reform Act of 1993. This amount was approved at the annual town meetings in both towns. It should be noted that for FY 2018, the district committed \$1.0 million dollars from reserves and \$1.0 million from school choice funds to offset budget shortfalls. Prior to 2013, the absolute minimum required by law was funded for four years and supplemented by substantial district reserves (\$1 million each year). The communities make every effort, despite their own economic challenges, to provide dependable funding for school programs and services. However, reductions in funding for staff, supplies, textbooks, capital projects and technology updates minimize the district's ability to keep pace with 21st century educational requirements.

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## General Description

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**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).**

Shepherd Hill Regional High School, located on Dudley-Oxford Road in Dudley, has been serving the adjacent communities of Dudley and Charlton since 1973. The high school put an end to double sessions at the old Charlton High School and brought together the Dudley students who, because the town had no high school of its own, were paying tuition to schools in the neighboring towns, one of which was in Connecticut. From 1973-2000, the school was a grade 7-12 facility. Two new middle schools, one in Dudley and one in Charlton, opened their doors in September, 2000 and alleviated severe overcrowding at the school. Shepherd Hill became a 9-12 facility at that time and remains such to this date. Major renovations include a total roof replacement in 1994, paving, addition of an outdoor adventure course, boys and girls locker room upgrades, replacement of the auditorium electrical panel and gym bleachers, replacement of science lab tables and replacement of all 296 original single pane windows and some exterior doors under the MSBA Green Repair Program in 2011. A \$2.2 million athletic field renovation project was approved by voters in both communities in March 2014. Our primary athletic field was replaced with a turf field to improve safety and accessibility concerns.

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

192247

**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. Please note whether there are any other buildings, public or private, that share this current site with the school facility. What is the use(s) of this building(s)? (maximum of 5000 characters).**

Shepherd Hill Regional High School is located on Dudley-Oxford Road in Dudley, Massachusetts. The school sits on 90 fairly level acres. An addition to the current facility could be accomplished with a design considered with the original layout of the building. This could consist of either a fourth floor addition to the academic building or a connecting addition on the north side of the academic building. There are no adverse existing conditions that would impact a potential project on the site.

**ADDRESS OF FACILITY: Please type address, including number, street name and city/town, if available, or describe the location of the site. (Maximum of 300 characters)**

68 Dudley-Oxford Road  
Dudley, Massachusetts

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

The building is of block design with a brick facade and slab foundation. The academic wing is a three story structure with ground floor cafeteria, gymnasium, auditorium and support areas.

**Has there been a Major Repair or Replacement of the EXTERIOR WALLS? YES**

**Year of Last Major Repair or Replacement:(YYYY) 2003**

**Description of Last Major Repair or Replacement:**

A section of the auditorium concrete block west wall was waterproofed, pointed and caulked.

**Roof Section A**

**Is the District seeking replacement of the Roof Section?** YES

**Area of Section (square feet)** 125635

**Type of ROOF (e.g., PVC, EPDM, Shingle, Slate, Tar & Gravel, Other (please describe))**

The building contains a large flat roof concrete or steel framed generally covered in modified bituminous sheet MEMBRANE roofing systems.

**Age of Section (number of years since the Roof was installed or replaced)** 23

**Description of repairs, if applicable, in the last three years. Include year of repair:**

Over the past 3-5 years our repairs of the roof have significantly increased with spending upward of 15K on ongoing repairs of leaks. During the last two school years (2016-2018) we have seen an significant increase in multiple leaks throughout the building resulting in relocation of students and services for short periods of time to other parts of the building until repairs and patches could be completed on the aging roof.

**Window Section** A

**Is the District seeking replacement of the Windows Section?** NO

**Windows in Section (count)** 296

**Type of WINDOWS (e.g., Single Pane, Double Pane, Other (please describe))**

double pane

**Age of Section (number of years since the Windows were installed or replaced)** 7

**Description of repairs, if applicable, in the last three years. Include year of repair:**

All 296, single pane windows from the original construction were replaced in the Fall of 2011 with the assistance of a MSBA Green Repair Grant.

**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 building was constructed in 1973 and has been used as an educational and community facility for the past 43 years. Despite an aggressive maintenance plan, age and tiring systems can only be repaired and maintained for so long without complete replacement and renovation provided. The only cost effective long-term solution to this aging facility and its systems is a complete renovation.

The existing 3 phase electrical distribution system is in need of replacement due to age and condition; it cannot support the requirements of the technology age. There is evidence of aluminum feeders that have failed. GFI plug sockets are not in place next to sink areas as they should be. Federal Pacific circuit breakers and electrical panels are obsolete and difficult to replace. New electrical panels were replaced in both gyms (1998) and the auditorium (2006).

The heating system is original to the building and relies on two inefficient furnaces which must be manually monitored. New boiler tubes were installed in 2002. The boiler/furnace stack shows considerable deterioration and there are concerns that boiler exhaust does not safely disperse from the building.

The ventilation and air conditioning is inadequate and contributes to uneven temperatures throughout the school. Adjusting the thermostats to compensate for under-heated areas results in other areas being overheated. This results in significant energy inefficiency and a less than comfortable learning and teaching environment. Pneumatic thermostats are used throughout the building; many of these lines have failed. The pneumatic system along with univent components is inefficient and replacement parts are not available.

Copper piping is original with lead joints and a growing number of leaks occurring behind the cinder block walls; wedge shutoffs are impractical and inadequate.



The technology infrastructure and outdated wiring are inadequate to meet the needs of a 21st century education. Fiber optic cabling and a wireless network are insufficient.

**Boiler Section 1**

**Is the District seeking replacement of the Boiler?** NO

**Is there more than one boiler room in the School?** NO

**What percentage of the School is heated by the Boiler?** 100

**Type of heating fuel (e.g., Heating Oil, Natural Gas, Propane, Other)**

Heating Oil

**Age of Boiler (number of years since the Boiler was installed or replaced)** 43

**Description of repairs, if applicable, in the last three years. Include year of repair:**

None in the last 3 years. The heating system is original to the building and relies on two inefficient furnaces which must be manually monitored. New boiler tubes were installed in 2001. The Boiler furnace stack was repaired in 2016 to correct safety concerns.

**Has there been a Major Repair or Replacement of the HVAC SYSTEM?** NO

**Year of Last Major Repair or Replacement:(YYYY)** 1973

**Description of Last Major Repair or Replacement:**

Original to building

**Has there been a Major Repair or Replacement of the ELECTRICAL SERVICES AND DISTRIBUTION SYSTEM?** NO

**Year of Last Major Repair or Replacement:(YYYY)** 1973

**Description of Last Major Repair or Replacement:**

Electrical services and distribution system are original to the building and are inadequate to support today's technology.

**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).**

Non-structural block interior with tile floor on concrete slab; all classrooms, library and cafeteria have 2X4 drop ceilings; connecting corridors and locker rooms are concrete slabs mesh cement with crawl space; lighting is 32 watt, 2 bulb fluorescent.

**PROGRAMS and OPERATIONS: Please provide a detailed description of the current grade structure and programs offered and indicate whether there are program components that cannot be offered due to facility constraints, operational constraints, etc. (maximum of 5000 characters).**

Shepherd Hill offers a comprehensive array of curricular offerings. The curriculum is organized into nine departments with 13 content areas consisting of English, mathematics, science, social studies, foreign languages (French, Latin, Mandarin and Spanish), business/technology education, visual and performing arts, physical education/health/family and consumer science, and special education. Graduation requirements include 22 total credits with four credits in English, four credits in math, three credits in science, three credits in social studies and three-quarters credit in physical education.

Shepherd Hill Regional High School was constructed in 1973 to meet the educational goals and requirements of that time. The building was designed for teachers working in individual classrooms and teaching subject matter in an isolated fashion primarily by lecture and reading. Today's high schools should be characterized by student collaboration, project-based learning, interdisciplinary projects, differentiated instruction, and teachers working in teams to deliver an interconnected curriculum in a coordinated manner using modern technology. In addition, special education instruction and services are far different today and space must be provided for English Language Learner programs and for students who are at-risk of dropping out of school.

In the academic wing, all classrooms are used constantly throughout the day and space is not available for additional/new

educational programs including those recommended by the MassCore graduation requirements (i.e. two credits in a foreign language and one credit in the arts), vocational instruction, increased special education opportunities, and expansion of the curriculum to provide relevant skills. Inadequate science labs, lack of a foreign language lab to promote proficiency and facilitate Advanced Placement testing, inadequate performing and visual arts facilities, inadequate physical education and wellness instructional areas, and lack of adequate classrooms for robotics and expanded engineering instruction negatively impact our ability to prepare our students for the future.

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. Classrooms were built before computers, SmartBoards, LCD projectors and other technological media devices were invented. This seriously impacts the curriculum and limits the acquisition of skills. A modern video production studio would augment our visual arts curriculum and expand student offerings. The inadequacies in this area are particularly concerning with the scheduled implementation of the computer-based MCAS 2.0 assessment.

The inability to provide adequate space for programs for students with specific learning disabilities will result in additional out of district placements that will not only be more costly for the district but will also not provide these students with the opportunity to receive an education in the least restrictive environment, which is expected under both state and federal regulation.

Adequate space is needed to develop programs for students who are at a high risk for dropout including vocational opportunities. The increased selectivity of vocational schools limits the availability of vocational programs for this population. This year 85 incoming grade 9 students opted to attend Bay Path Vocational High School in order to avail themselves of vocational and technical opportunities.

Modern athletic and physical education facilities including locker room updates are long overdue. We are very pleased that both communities approved a \$2.2 million renovation project for our primary athletic field. This has addressed safety and accessibility concerns and a cinder track was replaced with one that meets today's standards. However, additional practice fields and an indoor track facility are still needed for the expansion of athletic offerings to students and increase accessibility to community teams. Modernized athletic facilities would mirror those at other more recently constructed/renovated facilities at nearby schools and decrease the number of students who utilize school choice options to avail themselves of these athletic opportunities.

Kitchen facilities need to be modernized to provide for the nutritional needs of students. Much of the kitchen equipment is original to the building, is not energy efficient, and has exceeded its expected life span. The cafeteria is not configured to meet current wellness models for school food programs. The traditional serving line layout needs to be redesigned to provide a "food court" system that provides healthy meal choices for students and serves as a key component to the school wellness program.

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

The 77 room core educational space has been reduced over the years to accommodate inadequate computer space and special education needs. Currently 68 rooms are available as classrooms. The number and size of current classrooms is inadequate. The average core classroom contains between 590 and 775 sq. ft. (today's standard calls for 850 to 950 sq. ft.). There are no extra spaces for additional/new educational programs and storage space is severely limited.

Science labs do not meet current educational requirements, in size, accessibility, location and lab layout. The science curriculum is compromised due to limitations on the number and type of labs that can be run. The curriculum has been altered in most science labs, preventing the full science experience for all our students. The science labs are not fully or

properly equipped for biology, chemistry and physics. Teachers are unable to meet the curriculum requirements in the labs as evidenced by the following: 1.) lack of working or functioning gas in all labs -- 4 out of the 12 lab areas have Bunsen burners; 2.) insufficient sinks and tables for instruction; 3.) limited storage space for equipment and chemicals; 4.) insufficient technologies, lighting and electricity; 5.) inadequate safety/chemical wash and ventilation; 6.) no autoclave exists within any of our labs or science space which limits biology students from being able to do advanced biology and biotechnology labs, and finally, 7.) very limited prep rooms and no dishwashing equipment within any of the lab areas. Science laboratories contain between 900-1,055 sq. ft (today's standard calls for 1,440 sq. ft.) Three of the nine science labs were repaired/updated in 1998 to address natural gas emergency shut off concerns. Two chemistry labs were updated with new lab tables in August 2010, and one additional chemistry lab was updated with new lab tables in the fall of 2011.

The John F. Canavan Library and media center provides a variety of print and non-print materials that support the curriculum and enrich recreational reading activities. Internet access and computers are also available and were updated in 2013. Carpeting was also updated in 2013. However, furniture is original to the 1973 building and further updates are needed to create a true media center. Upgraded lighting and electronic cataloging were completed in 2004. An additional upgrade of the cataloging system occurred in 2010.

**CAPACITY and UTILIZATION: Please provide the original design capacity and 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).**

Enrollment has leveled due to the current economic downturn. Currently four teachers share classrooms with other teachers. During the 43 year history of the school, several spaces have been converted from their intended use into classroom space. The following have been converted into classrooms: a reading lab, a math lab, a foreign language lab, 2 teacher preparation rooms, three family and consumer science rooms, 2 lecture halls. Several storage areas have been converted into special education service areas for speech therapy, OT, PT and conference rooms. In addition, several industrial arts and storage areas have been converted into office spaces for the district central office.

In meeting with the town planners and the building officials from both towns, it is our collective belief that an improved economy will generate additional housing construction and result in an increased enrollment at the high school creating a situation of overcrowding, which was anticipated prior to the economic downturn.

**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 any override or debt exclusion votes that were necessary (maximum of 5000 characters).**

The Dudley-Charlton Regional School District prides itself on maintaining school buildings and insuring that students have a safe learning environment. Day to day building maintenance is provided by a full time staff coordinated by the director of maintenance. There are three shifts with a staggered schedule that allows the building to be monitored twenty-four hours a day during the regular school week. Mechanical, electrical, plumbing, and carpentry are done in-house if feasible. Major repairs are secured by bid when needed. Capital improvement occurs on a regular basis dependent upon financial availability, with a priority given to safety concerns. Recent capital repair investments include: repaving the driveway and parking lot, renovation of industrial arts classrooms and storage areas into a district central office, renovation of three chemistry labs with new lab tables, repainting lockers. All 296 original single pane windows and some exterior doors were replaced with the assistance of the MSBA Green Repair Program in 2011. Funding came from school choice monies and did not necessitate an override or debt exclusion. All first floor and second floor academic classrooms were painted during the summers of 2011, 2012, 2013, 2014 and 2015 with the assistance of the Sheriff's Department Community Service Program. In 2008 the gym was renovated to address a number of safety and ADA issues that included flooring, bleachers, backboards and rims. Intercom/paging repairs and upgrades took place in 2008. Auditorium lighting and panel board were replaced in 2007. In addition, all lighting in the cafeteria, school library, media center and gym were also replaced in

2007; a 15,000 gallon underground fuel storage tank was replaced in 2006; the walk-in freezer and refrigerator were replaced in 2006; the air exchange enhancement monitor in the gymnasium was replaced in 2004 with partial energy grant funding; two exhaust fans were installed in the kitchen in 2003; retubing of both boilers took place in 2002; a 1,200 gallon PVI hot water tank with four stainless steel indirect hot water tanks was replaced in 2002; the outdoor tennis and basketball courts were renovated and fencing on the courts and fields were replaced in 2005; three science labs were upgraded in 1998 and a total roof replacement amounting to \$900,000 debt exclusion was undertaken in 1994. A \$2.2 million athletic field renovation project was approved by both communities in March, 2014 to address safety and accessibility concerns. A \$1.2 million donation was received to lessen the financial burden on the communities and a debt exclusion was approved for funding the remaining amount.

The lack of efficiency and age of the various building systems impede the delivery of a 21st century education and have an increasing impact on financial resources. In addition, safety concerns in science labs, fire suppression system, lifting tiles in the practice gym and main corridors and locker room facilities, lack of handicapped seating in the auditorium, inefficient and aging student lockers contribute to a less than conducive environment for teaching and learning. Increased occupant comfort combined with an improved physical environment would promote a better atmosphere for teaching and learning and provide students with the skills necessary for success in the 21st century. The boiler/furnace stack was repaired in 2016 to address safety concerns and building technology was upgraded to include wireless internet access. A facility assessment to prioritize building needs took place in March, 2016. Results of that report are shared with this SOI. The lack of efficiency and age of the various building systems impede the delivery of a 21st century education and have an increasing impact on financial resources. In addition, safety concerns in science labs, fire suppression system, lifting tiles in the practice gym and main corridors and locker room facilities, lack of handicapped seating in the auditorium, inefficient and aging student lockers contribute to a less than conducive environment for teaching and learning. Increased occupant comfort combined with an improved physical environment would promote a better atmosphere for teaching and learning and provide students with the skills necessary for success in the 21st century. The boiler/furnace stack was repaired in 2016 to address safety concerns and building technology was upgraded to include wireless internet access. A facility assessment to prioritize building needs took place in March 2016, and we are awaiting results at this time.

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**Priority 5**

***Question 1: Please provide a detailed description of the issues surrounding the school facility systems (e.g., roof, windows, boilers, HVAC system, and/or electrical service and distribution system) that you are indicating require repair or replacement. Please describe all deficiencies to all systems in sufficient detail to explain the problem.***

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The current building was constructed in 1973 and has been used as an educational and community facility for the past 43 years.

Areas of active roof leakage have been reported at time of capital assessment in 2015 to include evidence of roof deterioration / age related wear in the form of membrane blisters, deteriorated seams, and wear of the membrane granular surfacing. Since 2015 assessment - the roof has consistently gotten worse with ongoing leakage.

Despite an aggressive maintenance plan, age and tiring systems can only be repaired and maintained for so long without complete replacement provided. The only cost effective long-term solution to this aging roof is complete replacement.

- | The Roof is 24 years old and leaks are becoming a consistent occurrence resulting in increased repair cost year after year and currently patching repairs over past patching and repairs.
- | Additionally, to explore alternate energy sources such as solar panels - funding grants require roofs to be less than 10 years old.
- | New Roof would provide a 25-30 year warranty.

**Priority 5**

***Question 2: Please describe the measures the district has already taken to mitigate the problem/issues described in Question 1 above.***

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The current building was constructed in 1973 and has been used as an educational and community facility for the past 43 years. Despite an aggressive maintenance plan, age and tiring systems can only be repaired and maintained for so long without complete replacement provided. The only cost effective long-term solution to this aging roof is complete replacement.

- | 1994- Total Roof replacement took place including membrane, drains, insulation, and copper facing. This occurred with funding through a debt exclusion.
- | Ongoing repair and triage of multiple leaks with rising costs in the last 3 years

Shepherd Hill Regional High School does have a preventative maintenance roof inspection procedure in place which includes:

1. Roofs will be inspected semi-annually. Once at the beginning of the winter season during the month of December, and again during the summer season in July.
2. During the inspection, staff shall note findings on the Roof Inspection Report form and where practical, minor deficiencies shall be repaired during the course of inspection. For those roofs under warranty or for more serious issues, the appropriate vendor will be contacted to make repairs. Our roof is no longer under warranty.
3. Physically inspect all roof surfaces for excessive wear, blistered areas, standing water, or separations of the roofing materials.
4. Physically inspect all eave and soffit overhangs for sagging or other deficiencies.
5. Physically inspect all gutters, downspouts, and roof scuppers/drains for a free and unrestricted flow.

As a result of these procedures - we feel we have gotten the most years out of the life of our roof (24 years) and currently can no longer cost effectively keep up with the roof repairs. New roof would resolve current issues and provide a 25-30 year warranty.

**Priority 5**

***Question 3: Please provide a detailed explanation of the impact of the problem/issues described in Question 1 above 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.***

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The lack of efficiency of the various building systems - in particular the roofing system - creates a difficult environment following any type of precipitation - resulting at times the temporary relocation of school personnel and students to different parts of the building to deal with ongoing roofing leaks and the subsequent repair. This clearly has negative impact on teacher, staff, and student culture within the building as well as possible overall performance.

As maintenance and operational costs of this issue climb, there is an adverse effect on the school budget. Funds that could be available for implementation of enhanced educational programming must be used to maintain the aging and inadequate building systems - including the roof.

Our aging roof also adds to the lack of energy efficiency and future possibilities of eligibility in obtaining energy grants with a new roof.

**Priority 5**

***Question 4: Please describe how addressing the school facility systems you identified in Question 1 above will extend the useful life of the facility that is the subject of this SOI and how it will improve your district's educational program.***

History of our maintenance of our building proves that we can get another 20 plus years out of a new roof. It would certainly resolve the constant costs of leaks and potential disruption to the educational programming in parts of the building currently as well as a decrease in spending for maintenance and operation of the building systems would allow for additional funding for the implementation of enhanced educational programming and other facility upgrades. Safety concerns due to inefficient and aging building systems would be addressed and provide for an improved teaching and learning environment.

**Please also provide the following:**

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

YES

**If "YES", please provide the name of the individual and his/her professional affiliation (maximum of 250 characters):**

RECAP REAL ESTATE ADVISORS - On Sight Insight Capital Needs Assessment June 2015

Massachusetts Department of Energy Resources Energy Audit Program 2009

**The date of the inspection:** 4/1/2009

**A summary of the findings (maximum of 5000 characters):**

As part of the Massachusetts Department of Energy Resources' (DOER) Energy Audit Program (EAP), Energy Engineering & Design, Inc. (EE&D), performed an energy audit at Shepherd Hill Regional High School in April of 2009. The audit included a comprehensive walk-through of the building, a review of the associated systems and equipment, including both process systems and building systems, with the goal of generating a list of energy conservation projects, their costs and estimated energy savings. These included the following: (1) Lighting upgrade (T-8 bulbs were installed with new ballasts in every light throughout the building.), (2) Install variable speed drives on the three 20-hp hot water pumps. (3) Replace pneumatic control system with electronic DDC. Electronic controls would allow for more fine-tuned controls, and could be accurately programmed, reducing the need for manual tweaking by maintenance staff. Additionally separate zones and time schedules and more sophisticated logic could be programmed into the electronic controls such as zone temperature reset, building warm-up, demand controlled ventilation and others. (4) Add outdoor air reset to boiler hot water temperature. Allowing the boiler to heat to a lower temperature when outdoor air is warmer would save fuel without impacting the boiler's ability to heat the building to optimal comfort levels. (5) Install dedicated domestic hot water heater. Using a dedicated heater for domestic hot water (DWH) would allow the boiler to be used for heating purposes only; as such, it may then be shut down for the summer months and/or maintenance. Reduced usage of the boilers during the summer months will result in fuel savings. Moreover, replacing the current DHW tank with a smaller unit will save energy by requiring a smaller amount of hot water to be kept at temperature, also saving fuel. (6) Replace single-pane windows with double-pane windows. (All 296 windows and some exterior doors were replaced in the summer of 2011 with partial funding under MSBA Green Repair Program.) (7) Replace fan motors in walk-in refrigerator and freezer with electronically commutated motors,



set to turn off when door is opened. (8) Install anti-sweat heater control for the kitchen cooler and freezer. A humidity sensor would turn off the defrost heat when not needed, reducing energy use by allowing the unit to not "fight itself" in order to maintain appropriate food storage temperatures. (9) Upgrade toilets, urinals, and faucets to low flow fixtures.



**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.

<b>Chief Executive Officer *</b>	<b>School Committee Chair</b>	<b>Superintendent of Schools</b>
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Gregg Desto	Pauline Aucoin	Gregg Desto
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Superintendent

		
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(signature)	(signature)	(signature)
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\* Local Chief Executive Officer: In a city or town with a manager form of government, the manager of the municipality; in other cities, the mayor; and in other towns, the board of selectmen unless, in a city or town, some other municipal office is designated to the chief executive office under the provisions of a local charter. Please note, in districts where the Superintendent is also the Local Chief Executive Officer, it is required for the same person to sign the Statement of Interest Certifications twice.