# **Massachusetts School Building Authority**

# Next Steps to Finalize Submission of your FY 2014 Statement of Interest

Thank you for submitting your FY 2014 Statement of Interest (SOI) to the MSBA electronically. **Please note, the District's submission is not yet complete**. The District is required to print and mail a hard copy of the SOI to the MSBA along with the required supporting documentation, which is described below.

Each SOI has two Certification pages that must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer\*. Please make sure that **both** certifications contained in the SOI have been signed and dated by each of the specified parties and that the hardcopy SOI is submitted to the MSBA with **original signatures**.

# SIGNATURES: Each SOI has two (2) Certification pages that must be signed by the District.

In some Districts, two of the required signatures may be that of the same person. If this is the case, please have that person sign in both locations. Please do not leave any of the signature lines blank or submit photocopied signatures, as your SOI will be incomplete.

\*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 as the chief executive office under the provisions of a local charter.

**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.

- School Committee Vote: Submittal of all SOIs must be approved by a vote of the School Committee.
  - 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.
- 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.
  - o Regional School Districts do not need to submit a vote of the municipal body.
  - 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.

CLOSED SCHOOLS: Districts must download the report from the "Closed School" tab, which can be found on the District Main page. Please print this report, which then must be signed by the Superintendent, the School Committee Chair, and the Chief Executive Officer. A signed report, with original signatures must be included with the District's hard copy SOI submittal. If a District submits multiple SOIs, only one copy of the Closed School information is required.

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.

- 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.
- If a District selects Priority #3, Prevention of a loss of accreditation, the MSBA requires the full accreditation report(s) and any supporting correspondence between the District and the accrediting entity.

**ADDITIONAL INFORMATION:** In addition to the information required with the SOI hard copy submittal, 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 Brian McLaughlin at 617-720-4466 or <a href="mailto:Brian.McLaughlin@massschoolbuildings.org">Brian.McLaughlin@massschoolbuildings.org</a>.

# **Massachusetts School Building Authority**

School District Belmont

District Contact Anthony DiCologero TEL: (617) 993-5430

Name of School Belmont High

Submission Date 4/7/2014

#### 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 sign the required certifications and submit one signed original hard copy of the SOI to the MSBA, with all 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 hard copy 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 and certification signatures in a format acceptable to the MSBA.

Chief Executive Officer \*

Chair, Board of Selectmen

**School Committee Chair** 

**Superintendent of Schools** 

Andrés T. Rojas

Laurie Graham

Dr. Thomas S. Kingston

. 1892

(signature)

Date 04/08/14

(signature)

Date 4 4.14

(signature)

Date 4 8 20/5

<sup>\*</sup> 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. Please do not leave any signature lines blank.

# **Massachusetts School Building Authority**

School District Belmont

District Contact Anthony DiCologero TEL: (617) 993-5430

Name of School Belmont High

Submission Date 4/7/2014

#### 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.  $\square$  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.

### **SOI** Vote Requirement

I acknowledge that I have reviewed the MSBA's vote requirements for submitting an SOI which are set forth in the Vote Tab of this SOI. I understand that the MSBA requires votes from specific parties/governing bodies, in a specific format using the language provided by the MSBA. Further, I understand that the MSBA requires certified and signed vote documentation to be submitted with the SOI. I acknowledge that my SOI will not be considered complete and, therefore, will not be reviewed by the MSBA unless the required accompanying vote documentation is submitted to the satisfaction of the MSBA.

**Potential Project Scope:** 

Repair Project

Other (systems)

Is this SOI the District Priority SOI?

YES

School name of the District Priority SOI:

2014 Belmont High

Is this part of a larger facilities plan?

YES

If "YES", please provide the following:

Facilities Plan Date: 10/15/2004

Planning Firm: Design Partnership of Cambridge, Inc.

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:

A hardcopy of the "Master Plan and Feasibility Study for Renovation to Belmont High School" has been previously filed with the MSBA. The key points within the Master Plan are: 1. All construction will take place in four phases with the building continuously occupied, since no alterantive exists to move the students and educational program offsite. 2. The bulk of the construction will be within the existing 257,120 square feet, with a major emphasis on upgrading building systems (mechanical, electrical, plumbing, etc.) and bringing the existing structure up to code. 3. New construction will consist of 34,825 square feet for a new science wing to correct the inadequacies of the existing science classrooms and laboratories. The new science wing will be part of the first phase of construction which will help to alleviate moving students and available classrooms during the following three phases of construction within the existing building.

Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 18 students per teacher

Please provide the originally planned student to teacher ratios at the school facility that is the subject of this SOI: 16 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.

ARCADD, Inc. dated April 23, 1999.

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 (e.g., 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 (e.g., 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.

Some class sizes have increased at all levels: High School, Middle School and Elementary.

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

In the FY14 final approved budget, no positions were reduced or eliminated due to budgetary reasons. However, increases for instructional materials were not funded at the level requested.

# **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).

Belmont High School was constructed as a new building on a vacant site and opened in 1970. There have been no additions or major renovations since it opened. The existing infrastructure is original equipment with the exception of replacement of all HVAC units on the roof of the building.

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

257120

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).

Belmont High School was constructed on the present 33 acre site and opened in 1970. The site is adequate for the educational facility and the fields supporting an extensive athletic program. A field house (which provides locker room space) and an ice rink are also on the high school property as separate, stand-alone buildings.

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)

221 Concord Avenue, Belmont, MA 02478

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).

From the October 2004 Master Plan, Design Partnership made the following observations about the building enclosure. The "new" Belmont High School was designed by the architectural firm of KLQ of Foxboro, Massachusetts. The design was, and remains, well conceived and well realized. The building is correct and efficient in its relationships and largely adequate in its spaces. A steel and concrete frame supports brick exterior walls with precast concrete trim, and brick and other masonry is used extensively on the interior also. The construction is, overall, substantial. DPC's evaluation shows that all elements of the exterior envelope, with the exception of the roof, are due for either replacement (e. g. all classroom windows) or repair (e. g. masonry).

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

Year of Last Major Repair or Replacement: 2012

Description of Last Major Repair or Replacement:

A building envelope study conducted by the engineering firm of Russo, Barr Associates recommended the repointing of all masonry walls, replacing deteriorating steel lintels and replacing metal panel systems at the High School, at an estimated cost of \$370,000. At the annual Town Meeting in April 2008, the Town approved \$81,000 to begin the first phase of that project, which has been completed. By the Summer of 2012 nearly the entire project has been completed. The project has been completed.

Has there been a Major Repair or Replacement of the ROOF? YES

Year of Last Major Repair or Replacement: 2000

Type Of ROOF: PVC

Description of Last Major Repair or Replacement:

The Sarnafil membrane roof was replaced in phases between 1996 and 2000.

Has there been a Major Repair or Replacement of the WINDOWS? YES

Year of Last Major Repair or Replacement: 2011

Type Of WINDOWS: Single pane, original to the school from 1970.

Description of Last Major Repair or Replacement:

Translucent panels at Belmont HS were replaced over a series of approximately five years. The panels are located in the gymnasium and the project was completed in FY11.

# 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).

From the October 2004 Master Plan, Design Partnership made the following observations about the mechanical and electrical systems. Virtually all components of the building's mechanical and electrical systems need attention. They are all, with minor exceptions, original equipment and have exceeded their design life expectancy. The boilers are oil-fired steam, feeding roof mounted air handling units directly and supplying hot water via converters to unit ventilators on the periphery of the building. Steam systems are very difficult to control. The building's electrical system is also original equipment, with the exception of some upgrades to the tel/data network made necessary by changing technologies. DPC's consultant electrical engineers, RDK Engineers, noted that the then 30 years old power distribution system is beyond its expected useful life. In addition to an increased frequency of component failures, replacement parts are becoming more scarce with time.

Has there been a Major Repair or Replacement of the BOILERS? NO

Year of Last Major Repair or Replacement: 0

Description of Last Major Repair or Replacement:

Has there been a Major Repair or Replacement of the HVAC SYSTEM? YES

Year of Last Major Repair or Replacement: 2008

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

The basic HVAC system consists of unit ventilators providing heat and outdoor air to most spaces that border an exterior wall, and sixteen rooftop air handling units providing heat, outdoor air and cooling in some interior spaces. In 2006, as part of a townwide Energy Service Company (ESCo) project, six of the rooftop units were replaced. At the annual Town Meeting in April 2007, \$1,000,000 was authorized for borrowing to fund the replacement of the ten remaining rooftop units. That project has been completed. Replacement of unit ventilators in classrooms is being performed and is currently ongoing.

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

Year of Last Major Repair or Replacement: 0

Description of Last Major Repair or Replacement:

HEATING FUEL: Which of the heating fuel types below does your building primarily rely on for heating?

Natural Gas

# 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).

From the October 2004 Master Plan, Design Partnership made the following observations about the building interior. The quality of interior finish is high with many high-use areas featuring quarry tile flooring and other low maintenance materials. Besides employing exclusively non-combustible materials, the design made liberal use of spray-on fireproofing, whose asbestos-content will add to the difficulty and cost of repair and renovation work. The interior finishes are tired. Floor tiles throughout the building contain asbestos. Although this material poses no threat until it is disturbed, it must be removed and replaced as part of any meaningful renovation program. Most other finished areas will be disturbed by necessary work to address barrier-free access or by replanning spaces for more effective and efficient use by evolving educational and support programs.

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. (maximum of 5000 characters).

Belmont High School offers a core academic program with approximately 95% of the graduating class going on to college. With such an emphasis on college preparatory, there is no industrial arts program offered. Graduation from BHS requires a student complete four years each of English, mathematics, science, physical education & health, three years of social studies, two years of a foreign language, one year of fine and performing arts, and 40 hours of community service. A review by the New England Association of Schools and Colleges (NEASC) in 2002 found many recommendations concerning the adequacy of the facility, particularly the ventilation system building-wide, handicapped access, and the limitations of the science laboratories. The NEASC Report placed the High School on warning status. NEASC took BHS off of warning status, as indicated in its letter of August 10, 2009. The NEASC letter of February 22, 2013 placed the district on warning based on the 2012 decennial NEASC evaluation report.

CORE EDUCATIONAL SPACES: Please provide a detailed description of the Core 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, and a description of the media center/library (maximum of 5000 characters).

A detailed description of every instructional space can be found within the 2004 Master Plan, a hardcopy of which has been filed with the MSBA with the original SOI for Belmont High School. In these "ed specs" are noted that there are 34 general classrooms, most of which are approximately 750 square feet. There are also 41 specialized teaching stations for science labs, art, music, drama, physical education and special education. The seven physics (1), chemistry (3), and biology (3) labs range from 1,161 square feet to 1,445 square feet. Two earth science labs are 930 square feet each. The Library & Media Center has a combined space of 5,964 square feet. All of these spaces are original to the 1970 construction with very little modification.

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).

The current building is fully utilized, with an enrollment of 1,184 students for 2013-14. The 2004 Master Plan, in accordance with the old Department of Education School Building Assistance Bureau (SBAB) guidelines, recommended that for a projected enrollment of 1,250 students, an ideal space utilization would require the addition of ten general classrooms, five laboratories, and two specialized art and music rooms. These rooms plus adjustments in miscellaneous spaces would require an additional 34,825 square feet, a 13.5% increase to the existing 257,120 square feet. In the Master Plan, these space needs could be met be adding a wing to the building housing the entire science department, thus alleviating one of the biggest problems in the existing facility.

The current instructional spaces for art and music are not large enough to serve all students enrolled in those respective programs. In addition, the rooms are not equipped with modern facilities such as wiring for instructional technology.

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 district utilizes a contracted cleaning company to perform a clearly-defined and detailed list of tasks on a daily basis. The maintenance of the building systems is part of a districtwide program of preventative maintenance. The district maintenance and custodial staff have a scheduled checklist of items for servicing all motors and other elements of the systems. The District uses outside vendors for regular preventative maintenance and unscheduled repairs to HVAC,

Name of School

Belmont High

elevator and fire protection systems. Breakdowns are reported to the Supervisor of Buildings and Grounds through the use of a computerized work order system. The Town budgets major capital repairs through a Capital Budget Committee separate from the operating budgets. As mentioned above, over the past few years, funds have been appropriated, or borrowing approved, at the annual Town Meeting for the rooftop HVAC replacements, the building envelope study, translucent panel replacements in the gymnasium and field house, and tennis court resurfacing on the grounds of the High School. Also funded through the Capital Budget were the design services funds for the master Plan. None of these Capital Budget items required an override or debt exclusion.

Name of School	Belmont High
Priority 3	
accreditation Center/Libra	Please provide a detailed description of the "facility-related" issues that are threatening . Please include in this description details related to the program or facility resources (i.e. Media ry, Science Rooms/Labs, general classroom space, etc.) whose condition or state directly threatens the reditation status.
2013, the Vis	land Association of Schools and Colleges (NEASC) Evaluation Report of the Visiting Committee in Februar iting Committee made several recommendations about the needs of the Belmont High School facility. encies were noted regarding the inadequacy of the facility to support learning, and in particular the do not the Media Center/Library, Science Rooms/Labs, general classroom space and athletics locker room
burners, exha made as prob	facility audit (ARCADD Report, 1999) recommends extensive renovations including replacing boilers and aust fans, wiring, kitchen equipment, etc. Because of inadequate funding, repairs to critical systems are plems come up All of these things impact the comfort of students and staff members and lead to low ting the delivery of the educational program."

# Question 2: Please describe the measures the district has taken to mitigate the problem(s) described above.

The NEASC report was received in February 2013. Many of the same facility-related findings from the previous NEASC report from 2002 were reiterated in 2013.

Through the Town of Belmont Capital Budget Committee, the following projects have been funded by Town Meeting to try to alleviate some ofthe facility problems at Belmont High School:

- 1. A building envelope study for all school buildings was approved for FY07, and was conducted by the engineering firm of Russo, Barr Associates;
- 2. Based upon the recommendation of the building envelope study, which recommended repairs to the High School building exterior walls estimated to cost \$370,000, the Town Meeting approved for FY09 \$81,000 to begin these repairs;
- 3. Town Meeting approved \$125,000 for FY08 plus \$100,000 for FY09 as part of a phased replacement of sections of the translucent panels in the gymnasium and field house. An additional \$112,629 was expended in FY10 and an additional \$125,000 was approved for FY11 for the final phases of translucent panel replacement. The project is completed.
- 4. The Energy Service Company (ESCo) project in 2006 replaced six of the sixteen rooftop HVAC units;
- 5. Town Meeting for FY08 authorized the borrowing of \$1,000,000 to replace the remaining ten rooftop HVAC units, which has been completed.
- 6. In the summer of 2008, in-house maintenance workers removed the fixed lab tables in the science rooms to accommodate more room for student chairs. These rooms were originally designed as combination classrooms and laboratories, but the fixed lab tables had become obstructions.
- 7. In the summer of 2009, a new Foreign Language lab was installed with equipment and furnishings paid by an \$80,000 grant from the Foundation for Belmont Education with the labor provided by the district's in-house maintenance workers.

#### 8. In FY10:

44,025 was appropriated to begin repairs on the univent heating units in each classroom.

100,943 was appropriated to repave the access road in front of the high school building.

#### 9. In FY11:

- •\$93,168 was expended for building envelope work (brick repointing, replacing external sealants, etc).
- •\$72,770 was expended for the final phase of replacing translucent panels.

# 10. In FY12:

- •\$14,979 was expended to rebuild heating units in the gymnasium
- •\$100,000 was appropriated in FY12 to replace the oil-fired burners with natural gas burners. Since that time National Grid has informed the Belmont Schools that it will cost \$93,000 for the town's share for National Grid to lay over 1,800 feet of high pressure natural gas piping underground and connect it to Belmont High School. This work is necessary for the building to be able to be heated by natural gas, as the current natural gas line that services the building is a smaller line that was designed to supply the science labs with natural gas. The School Department is pursuing options with National Grid as to whether the \$93,000 can be amortized over a series of months to be paid with monthly natural gas invoices.

## 11. In FY13:

- •\$100,000 has been appropriated to repave a portion of the main parking lot
- \$50,000 has been appropriated to continue repairs on the univent heating units in each classroom

## 12. In FY14

- 200,000 additionally has been appropriated to repave a portion of the main parking lot (for a project total of \$300,00)
  - •\$87,000 was appropriated for the town's share for National Grid to install high pressure natural gas piping underground and connect it to Belmont High School. An alternate pathway over which to run the pipeline was identified, which reduced the cost from the initial estimate of \$93,000.

In addition to these capital budget appropriations, in FY14 the School Department and the Town's Facilities Department expended over \$60,000 to address repairs and water and air quality issues with the indoor swimming pool at Belmont High School.

Question 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(s) identified.

The following are examples of the impact of facilities-related deficiencies cited in the NEASC Evaluation Report of the Visiting Committee in February 2013.

- -"The negative impact of the facility to adequately and fully support the opportunities for all students to practice and achieve each of the 21<sup>st</sup> century learning expectations and the delivery of the curriculum"
- -"The lack of adequate space in the library/media center causing reduced functionality of the center"
- -"Limited science lab areas compromising lab safety"
- -"Lack of adequate electricity, water, and technology in several science classrooms and labs"
- -"The poor condition of the heating and ventilation systems throughout the building"

# Please also provide the following:

Name of accrediting entity (maximum of 100 characters)::

New England Association of Schools and Colleges (NEASC).

Current Accreditation Status: Please provide appropriate number as 1=Passed, 2=Probation, 3=Warning, 4=Lost:

If "WARNING", indicate the date accreditation may be switched to Probation or lost::

10/1/2014

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.:

Please provide the date of the follow-up accreditation visit::

3/1/2022

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

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

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

3/11/2012

Are facility-related issues related to "Other"? If yes, please identify the other area below and describe in detail in Question 1 below.:

YES

Please describe (maximum of 100 characters).:

Deficiencies were cited in the girls' locker room space, which were corrected during FY13 and FY14.

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Name of School	Belmont High	

Question 1: Please describe the conditions within the community and School District that are expected to result in increased enrollment.

Families are attracted to Belmont as a result of:

- -A high-performing school district
- -Close proximity to Boston
- -Available public transportation

As such, enrollment is not impacted solely by birthrates. An enrollment projection performed by the New England School Development Council (NESDEC) in December, 2013 projects from FY14 to FY24, Belmont HS enrollment will increase by 254 students, or 21.47% over the next decade.

In addition, a new housing development is to be constructed in Belmont. The estimate of the Town Planning Board is that enrollment will increase by 41 students across the district.

Name o	f School
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Belmont High

# **Priority 4**

Question 2: 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.

The building is a full capacity and is currently not able to serve all student needs fully, in terms of:

- ·Classroom space
- ·Athletic facilities-meeting space and locker room storage
- ·Student locker storage
- ·Office space for guidance, psychologist and other social-emotional services
- ·Fine and performing arts space

As a result, the district is limited in available options to remediate space-related problems.

Note that the High School PTO has funded the purchase of 20 wooden benches that have been placed in corridors so that students scheduled for self-study periods have a place to be seated, as the library and the cafeteria are overcrowded.

Question 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.

The existing conditions of lack of adequate space result in:

- ·Limits to differentiated instruction
- ·Limits to the development of 21 Century Learning Skills
- ·Limits to the implementation of a student-centered learning environment
- ·Limits to the capacity for students to engage in collaborative work teams, thereby impacting the social-emotional development of students

# Please also provide the following:

Cafeteria Seating Capacity: 650

Number of lunch seatings per day: 4

Are modular units currently present on-site and being used for classroom space?:

NO

If "YES", indicate the number of years that the modular units have been in use:

**Number of Modular Units:** 

Classroom count in Modular Units:

**Seating Capacity of Modular classrooms:** 

What was the original anticipated useful life in years of the modular units when they were installed?:

Have non-traditional classroom spaces been converted to be used for classroom space?:

YES

If "YES", indicate the number of non-traditional classroom spaces in use:

Please provide a description of each non-traditional classroom space, its originally-intended use and how it is currently used (maximum of 1000 characters).:

- •Wellness and social studies classes are held in stadium/lecture setting, which does support differentiated instruction;
- •Science labs are being conducted in general classrooms that were not designed as science labs;
- •Full classes (of enrollment of 25+) are held in rooms with partitions;
- •Orchestra/chorus classes are held in a garage area in the building;
- •Science teacher lab preparation rooms are used for storage of science equipment and supplies, which prevents teachers from using those rooms for lab preparation.

Please explain any recent changes to the district's educational program, school assignment polices, grade configurations, class size policy, school closures, changes in administrative space, or any other changes that impact the district's enrollment capacity (maximum of 5000 characters).:

For the 2013-2014 School Year, the district has capped enrollment at the Wellington Elementary School due to an increase in the number of students attending. Any new families moving into a "Wellington" neighborhood are assigned to another Belmont elementary school.

# What are the district's current class size policies (maximum of 500 characters)?:

The district's has established class size guidelines for grades K-8. They are as follows:

**Grade Guidelines** 

K 18-22

1 19-23

2 19-23

3 20-24

Name of School	Belmont High
4 20-24 5 20-24 6 22-26 7 22-26 8 22-26	

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.

At a Special Town Meeting in November 2003, the Town voted to appropriate \$90,000 for design services for the development of a Master Plan for future renovations to Belmont High School. The intent of developing the Master Plan is to identify and prioritize necessary renovations while waiting for a comprehensive renovation some time beyond 2010. The architectural firm of Design Partnership of Cambridge, Inc. (DPC) was hired to work with the Superintendent's Advisory Council on the Future Needs of Belmont High School.

In October 2004, Design Partnership presented the *Master Plan and Feasibility Study for Renovations to Belmont High School* to the Advisory Council. The mechanical and electrical engineering analysis was performed by Richard D. Kimball Company, Inc. (RDK). The Executive Summary presented the following <u>Existing Conditions Review and Recommendations</u>:

Virtually all components of the building's mechanical and electrical systems need attention. They are all, with minor exceptions, original equipment and have exceeded their design life expectancy. The boilers are oil-fired steam, feeding roof mounted air handling units directly and supplying hot water via converters to unit ventilators on the periphery of the building. Steam systems are difficult to control and to maintain in optimal working order. RDK's strong recommendation is to replace the present boilers with hot water units with dual-fuel capability. Steam piping and controls will also need to be replaced. As the boilers are changed out the steam fed rooftop units must be replaced also. These units are very, very near the end of their lives and may, in fact, need replacement prior to the main part of the project going forward. Another deficiency to be corrected by the mechanical system upgrade is the amount of fresh air available to building occupants. New rooftop units will have a higher intake and distribution capacity to meet present codes. Review of existing conditions indicates the need for new unit ventilators. New air distribution equipment for the Pool and Fieldhouse is also indicated. It will be appropriate to replace the Pool system with a specifically designed, high efficiency "Pool-pak" system combining heating, dehumidification and heat recovery.

19

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

A new unified heating system as described above by Richard D. Kimball Company would be part of the Belmont High School renovation.

As part of the Energy Service Company (ESCo) project in 2006, the following improvements to reduce energy consumption were implemented:

- 1. All interior lighting was replaced with energysaving fixtures; subsequently, the High School's electricity usage went from 2.35 M KWH in FY05 to 1.80 M KWH in FY07, a savings of 23.4%.
- 2. Six of the sixteen rooftop HVAC units were replaced, which provides improved heating and ventilation to interior room controlled by those units.

At the annual Town Meeting for FY08, the Town authorized the borrowing of \$1,000,000 to replace the remaining ten rooftop HVAC units, to provide improved heating and ventilation to interior rooms and spaces controlled by those units.

At annual Town Meeting in FY12 and FY14 at total of \$187,000 was appropriated to convert the building to be heated by natural gas. The project included purchasing three new dual fuel (natural gas and oil) burners to replace the existing three oil-fired burners. Also included in the scope of the project was laying new underground gas piping to the building.

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.		
Limited budget funds spent unnecessarily on inefficient energy-consuming systems results in less funds being spent for the instructional program. This is becoming more critical in these tight budget times. In addition, unfavorable conditions in air quality and temperature may be distracting to staff and students, thereby potentially being disruptive to the educational process.		

Name of School

Belmont High

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.

All of the original systems in the building are now over 40 years old and are beyond their expected lifespan. This is resulting in more frequent breakdowns, greater maintenance costs, and disruption to the instructional process. While improvements have been made such as the 2006 ESCo lighting fixture replacements and the 2008 Town-funded rooftop HVAC unit replacements, the core of the infrastructure systems can not be remedied without a major renovation project. It is expected that such a renovation project would substantially extend the useful life of the building.

# Please also provide the following:

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

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

Richard D. Kimball Engineering

The date of the inspection::

10/15/2004

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

The findings are included in response to Question 1 of Priority 5 and are copied here for completness:

Virtually all components of the building's mechanical and electrical systems need attention. They are all, with minor exceptions, original equipment and have exceeded their design life expectancy. The boilers are oil-fired steam, feeding roof mounted air handling units directly and supplying hot water via converters to unit ventilators on the periphery of the building. Steam systems are difficult to control and to maintain in optimal working order. RDK's strong recommendation is to replace the present boilers with hot water units with dual-fuel capability. Steam piping and controls will also need to be replaced. As the boilers are changed out the steam fed rooftop units must be replaced also. These units are very, very near the end of their lives and may, in fact, need replacement prior to the main part of the project going forward. Another deficiency to be corrected by the mechanical system upgrade is the amount of fresh air available to building occupants. New rooftop units will have a higher intake and distribution capacity to meet present codes. Review of existing conditions indicates the need for new unit ventilators. New air distribution equipment for the Pool and Fieldhouse is also indicated. It will be appropriate to replace the Pool system with a specifically designed, high efficiency "Pool-pak" system combining heating, dehumidification and heat recovery.

Question 1: 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.

The present Belmont High School was constructed in 1970 as a replacement for an older wood framed structure, destroyed by fire. The "new" High School was designed by the respected architectural firm of Korslun, LeNorman and Quan from Foxboro, MA. The design was, and remains, well conceived and well realized. The building is correct and efficient in its relationships and largely adequate in its spaces. A steel and concrete frame supports brick exterior walls with precast concrete trim, and brick and other masonry is used extensively on the interior also. The level of interior finish is high with many high-use areas featuring quarry tile flooring and other low-maintenance materials. The construction is, over all, extremely substantial. (Design Partnership, Master Plan and Feasibility Study for Renovations to Belmont High School, October 15, 2004)

In 1999, the Belmont School Committee contracted with the architectural/engineering firm of ARCADD, Incorporated of West Newton, MA to perform a facilities audit of all six Belmont School buildings, plus the administration building. Included in this audit was a "Full Scope Audit plus Summary Space Analysis" of Belmont High School. Within the Executive Summary of their report of November 1999, ARCADD, Inc. states:

Belmont High School is the largest of all the buildings and will require the largest effort and financial commitment on the part of the Town of Belmont. Its physical structure is solid and made to last, yet its envelope does not meet today's energy and air quality standards. Its doors are original and lack compliance with current accessibility standards. Its auditorium, cafeteria and art spaces are in need of major upgrades. The athletic facilities, including lockers, gymnasium spaces, and pool area are in need of redesign to suit current teaching and academic standards and the administrative spaces are centrally designed and densely furnished.

The science laboratories and classrooms are outdated and their fittings are old. Many Science Labs have been retrofitted into spaces originally designed for other programs such as business. These spaces are not optimal for a modern science curriculum that combines bench work in a continuum with board work. Ideally to do this requires a two-part teaching station, with a lecture area and tablet-arm chairs within the same room but separate from the lab bench area.

At a Special Town Meeting in November 2003, the Town voted to appropriate \$90,000 for design services for the development of a Master Plan for future renovations to Belmont High School. The intent of developing the Master Plan is to identify and prioritize necessary renovations while waiting for a comprehensive renovation some time beyond 2010. The architectural firm of Design Partnership of Cambridge, Inc. (DPC) was hired to work with the Superintendent's Advisory Council on the Future Needs of Belmont High School.

In October 2004, Design Partnership presented the *Master Plan and Feasibility Study for Renovations to Belmont High School* to the Advisory Council. The mechanical and electrical engineering analysis was performed by Richard D. Kimball Company, Inc. (RDK). The Executive Summary presented the following Existing Conditions Review and Recommendations:

In virtually all of its components and systems, Belmont High School shows at once its ruggedness and the care that has been given its upkeep and at the same time that it has seen hard use by a demanding clientele for almost 35 years. The only major replacement project accomplished since its construction has been a new roof, installed approximately 5 years ago. As DPC's evaluation showed, all other elements of the exterior envelope – the windows, the "Kalwall" panels at the Field House and Pool, the spandrel panels, the brickwork, precast concrete and caulking – are due for either replacement (e.g. the windows) or repair (e.g. the masonry).

The interior of the building is in similar condition. Most of the finishes are tired. Those that aren't – the quarry tile and brick walls – are dark and provide no spark of energy to the décor. As a consequence of needed mechanical and electrical work, most ceilings will have to be removed and asbestos abatement carried out. Floor tiles throughout the

building contain asbestos as does the mastic in which they are set. Although this material poses no threat until it is disturbed, it must be removed and replaced as part of any meaningful renovation program. The interior fire-rated doors and the exterior insulated doors both contain asbestos cores and, again, should be replaced as part of a comprehensive program of renovations. Most other finished areas will be disturbed by necessary work to address issues of barrier-free access or by replanning spaces for more effective and efficient use by evolving educational and support programs.

Issues of barrier-free access are pervasive. Some doors and all door hardware do not meet present requirements, nor do stairs, handrails and the elevator. Toilet, locker and shower rooms were not designed with the maneuvering room and clearance for wheelchairs that present codes require. Drinking fountains are not accessible to wheelchair bound students or staff and there are also many projections into the corridor creating hazards to unsighted people. In general, casework pieces such as Library shelving, catalogue and checkout desks, the main office reception counter and science lab benches, are not designed to meet today's access codes. Throughout the building there is a lack of staff support space, storage and student gathering and activity space.

Virtually all components of the building's mechanical and electrical systems need attention. They are all, with minor exceptions, original equipment and have exceeded their design life expectancy. The boilers are duel-fuel steam, feeding roof mounted air handling units directly and supplying hot water via converters to unit ventilators on the periphery of the building. Steam systems are difficult to control and to maintain in optimal working order. RDK's strong recommendation is to replace the present boilers with hot water units with dual-fuel capability. Steam piping and controls will also need to be replaced. . . . . . Another deficiency to be corrected by the mechanical system upgrade is the amount of fresh air available to building occupants. . . . . . . Review of existing conditions indicates the need for new unit ventilators. New air distribution equipment for the Fieldhouse is also indicated.

Required plumbing system work within the existing building, per RDK's investigation and analysis, includes new, water efficient fixtures, barrier-free compliance and replanning of toilet and shower room fixture layouts and the kitchen. (Some of this was replaced in 2006 by the ESCo project.) The acid-neutralization system for the labs and the kitchen grease trap will also require attention and probable replacement.

The original design of this facility met the building code then in place in all respects. Today, codes are more stringent. One of the most glaring differences is in the fire protection system. Belmont High School has no passive or active system to assist fire fighters in controlling an event. While the building itself would, no doubt, be difficult, probably impossible, to burn, its contents and equipment would not. Today, any building approaching the size, use and construction characteristics of the High School would be required to be completely sprinklered and provided with fire department standpipes at all stairs, assembly areas and on the stage. A renovation project whose cost is more than 30% of the building's assessed valuation will automatically trigger this requirement. Even if this work were not mandated, it would be very shortsighted to avoid it.

The building's electrical systems are also original equipment, with the exception of some upgrades to the tel/data network made necessary by changing technologies. RDK has determined that to provide a level of amenity, usefulness and efficiency comparable to new construction and thus provide a second 35 to 50-year "useful life-span", all of these systems should be changed out. New lighting (replaced in 2006 as part of ESCo project), standard and emergency power distribution, data, communications and alarm systems are included in the recommended renovation project. Like the rooftop HVAC units noted above, the fire alarm system is a candidate for accelerated replacement due to its present condition and the difficulty of finding parts that are no longer manufactured or stocked.

In the art classrooms the following current conditions were noted by the administration:

- There are not enough sinks to serve all students enrolled
- ·There is insufficient storage space for materials and student work
- ·The size of the ceramics room is not sufficient for the number of students enrolled in the program

Similarly, the following conditions were noted regarding the music instructional spaces:

- ·There is insufficient storage space for musical instruments and equipment
- ·There are not enough electrical outlets
- ·Spaces are not wired for instructional technology such as SmartBoards or LCD projectors
- •There are two structural support columns in the middle of the chorus/orchestra room which prevent students in certain seats from being able to see the conductor

Based on an internal review in 2013, there are also a number of security-related concerns with the facility. In the interest of the safety of students, staff and other building occupants, rather than citingany concerns in a public document, the district can share this information with representatives from the MSBA at a future meeting.

Question 2: Please describe the measures the district has taken or is planning to take in the immediate future to mitigate the problem(s) described above.

The 2004 Master Plan presented several options to accomplish therenovation necessary to support the academic program at Belmont High School and meet current building codes. All options contained price estimates calculated in 2004, based upon the assumption that the project would be bid in the spring of 2008, with an annual inflation factor of 5% built into the projections each year since 2008.

The options presented were:

- 1. assumes a single continuous construction sequence under a single general contractor \$ 79,579,984
- 2. assumes separate project phases done non-sequentially by separate general contractors \$ 94,398,889
- 3. assumes replacement of existing facility with new construction (except renovate the existing field house and pool) \$113,040,258

The Advisory Council recommended the first option, one construction contract, to the School Committee. The estimated time to accomplish this single project would be four years, doing the work in four phases while students are in the building. The second option would allow down-time between phases and would stretch the project out to nearly ten years. The School Committee accepted the recommendation and placed the High School project on hold until work on the Wellington Elementary School was underway.

Question 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.

The impact on the educational process is demonstrated in several ways:

- 1. as previously stated, heating and ventilation problems affect all classrooms;
- 2. as previously stated, the NEASC report has cited many issues with the configuration of classroom spaces not being suitable for the educational program;
- 3. as previously stated, increased maintenance costs takes funding away from the instructional program in tight budget times;
- 4. During the 2007-2008 School Year, there was a loss of two school days resulting from an electrical malfunction which rendered as inoperable a major switch in the main electrical supply room; replacement parts were difficult to find; the likelihood of the loss of school time will continue to increase.
- 5. Current space allocation BHS fitness center is undersized in relationship to the current class sizes of our P.E. courses.
- 6. Unavailable quiet study spaces in the library impedes students' ability to study and learn. Also there are not enough seats/tables for students to work.

# REQUIRED FORM OF VOTE TO SUBMIT AN SOI

# REQUIRED VOTES

If a City or Town, a vote in the following form is required from both the City Council/Board of Aldermen **OR** the Board of Selectmen/equivalent governing body **AND** the School Committee.

If a regional school district, a vote in the following form is required from the Regional School Committee only. FORM OF VOTE Please use the text below to prepare your City's, Town's or District's required vote(s).

FORM OF VOTE		
Please use the text below to prepare your City's, Town's or District's rec	quired vote(s).	
Resolved: Having convened in an open meeting on	prior to the closing date, the	
	fCity Council/Board of Aldermen,	
Board of Selectmen/Equivalent Governing Body/School Committee] of	[City/Town], in	
accordance with its charter, by-laws, and ordinances, has voted to author		
to the Massachusetts School Building Authority the Statement of Interest		
[Name of School] located at		
	[Address] which	
may be submitted to the Massachusetts School Building Authority in the	Tuture	
; {In	sert a description of the priority(s) checked off	
on the Statement of Interest Form and a brief description of the deficiency described therein for each prio		
specifically acknowledges that by submitting this Statement of Interest I		
Building Authority in no way guarantees the acceptance or the approval		
a grant or any other funding commitment from the Massachusetts Schoo		
the City/Town/Regional School District to filing an application for funding	ng 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.

Chief Executive Officer *	School Committee Chair	Superintendent of Schools
Andrés T. Rojas	Laurie Graham	Dr. Thomas S. Kingston
Chair, Board of Selectmen (signature)	) (signature)	(signature)
Date 04/08/14	Date 4.8.4	Date 4/8/2014

<sup>\*</sup> 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. Please do not leave any signature lines blank.

Name of District

Belmont

# **Massachusetts School Building Authority**

School District Belmont

District Contact Anthony DiCologero

TEL

(617) 993-5430

Submission Date 4/7/2014

# **Closed Schools Information**

Name of District

Belmont

# **Closed Schools**

Question 1: Has the district sold, closed, or otherwise removed from service a school in the last 10 years?

No

Question 2: Does the district have any plans to sell, close, or otherwise remove from service a school in the next 10 years?

No

## **CERTIFICATIONS**

The undersigned hereby certifies that, to the best of his/her knowledge, information and belief, the statements and information contained in this Closed Schools formation are true and accurate and that this Closed Schools Information has been prepared under the direction of the district school committee and the undersigned is duly authorized to submit this Closed Schools Information 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 Closed Schools Information that may be required by the Authority.

	Chief Executive Officer *	School Committee Chair	Superintendent of Schools
	Andrés T. Rojas	Laurie Graham	Dr. Thomas S. Kingston
۶	Chair, Board of Selectmen	Jan Cohann	Dros Day
	Signature) Date 04/08/14	(signature) Date 4. G. 14	Signature) Date 4 8 2014

<sup>\*</sup> 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. Please do not leave any signature lines blank.