

ATTACHMENT A  
STATEMENT OF INTEREST



Name of School Tri County Reg Voc Tech

## Massachusetts School Building Authority

School District Tri County

District Contact Stephen F Dockray TEL: (508) 528-5400

Name of School Tri County Reg Voc Tech

Submission Date 4/1/2019

### Note

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

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

### 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: Renovation/ Addition

Is this SOI the District Priority SOI? YES

School name of the District Priority SOI: 2019 Tri County Reg Voc Tech

Is this part of a larger facilities plan? YES

If "YES", please provide the following:

Facilities Plan Date: 1/8/2016

Planning Firm: Knight, Bagge & Anderson Architects

Please provide a brief summary of the plan including its goals and how the school facility that is the subject of this SOI fits into that plan:

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

Chief Executive Officer \*

School Committee Chair

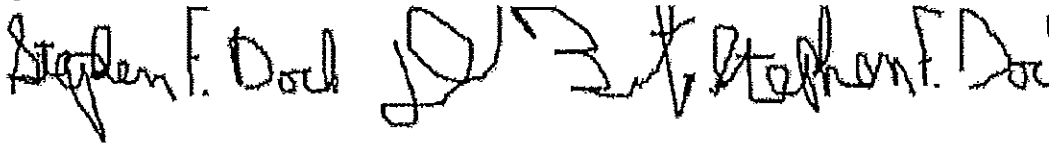
Superintendent of Schools

Stephen F Dockray

David Bento

Stephen F Dockray

Superintendent



(signature)

(signature)

(signature)

Date

Date

Date

3/29/2019 2:34:37 PM

3/29/2019 5:29:44 PM

3/29/2019 2:36:23 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.

The building is 41 years old and has a number of health, safety and security issues. There is asbestos containing material throughout the building, which needs to be abated. There are egress and fire rating issues that must be rectified. The entire building lacks any type of fire suppression system. There are environmental concerns for, not just the tempered environment, but also the need for fresh air and exhaust air throughout the entire building. The roofs are over 26 years old, have numerous leaks, which have allowed the underlying insulation to become wet and thus ineffective as well as causing numerous interior damage from water leaks. The roofs have exceeded their useful life and are no longer under warranty. Windows in many areas no longer close properly resulting in hot and cold areas that are not conducive learning environments not to mention extremely energy inefficient and costly. The building lacks security features designed into newer school buildings. There is no security vestibule to isolate and engage visitors before they enter the building. The metal door jambs for a number of doors have rusted to the point that door security may be compromised. Operationally, the doors lack a thermal break, which allows for hot and cold areas, and are not energy efficient. The building has a number of handicap accessibility issues throughout the entire building. Two areas of primary concern are the lack of an elevator (presently use freight elevator) to access the second floor and the cafeteria. The second floor houses the majority of academic classrooms and a number of vocational shops. The cafeteria is a multi-leveled area with numerous steps and ramps that do not meet current accessibility codes. The building's plumbing system is beginning to fail with a number of cast iron pipes having to be replaced do to failure. The 41 year old electrical system was not designed for the power needs of the twenty-first century in areas such as lighting, fire detection, communications and technology. Replacement parts for the system is more and more difficult to find. Overall, many items do not meet current building codes. Access roads, parking lots, sidewalks and athletic fields need to be updated. Manholes are sinking and there are a number of frost heaves. The current track is unusable and home track meets need to be held off site. Educationally, the building does not lend itself easily to reconfiguration to meet changing educational demands. The building and grounds have been well maintained over the past 42 years but have aged to a point that it is in need of a major renovation in order to meet the educational needs of the 11 member towns.

**Please provide the current student to teacher ratios at the school facility that is the subject of this SOI: 20 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.**

KBA Architects 8/28/18 Master Planning Study (Enclosed) The Master Planning Study is a supplemental companion to our Facility Audit completed in January 2016.

**Is there overcrowding at the school facility? YES**

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

In the last three years we have begun to see severe overcrowding in specific vocational programs. Applications for enrollment in our Medical Careers, Computer Information Systems and Engineering Technology programs have exceeded available seats. We have renovated our Construction Craft Laborers space, a program that was phased out due to a lack of interest on the part of students, to accommodate the our Engineering Technology / Advanced Manufacturing Program. We are now renovating the former Engineering Technology program space to add a Medical Assisting Program. These renovations, which are very expensive, are being done through our school district budget which is heavily subsidized by our eleven (11) member towns.

**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.

Does Not Apply

Please provide a description of the local budget approval process for a potential capital project with the MSBA. 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).

Internally, the budget process begins with teachers submitting departmental requests through their respective facilitators or budget liaisons. These requests are compiled by the respective supervising administrators, such as the Vocational Director or the Academic Coordinator. All such respective administrators consolidate, prioritize and forward their requests to the Principal who meets with them as a team, setting refined priorities and balancing the needs of all instructional and support programs. The next step is for the Principal, Director of Facilities, School Business Administrator and Director of Continuing Education to submit similar requests to the Superintendent-Director who meets with this last team, further refines priorities and, having considered the recommendation of all constituencies, finalizes a draft budget. The draft budget is submitted to a subcommittee of the School Committee for its consideration in a series of budget sessions. At this time, representatives of all eleven member town Boards of Selectmen and Finance Committees are invited to attend. After the Subcommittee's work is finished, a proposed budget is submitted to the School Committee. The Superintendent and School Business Administrator then present the budget to the Finance Committees, Boards of Selectmen and Town Meetings, as requested by the member towns. A final approval is voted by the Tri-County School Committee, usually at the end of March along with a vote to certify local assessments.

## 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).

Tri-County Regional Vocational Technical High School is a two story 285,000 square foot building located approximately 25 miles southwest of Boston, near the junction of RT 140 and I-495. Construction of the school began in 1975 and was completed in 1977. The rated capacity of the building at its time of construction was 1,200 occupants and it presently serves 1,024 secondary students. We also run post-secondary programs in Practical Nursing and Cosmetology which number about 58 additional students. A 1,300 square foot field house was constructed between the baseball and football fields and a new 3,200 square foot maintenance storage building was built by faculty, students and maintenance personnel in 2009.

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

285000

**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).

The site consists of 60 acres and lies in a north-south orientation approximately 600 feet east of Pond Street and 150 feet north of West Central Street, RT. 140 in Franklin MA. The topography of the site is essentially the side and top of a hill with generally 10% slopes falling off in westerly and southerly directions. The vegetation is mostly oak trees with some pine. Woodland covers a large quantity of the site. The site lies in a primarily residential zoned area. The site has no known existing conditions that would negatively impact this proposed project.

**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)

147 Pond Street  
Franklin, MA.

**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).

All exterior walls of the building are concrete block built on poured concrete foundation walls. The blocks are a specially cast concrete masonry unit facing with a 2inch cavity (insulated) and 6 inch concrete masonry unit backup; 8 inch backup block is used in high wall areas.

**Has there been a Major Repair or Replacement of the EXTERIOR WALLS?** NO

**Year of Last Major Repair or Replacement:(YYYY)** 1977

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

N/A

**Roof Section** A

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

**Area of Section (square feet)** 53500

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

Metal

Age of Section (number of years since the Roof was installed or replaced) 41

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

N/A

Roof Section B

Is the District seeking replacement of the Roof Section? YES

Area of Section (square feet) 110000

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

Single Ply PVC

Age of Section (number of years since the Roof was installed or replaced) 26

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

Numerous patches each of the last 7 years

Roof Section C

Is the District seeking replacement of the Roof Section?

Area of Section (square feet)

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

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

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

Window Section A

Is the District seeking replacement of the Windows Section? YES

Windows in Section (count) 999

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

The majority of the windows are anodized aluminum equal to AAMA P-A2-HP Commercial grade. All windows contain insulating heat reducing glass formed of two sheets of 3/16" of 1/4" plate glass.

Age of Section (number of years since the Windows were installed or replaced) 41

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

N/A

**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).

Tri-County uses 3 Lochinvar High Efficiency gas fired boilers to supply heat throughout the building. The boilers were installed in 2015 replacing 5 Kelly Thermific gas fired boilers installed in 1992. Through an MSBA Green Energy grant, Tri-County was able to eliminate a sixth Kelly Thermific boiler and replace it with two PV Power VT energy efficient water heaters to supply domestic hot water throughout the building.

The HVAC system for the building is broken down by areas. The north and south wings of the building are serviced by heat pumps and air handlers with individual unit controls for classrooms and shops. A gas boiler for booster and peak heating requirements supplies two pipe hot water forced circulation pumps as required and duct distribution for individual units and classrooms. The center core of the building is serviced by two water chilling units to chill water for circulation to air handling units for cooling and two pipe hot water forced circulation pumps as required for heating. Air handling units are used for air distribution. The gymnasium and kitchen are serviced by a large capacity heating and ventilating unit. Corridors are serviced by unit heaters. Motorized fans located on the roof with duct systems service locker rooms, gyms, shops, laboratories and toilets. All roof top equipment including exhaust fans and kitchen heat recovery units were replaced when the roof was replaced in 1995. All other equipment, except for our new chillers and cooling tower which were provided through the MSBA Green Energy Grant, are original to the building and are approximately 42 years old. The cost to repair such an extensive system is no longer fiscally responsible. As such, there are environmental concerns for, not just the tempered environment, but also for the need for fresh air and exhaust air throughout the entire building. The entire system needs to be replaced.



The electrical service and distribution at Tri-County consists of the following: (1) 1500kva transformer located outside of the south wing and (1) 2000amp SPCB switch-gear located inside the south wing compressor room. (1) 1500kva transformer located outside of the mechanical room and (1) 2000amp SPCB switch-gear located inside the mechanical room. (1) 1500kva transformer located outside of the mechanical room and (1) 2500amp SPCB switch-gear located inside the mechanical room. 1 Cummins Generator, model 500FDR5055AA,s/n ED90168 and 1 automatic transfer switch.

The electrical systems are seeing widespread signs of aging and the need to upgrade the entire system for power, lighting, fire detection, communications and technology. Many items do not meet code, therefore widespread system overhaul should be considered.

**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)**

Natural Gas

**Age of Boiler (number of years since the Boiler was installed or replaced)** 4

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

Boilers were replaced during the summer of 2015

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

**Year of Last Major Repair or Replacement:(YYYY)** 2012

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

Replaced chillers, cooling tower and pumps as part of a MSBA Green Repair Project

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

**Year of Last Major Repair or Replacement:(YYYY)** 1977

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

N/A

**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).

Flooring within the building is finished concrete in the shop areas, carpet in administrative offices and cafeteria, quarry tile in kitchens, terrazzo in hallways and some vinyl tile in storage rooms. Walls are painted drywall in classrooms and administrative areas, epoxy painted concrete block in locker rooms, exposed concrete block in shop and maintenance areas, painted concrete block in shop, classroom and gym areas. Ceilings consist of acoustical ceiling tile in classrooms, shops and hallways, painted drywall ceilings in auditorium and conference rooms, and exposed structure in maintenance areas. Classroom, office, and shop lighting is energy efficient fluorescent fixtures with occupancy sensors controlling lights. Cafeteria and gymnasium lighting is LED light fixtures.

**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).

The academic programs at Tri-County include English language arts (ELA), mathematics, science, social studies, physical education, spanish and business technology electives. Courses are available at the Advanced Placement, Honors, and College Preparatory levels.

Sixteen (16) Vocational Programs are offered at Tri-County. They include Automotive Collision Repair, Automotive Technology, Carpentry, Computer Information Systems, Cosmetology, Culinary Arts, Dental Assisting, Early Childhood Careers, Electrical Wiring Technology, Engineering, Graphic Communications, HVAC&R, Legal & Protective Services,

Medical Careers, Metal Fabrication and Plumbing. Tri-County students receive a unique opportunity for training and skill development by participating in real life work through our vocational service programs. Staff and community members may request services of several vocational and technical programs. These services are accomplished by students under the supervision of professionally licensed teachers in the vocational areas. Requests for services by the Automotive, Auto Body, and Graphic Communications Programs may be made by calling the school and completing the appropriate work order. Reservations at Gerry's Place Restaurant, and appointments at one of three Cosmetology Salons on campus can be made when school is in session.

Tri-County runs summer camp for 7th and 8th graders to introduce them to various vocational programs. Summer Camp sessions are held for one week in July from 8:30 AM – 12:30 PM. Fifteen students are accepted into each summer camp program with at least one licensed teacher leading the group. Extra-curricular activities include athletics, clubs and other leadership activities.

**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).

Tri-County Regional Vocational Technical High School houses sixteen vocational technical areas, five science labs, thirty four classrooms and two computer labs. Administrative functions are coordinated from six office areas and there are three conference rooms. In addition assembly areas include a tri-level cafeteria, Gerry's Place restaurant, an auditorium, a library/media center and a gymnasium. The campus has athletic fields for student participation in football, lacrosse, soccer, baseball, softball and track and field.

The sixteen vocational technical areas are broken down as follows:

Automotive Collision Repair- 8,254 SQ.FT  
Automotive Technology -9,104 SQ.FT  
Carpentry – 7,420 SQ.FT  
Computer Information Systems – 3,232 SQ.FT  
Cosmetology – 6,484 SQ.FT  
Culinary Arts – 5,969 SQ.FT  
Dental Assisting – 2,253 SQ.FT  
Early Childhood Careers – 3,040 SQ.FT  
Electrical Wiring Technology – 5,961 SQ.FT  
Engineering/Advanced Manufacturing – 4,800 SQ.FT  
Graphic Communications – 6,545 SQ.FT  
HVACR – 8,296 SQ.FT  
Legal & Protective Services - 2,710 SQ. FT  
Metal Fabrication - 7,176 SQ. FT  
Medical Careers – 4,040 SQ.FT  
Plumbing – 6,918 SQ.FT

**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).

The rated capacity of Tri-County at the time of construction was 1,200 occupants. Due to Special Education requirements, the need for lab science space and the expansion of our Chapter 74 Vocational Programs, our enrollment at the secondary level was 1,024 as of October 1, 2018. Through renovation of our vocational/technical programs, we have the capacity to expand our enrollment by about 176 students. Our vocational spaces need to be continually reviewed to satisfy current and future market demands.

**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).

#### Introduction

The primary goal of the Maintenance Department is to provide a safe, clean and reliable learning environment for the students, faculty and staff at Tri-County RVTHS. The Preventive Maintenance (PM) Plan has been designed and developed as a tool to help achieve these goals. The objective of the plan is to protect school assets and extend the life of school equipment, enabling us to provide uninterrupted service to students, faculty, and staff. It is our desire to maintain equipment before it fails, replace equipment before it reaches its projected life span, and anticipate problems before they become emergencies.

#### 2. Preventive Maintenance Program

##### a. Included Equipment

Generally any equipment which consists of moving parts or contains components consisting of moving parts, or components that have predictable life spans, should be included in the preventive maintenance program. Examples of equipment that will receive scheduled PM include but are not limited to:

- Air handling units- belts, motors and filters
- Boilers- inspection, cleaning and testing of components
- Centrifugal Chillers- inspection, cleaning and testing of components
- Cooling Towers- inspection, testing and cleaning of components
- High Voltage Switch Gear- inspection and cleaning
- Motor Vehicles- service as recommended by manufacturer
- Intruder and Fire Alarm Systems- testing and documentation of results
- Circulating and Loop Pumps- grease and check bearings and alignment
- Grounds-keeping Equipment- service as recommended by manufacturer
- Roof Systems- Inspect quarterly. Repair as needed.
- Emergency Diesel Generator

The Director of Facilities will identify all school equipment and maintenance tasks to be included in the PM work order system. Once a determination has been made to perform regular preventive maintenance on a piece of equipment, the equipment must be numbered and entered into the database. Information about the cycle schedule, location, equipment number, and a description of the maintenance to be performed will be noted in the Maintenance Direct database. Specifications about the equipment (i.e. part #, model #, serial # etc.) that may be useful in replacing the equipment at the end of its projected life span will also be noted in the system. Maintenance Direct is the computerized maintenance management system used by the Facilities Department.

##### b. Equipment Information

Before a PM work order can be initiated, the equipment must be established as having a valid equipment number in the Maintenance Direct program. The following information will be used in establishing a valid equipment number:

###### • Equipment Identification

Equipment identification will be established according to a standardized system. This system will include the name of the equipment, a number designation, and area or room number locator.

###### • Description

This is a brief description of the equipment to be maintained.

###### • Location

This is a general description of where the equipment is located within the building.

###### • Replacement Cost

Projected replacement cost of the unit will be listed. This will allow a decision to be made as to whether PM is economical as opposed to replacement of the unit.

###### • Maintenance Cycle

This is the number of days, weeks, or months between scheduled maintenance tasks.

##### c. Inspections

Required inspections by outside agencies will also be tracked in the Maintenance Direct database. Inspection due dates will be entered and a work order will be generated to allow for scheduling if necessary. Required inspections include but are not limited to:

- Fire Alarm System
- Town Building Inspector
- Boilers
- Pressure Vessels
- Elevator
- Fire Department
- Fire Extinguishers and Range Hoods

d. PM Record Keeping

Once a new equipment number has been added to the PM database, a file will be maintained to keep historical records of repair, service, and replacement of the equipment. This information will be maintained in the Maintenance Direct system. Hard copies and vendor reports will also be maintained in the Director of Facilities' office.

e. Automatic PM Work Orders

The Maintenance Direct system will automatically generate work orders at the predetermined schedule date for each piece of equipment entered into the system. The work order is then assigned to a member of the Maintenance Department.

Once the work order has been completed to the satisfaction of the Director of Facilities the completion date and any other relevant information will be entered into the data base.

Priority 1

*Question 1: Please provide a detailed description of the perceived health and safety problem(s) below. Attach copies of orders or citations from state and/or local building and/or health officials.*

While the building is not structurally unsound, we believe that the condition of the building jeopardizes the health and safety of our students.

All air handlers, fans, duct work and any equipment responsible for air movement within the building are over 41 years old and no longer adequate. The school has upgraded equipment and computers to provide the best possible learning environment for students but the original system was not designed for heating and cooling loads of a modern school building and along with equipment being in constant need of repair often results in unsafe air quality conditions jeopardizing the health of our students. Exhaust systems in shops are inadequate and students could be exposed to dangerous conditions.

The roof of the building is years past its warranty date and numerous leaks allow water into classrooms and vocational spaces exposing students to the possibility of slips and falls as well as the constant threat of mold.

The electrical systems are seeing widespread signs of aging and the need to upgrade the entire system for power, lighting, fire detection, communications and technology. Many items do not meet code, therefore exposing students and staff to potential safety issues. A widespread system overhaul should be initiated.

The Fire Alarm system needs to be updated to comply with present code. Lack of voice evacuation in areas as well as ADA Strobes and Speakers presents a serious safety threat to students in the event of a fire. The building does not have a sprinkler system which could lead to serious injury or worse in the event of a fire.

The original design of the main entry makes it almost impossible to prevent unauthorized persons entering the building. That coupled with service shops such as Culinary and Cosmetology being located in the center of the building causes a safety issue for students.

The track is bituminous asphalt and is severely rutted and cracked. We were unable to host track meets for the past three years. The turf on the softball/practice field is in poor shape from over use. This past fall we were unable to play our last few regular season games and all of our playoff games on our home field due to the poor condition of the field. There is almost no turf within the practice field area. The small set of bleachers on one side of the football field are not handicap accessible. All of these issues create safety issues for our students and visitors to the school.

Serious deficiencies in handicapped accessibility throughout the building have been identified during a building audit and present a threat to student health because of a lack of bathroom accessibility and also lack of egress in some areas.

The presence of asbestos has been identified throughout the building in flooring, joint compound, duct work and pipe insulation and caulking on windows which may contain PCB's. The threat to student's health from exposure to asbestos has been well documented and remodeling and upgrading the facility would eliminate the problem

**Priority 1**

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

Scheduled preventive maintenance is performed regularly on the following equipment:

- Air handling units- belts, motors and filters
- Boilers- inspection, cleaning and testing of components
- Centrifugal Chillers- inspection, cleaning and testing of components
- Cooling Towers- inspection, testing and cleaning of components
- High Voltage Switch Gear- inspection and cleaning
- Motor Vehicles- service as recommended by manufacturer
- Intruder and Fire Alarm Systems- testing and documentation of results
- Circulating and Loop Pumps- grease and check bearings and alignment
- Grounds Keeping Equipment- service as recommended by manufacturer
- Roof Systems- Inspect quarterly. Repair as needed.
- Emergency Diesel Generator

**Priority 1**

**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 windows and doors throughout the building are original to the building. On cold days in the winter the air penetrates the classrooms and especially the library. When we have heavy rains, we experience flooding in several areas of the school presenting an undesirable learning environment for our students.

The metal door jams on a number of doors have rusted to the point that door security may be compromised.

The main entry to the building lacks a secure vestibule area, a necessity in any security plan. Once visitors to the building are buzzed in by security staff, they have the ability to enter directly into the administration area as well as guidance without any containment. The possibility exists for unauthorized individuals to enter the building without verification of security staff, compromising the safety and security of students and staff.

The majority of the building offices and general classroom areas, are heated, ventilated and air conditioned by two (2) built up air handling units that are located in the two penthouse mechanical rooms creating very uneven temperatures in academic classrooms and vocational labs. Exhaust systems in shops are inadequate and students are being exposed to dangerous conditions.

The roof of the building is years past its warranty date and numerous leaks in academic classrooms and vocational labs present the potential for student and staff accidents due to slips and falls. There are issues with the thermal insulation. Approximately 2,500 square feet of the roof contains wet roofing. This presents the constant threat of mold in academic classrooms, vocational labs and staff offices.

Because of the poor condition of our track and the overuse of our fields, our students are exposed to unsafe conditions.

**Please also provide the following:**

In the space below, please tell us about the report from an independent source that is not under the direct control of the school district or the city/town, stating that the facility is structurally unsound or jeopardizes the health and safety of the students. The entirety of this report should be submitted in hard copy.

Please note that the MSBA will accept an official report from a city or town department/employee, if the person preparing the report is a licensed building inspector, architect, or engineer. For example, a report from the district, city, or town maintenance or janitorial department would not meet this requirement.

**Name of Firm that performed the Study/Report (maximum of 50 characters):**

Knight, Bagge & Anderson Inc. (KBA Architects)

**Date of Study/Report:** 1/8/2016

**Synopsis of Study/Report (maximum of 1500 characters):**

The report identifies a number of health and safety issues which are enumerated below:

The entire building is not equipped with any type of fire suppression system other than the hood suppression

systems in the kitchen

The exterior envelope, including roofs, windows and doors, is aging, failing and presents various health and safety issues.

There are egress and fire rating issues that must be addressed.

The HVAC system is 41 years old and as a result presents environmental concerns for, not just the tempered environment, but also for the need for fresh air and exhaust air throughout the entire building. The HVAC system should be replaced.

Plumbing waste pipes are corroded and falling apart

The electrical systems are seeing widespread signs of aging and the need to upgrade the entire system for power, lighting, fire detection, communications and technology creates a safety issue. Many items do not meet code, and therefore a widespread system overhaul is needed.

Our front entrance needs to be redesigned to provide a secure vestibule to protect our students from any intruders.

Our freight elevator, which does not meet ADA standards, is being used by handicapped students and adults to gain access to the second floor.

There are many handicap accessibility issues throughout the building that must be alleviated.

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

If "YES", please describe the location in the facility, if it is currently viable, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

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

If "YES", please describe the electrical condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

The emergency standby system, due to code changes, is no longer code compliant and the generator is at the end of its useful life. The emergency lighting is required to have a separate transfer switch with emergency lighting panels in a 2-hour rated room. The existing system does not comply with current codes. The fire alarm system for the facility consists of a Simplex 4100 addressable control panel. The control panel is located at the Main Office. The horn/strobes were not upgraded and are not ADA compliant. The existing electrical service and distribution equipment is at the end of its useful life and in poor condition. The existing lighting is not energy efficient and does not include occupancy sensors.

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

If "YES", please describe the structural condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

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

If "YES", please describe the building envelope condition, any imminent threat, and the mitigation efforts that the district has undertaken to date (maximum of 2000 characters):

The windows and doors throughout the building are original to the building. On cold days in the winter the air penetrates the classrooms and especially the library. Some of the locks on the windows are so worn that the windows have to be taped shut. When we have heavy rains, we experience flooding in several areas of the school presenting an undesirable learning environment for our students and potential exposure to slippages and mold by students and staff.

The metal door jambs for a number of doors have rusted to the point that door security may be compromised.

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

If "YES", please describe the roof condition, any imminent threat, and the mitigation efforts that the district has



**undertaken to date (maximum of 2000 characters):**

The roof of the building is years past its warranty date and numerous leaks in academic classrooms and vocational labs present the potential for student and staff accidents due to slips and falls. There are issues with the thermal insulation. Approximately 2,500 square feet of the roof contains wet roofing. This presents the constant threat of mold in academic classrooms, vocational labs and staff offices.

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

**If "YES", please describe the areas that lack accessibility and the mitigation efforts that the district has undertaken to date. In addition, please submit to the MSBA copies of any federally-required ADA Self-Evaluation Plan and Transition Plan (maximum of 2000 characters):**

Serious deficiencies in handicapped accessibility throughout the building have been identified during a building audit and present a threat to student health because of a lack of bathroom accessibility and also lack of egress in some areas.

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.*

The building is 41 years old and has a number of health, safety and security issues. There is asbestos containing material throughout the building, which needs to be abated. There are egress and fire rating issues that must be rectified. The entire building lacks any type of fire suppression system. There are environmental concerns for, not just the tempered environment, but also the need for fresh air and exhaust air throughout the entire building. The roofs are over 26 years old, have numerous leaks, which have allowed the underlying insulation to become wet and thus ineffective as well as causing numerous interior damage from water leaks. The roofs have exceeded their useful life and are no longer under warranty. Windows in many areas no longer close properly resulting in hot and cold areas that are not conducive learning environments not to mention extremely energy inefficient and costly. The building lacks security features designed into newer school buildings. There is no security vestibule to isolate and engage visitors before they enter the building. The metal door jambs for a number of doors have rusted to the point that door security may be compromised. Operationally, the doors lack a thermal break, which allows for hot and cold areas, and are not energy efficient. The building has a number of handicap accessibility issues throughout the entire building. Two areas of primary concern are the lack of an elevator (presently use freight elevator) to access the second floor and the cafeteria. The second floor houses the majority of academic classrooms and a number of vocational shops. The cafeteria is a multi-leveled area with numerous steps and ramps that do not meet current accessibility codes. The building's plumbing system is beginning to fail with a number of cast iron pipes having to be replaced do to failure. The 41 year old electrical system was not designed for the power needs of the twenty-first century in areas such as lighting, fire detection, communications and technology. Replacement parts for the system are more and more difficult to find. Overall, many items do not meet current building codes. Access roads, parking lots, sidewalks and athletic fields need to be updated. Manholes are sinking and there are a number of frost heaves. The current track is unusable and home track meets need to be held off site. Educationally, the building does not lend itself easily to reconfiguration to meet changing educational demands. The building and grounds have been well maintained over the past 41 years but have aged to a point that it is in need of a major renovation in order to meet the educational needs of the 11 member towns.

Priority 5

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

Scheduled preventive maintenance is performed regularly on the following equipment:

- Air handling units- belts, motors and filters
- Boilers- inspection, cleaning and testing of components
- Centrifugal Chillers- inspection, cleaning and testing of components
- Cooling Towers- inspection, testing and cleaning of components
- High Voltage Switch Gear- inspection and cleaning
- Motor Vehicles- service as recommended by manufacturer
- Intruder and Fire Alarm Systems- testing and documentation of results
- Circulating and Loop Pumps- grease and check bearings and alignment
- Grounds Keeping Equipment- service as recommended by manufacturer
- Roof Systems- Inspect quarterly. Repair as needed.
- Emergency Diesel Generator

## 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.***

The windows and doors throughout the building are original to the building. On cold days in the winter the air penetrates the classrooms and especially the library creating a less than desirable learning environment. When we have heavy rains, we experience flooding in several areas of the school including our vocational labs which contain expensive machinery and equipment. The majority of the building offices and general classroom areas, are heated, ventilated and air conditioned by two (2) built up air handling units that are located in the two penthouse mechanical rooms creating very uneven temperatures in academic classrooms and vocational labs. The air handling units are both variable air volume units equipped with hot water heating coils, chilled water cooling coils, a supply fan and filters. There are ceiling suspended inline return fans located adjacent to the units. The units installed in 1977 are originally installed equipment. The units are in poor physical condition resulting in above normal temperatures in the summer and extreme cold in the winter. The gymnasium is heated and ventilated by two (2) hot water indoor air handling units, which are suspended from the gymnasium roof structure. The units have a design capacity of 10,000CFM. The units installed in 1977 have exceeded their expected useful service life. The upper room of the gymnasium, used for Physical Education, is served by an indoor hot water heating and ventilation unit. The unit installed in 1977 is originally installed equipment and in poor condition. The Graphic Arts classrooms are heated, ventilated and air conditioned similar to other general classrooms. In addition, the Graphic Arts Print Shop classroom has a dedicated exhaust air system. However, there are noticeable odors in this classroom requiring that the exhaust system be upgraded. The auditorium is served by the central variable air volume air handling unit system with overhead supply air duct work and variable air volume control boxes, and overhead return air duct work. The room becomes very warm and uncomfortable when filled to capacity. The Metal Fabrication Shop is heated and ventilated by an indoor hot water heating and ventilation (H&V) unit which is in poor condition creating an uncomfortable learning environment in the winter months. The Auto Repair Shop is heated and ventilated by an indoor H&V unit. The H&V unit was installed in 1977 and is in poor condition. There is a vehicle exhaust capture system that is served by an exhaust air fan. The shop also has a supplemental make-up air supply fan and hot water unit heaters. The H&V unit, supply fan and unit heaters are originally installed equipment and have exceeded their expected useful service life. This often leads to extreme temperatures and strong odors in the lab. The Auto Body Shop is heated and ventilated by an indoor hot water heating and ventilation unit. The H&V unit was installed in 1977 and is in poor condition. There is a large and small paint booth and paint storage area that are each served by a dedicated exhaust air fan system. The paint booths each have a dedicated make up air unit. There is a H&V unit that provides make-up air for the paint booth. The shop also has supplemental water unit heaters. There are ceiling suspended air filter units located in the Auto Body shop. The H&V unit and unit heaters are originally installed equipment and have exceeded their expected useful service life creating extreme temperatures in the winter months and a less than desirable learning environment for the students in this lab. The Carpentry Shop has an indoor H&V unit, HV-8. The shop has dust collection exhaust duct work that is connected to an outdoor dust collector unit. The dust collector is in poor physical condition and shows visible signs of corrosion. The dust collector has an estimated capacity of 10,000 CFM and is originally installed equipment. As a result, students are exposed to dust and other chemicals that are very unhealthy. The Electrical Shop is heated and ventilated by an indoor hot water heating and ventilation unit and has supplemental ceiling suspended unit heaters. The H&V unit was installed in 1977 and is in poor condition. The Plumbing/Heating shop is served by make-up air supply air fans and hot water unit heaters. The supply fans and unit heaters are originally installed equipment and have exceeded their expected useful service life. Again, improper heating and ventilation make for an uncomfortable learning environment for students in these two vocational labs. There are no wheelchair accessible seating spaces integrated into the seating plan in the auditorium. The auditorium lacks accessible seating and has no accessible route between the spectator area and the stage. Most transaction counters do not have a lowered section. Bathrooms in the shops are not accessible. Work surfaces in the shops are not accessible. The gymnasium lacks accessible seating in the bleachers. The boys and girls locker rooms near the gym lack accessible lockers, benches, and showers. There is no tactile/Braille signage at 'permanent rooms and spaces' or at all exits. The cafeteria, although a 6800+ s.f. area, deducting for stairs, ramps, walls and traffic aisles; does not meet Space Summary standards. Most importantly, the cafeteria does not meet the criteria for the ADA/AAB requirements, especially the ramp slopes that far exceed those required by all accessible codes. One cannot move from the lowest to the

highest levels by meeting the requirements set forth to do so. Our current elevator (freight) is very small and does not comply with the latest ADA code.

The main entry to the building lacks a secure vestibule area, a necessity in any security plan. Once visitors to the building are buzzed in by security staff, they have the ability to enter directly into the administration area as well as guidance without any containment. The possibility exists for unauthorized individuals to enter the building and spaces without verification of security staff, compromising the safety and security of students and staff.

The track is bituminous asphalt and is severely rutted and cracked. We were unable to host track meets for the past two years. The turf on the softball/practice field is in poor shape from over use. There is almost no turf within the practice field area. The small set of bleachers on one side of the football field is not handicap accessible.

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.*

We believe that all of the major systems within this building have exceeded their expected life-span. All exterior doors have long outlived their usefulness and serve little or no purpose in assisting with energy conservation and security. All of the exterior doors and frames, hinges and hardware should be replaced with new FRP doors for high energy efficiency and security. The windows are lacking the energy efficient details that would include:

- 1.) Thermal breaks, which prohibit cold/heat from transferring through the frame into the interior.
- 2.) Tinting and
- 3.) Argon gas filled vacuum in today's insulated glass products.

Throughout the building we have very uneven temperatures in academic classrooms and vocational labs. Students are seen wearing coats in some of our vocational labs due to the cold temperatures. This certainly affects their ability to learn. Due to the age of the equipment in the building, we are not able to provide the proper level level of ventilation in many of our vocational labs. Our students are using various paint products and other chemicals every day in their labs; and if we don't have equipment to ventilate the air in these spaces we are exposing our students to some very unhealthy conditions.

What we have described throughout this Statement of Interest is a building that is showing its 41 years of age. We have continued to maintain the building by using unspent operating budget dollars or through our very meager capital budget. We do not have the available funds to perform the major renovation that a building 41 years old needs.

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):

Knight, Bagge & Anderson Inc. (KBA Architects)

The date of the inspection: 1/8/2016

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

The entire building is not equipped with any type of fire suppression system other than the hood suppression systems in the kitchen

The exterior envelope, including roofs, windows and doors, is aging, failing and has become a large source of expenditure due to extreme energy inefficiency.

There are egress and fire rating issues that must be addressed.

The HVAC system is 41 years old and the cost to repair such an extensive system is no longer fiscally responsible. As such, there are environmental concerns for, not just the tempered environment, but also for the need for fresh air and exhaust air throughout the entire building. The HVAC system should be replaced.

The electrical systems are seeing widespread signs of aging and the need to upgrade the entire system for power,

lighting, fire detection, communications and technology. Many items do not meet code, therefore widespread system overhaul should be considered.

Our front entrance needs to be redesigned to provide a secure vestibule to protect our students and staff from any intruders.

Our freight elevator, which does not comply with ADA, is being used by handicapped students and adults to gain access to the second floor.

Plumbing waste pipes are corroded and falling apart

There are many handicap accessibility issues throughout the building that must be alleviated.

The on-site parking and roadways are in need of improvements.

The track is bituminous asphalt and is severely rutted and cracked. We were unable to host track meets for the past two years. The turf on the softball/practice field is in poor shape from over use. There is almost no turf within the practice field area. The small set of bleachers on one side of the football field is not handicap accessible.

**Priority 7**

*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.*

Over the last five (5) years we have seen a heightened interest in specific vocational programs. Applications for enrollment in our Health Assisting, Computer Information Systems and Engineering Technology programs have exceeded available seats in most years. Below is a summary of the last five years.

	2015	2016	2017	2018	2019
<u>Medical Careers</u>					
Applications	28	47	45	34	35
Seats	20	25	25	20	20
<u>Engineering Technology/Advanced Mfg.</u>					
Applications	N/A	28	25	29	26
Seats	N/A	20	20	26	26
<u>Computer Information Systems</u>					
Applications	32	31	28	21	30
Seats	20	20	20	20	21

A number of our vocational shops do not have related classrooms in close proximity to their labs We do not have a separate entry for the public to gain access to our restaurant and cosmetology lab which compromises the security of our secondary students. Similarly, there is no separate entry way for our post-secondary students to enter and exit the building. These older students often come in contact with the our younger secondary students again presenting a potential security concern. All of our spaces need to be designed to be multi-programmable. It would also be beneficial to have more lab space.



Priority 7

*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.*

We have started to address the problem of overcrowding in specific vocational programs by renovating our Construction Craft Laborers space, a program that was phased out due to a lack of interest on the part of students, to accommodate the overflow in Engineering Technology/Advanced Manufacturing using District funds. We are presently renovating the former Engineering Technology program space to add a Medical Assisting Program to alleviate the overcrowding in our Medical Careers program. However, most of the renovation costs will be funded through our district budget which is heavily subsidized by our eleven (11) member towns.

Priority 7

*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.*

Because we are unable to provide space for more than 20-25 students per class in our most popular programs; Medical Careers, Engineering Technology/Advanced Manufacturing and Computer Information Systems, we are losing many students after their freshmen year. Students who are not able to access their first choice in vocational programs are apt to under perform or even go back to their sending towns. This reduces our enrollment and impacts our Chapter 70 funding from the state. It also reduces the number of trained students available to enter into high skilled trades in the Metro West region of which Tri-County is a part of.

Our inability to reconfigure some of our larger vocational labs, which are under-subscribed, to create space for new programs such as Biotechnology and Robotics, which meet the needs of employers in the the Metro West region is a major problem. Since the school was designed in the mid 1970's, the ability to renovate and reconfigure vocational spaces is cost prohibitive.