



Pittsfield Public Schools

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September 25, 2011

Mary Pichetti
Director of Capital Planning
Massachusetts School Building Authority
40 Broad Street, Suite 500
Boston, MA 02109

Dear Ms. Pichetti:

I have received your letter dated September 7, 2011. In the letter, you reviewed the documents we had filed with your agency, the Massachusetts School Building Authority (MSBA), on July 14, 2011. These documents included the Draft Educational Programs for both Pittsfield and Taconic High Schools and the Berkshire County Labor Market Study. Within the letter, you asked for several additional pieces of information. What follows in this letter is our response with corresponding enclosures.

I am more than happy to schedule a conference call to review our response and discuss next steps. I look forward to hearing from you.

Sincerely,

Howard Jacob Eberwein III, Ed.D.
Superintendent
Pittsfield Public Schools

Cc: Mayor James M. Ruberto, City of Pittsfield
Karl Brown, Massachusetts School Building Authority
Katie DeCristofaro, Massachusetts School Building Authority
Paul Kneeder, Skanska USA Building Inc.
Dale Caldwell, Skanska USA Building Inc.
Katie DeCristofaro, Massachusetts School Building Authority
Members of Pittsfield School Building Needs Commission
Members of Pittsfield School Committee

The mission of the Pittsfield Public Schools is to serve our community and its children by creating an environment where lifelong learning is valued, excellence is expected, and improvement is continuous

Department of Elementary and Secondary Education (DESE)

As part of our submission, the MSBA requested that we send our Educational Programs and Labor Market Study to the DESE. A letter and materials were submitted to Commissioner Mitchell Chester in August of 2011, and Superintendent Eberwein had two conversations with Christine Lynch, from the Regional Governance Office. During each conversation Ms. Lynch reviewed the DESE's role in supporting new school construction, including certification of special education programs/spaces and career and technical education programs/spaces. She indicated that the DESE would review architectural plans and is in the process of developing a more comprehensive Chapter 74 program review process. She offered that at this time the DESE is not requiring any additional written documentation from Pittsfield and they would not hold up the project. That said, they want to be partners as future decisions and plans are developed. Superintendent Eberwein has requested a formal letter from the DESE, which he has not received as of this date. It is worth noting that Pittsfield Schools will be undergoing a Coordinated Program Review (CPR) in April of 2012. As part of this review, both special education programs and Chapter 74 programs will be audited for compliance with state and federal regulations. We expect any findings of the CPR to be incorporated into future planning.

Educational Programs

1. The MSBA noted that the Educational Programs have not been widely shared with the public or school staff. Thus far the plans have been reviewed and approved by the Pittsfield School Committee in May of 2011 and by the School Building Needs Commission in June of 2011. Both meetings were open to the public with time allocated for public input. Additionally, both Educational Programs were posted online in July of 2011 and the Superintendent used both the local print media and radio to direct citizens to these and other commission resources. Finally, representatives from Skanska attended a General Advisory Committee of the CVTE programs and reviewed the Educational Programs with these individuals, who represent both classroom and working trades professionals. Looking forward, we expect to further distribute the plan as follows:

- A public presentation to the Pittsfield City Council will be delivered on October 11, 2011. During that time, all resources will be reviewed again as part of this public meeting. As has been the case, an online input tool will be offered as a mechanism citizens can use to ask questions, make comments, or offer their opinions.
- The Educational Program documents will be circulated among all Pittsfield Public Schools' staff. In addition, each high school principal will dedicate staff meeting time to an overview of each plan. As each high school is preparing for impending accreditation visits, the review of the plan and changes contained within will align neatly with planning that is ongoing at the building level.
- As has been the case in the previous two years, the Superintendent will make appearances on local radio and cable access television to highlight the elements of the plan. These shows will be informational in nature and at least one, scheduled for October 5, will allow citizens to call in to ask questions.
- A public presentation that provides an overview of commission efforts to date and specifically reviews the Educational Programs is targeted for late October. As part of this presentation, citizens will be afforded an opportunity to ask questions and offer input.

We are hopeful that as we move further into the feasibility phase, our architect/designer will play a direct role in further developing the Educational Programs and translating them into design features. As part of this process, it is expected the designer will also offer a public outreach and input plan that will allow for further refinement of the Educational Programs.

2. Science, Technology, Engineering, and Mathematics (STEM) programs at Taconic High School (THS). Currently, both high schools have academy programs that allow for specialized pathways through high school and into post-secondary settings. All pathways include a core curriculum that is part of each student's graduation plan. As part of the district's Race to the Top (RTTT) plan, we will further align our local expectations with the state's MassCore, which establishes graduation standards in ensuring students are prepared for college and career.

One academy currently in place at Taconic High School is the Science and Engineering Academy (SEA). This pathway creates a focus on science content and the inquiry process through science courses, mentoring, internships, and the science and innovation fair. It is expected that both high schools will continue academy programs, which create smaller learning communities within larger schools to allow students to connect their learning to post-secondary goals and the world of work while developing Twenty-First Century skills and fostering positive relationships between adults and students.

We believe that the Labor Market Study, when coupled with state and national employment trends, reinforces the need for STEM, embedding both content and skills into pre-professional and technical training. For example, the health care industry, the largest employer in Berkshire County, will require both technical and professionally credentialed employees. At THS we expect students will prepare through two separate, yet connected pathways. First, the SEA will offer students a concentration of core and high level science courses, up to and including Advanced Placement, that will prepare them for college coursework where they may pursue pre-medical or nursing training, for example. In addition to high-level coursework, these students will have an opportunity to participate in career inventories, be mentored by working professionals, and compete in state, local and national science and innovation fairs. Other students at THS will choose a technical pathway. While still completing a solid core academic schedule, students in the Health Technology program would participate in a Chapter 74 approved curriculum that specifically trains students for immediate careers in practical nursing and phlebotomy, for example. This curriculum includes technical skills that are developed in the classroom and practiced in the field. In addition to Health Technologies and pre-professional training in the sciences, STEM will also be reinforced through pre-engineering courses that will support pre-professional careers and also manufacturing opportunities, such as those listed in the Labor Market Study.

All told, we believe applying STEM as an emphasis at THS will prepare students who are pursuing both pre-professional and technical careers that align with emerging labor trends at the local, state, and national level.

3. Music and Performing Arts programs. As part of the School Building Needs Commission's vision statement, we believe there were be a clear delineation of areas of focus and concentration at the two high schools. Taconic will be themed around science, technical and vocational pathways, while Pittsfield High School (PHS) will be themed around liberal arts education, including fine and performing arts. In creating concentrations at each school, resources will be better maximized in supporting the needs and interests of each group of students. While this specialization occurs currently at the high schools in vocational areas, for example, the Educational Programs call for the development of pathways that will be unique to each school.

We anticipate that programs such as theatre, specialized art classes, and voice, for example, will be offered at PHS, while pre-engineering, computer programming, and Advanced Placement Chemistry will be offered at THS. That said, any course, program, or elective that has sufficient enrollment will be offered at both schools. In situations where enrollment is low, we will work to make available opportunities for students to have access to these courses and experiences through cross-school course enrollment and virtual learning models. Thus, a student who wants to participate in the school play, assuming there is only one district theatre program at PHS, will have access to this program as part of the cross-school elective program. This is already the case with several athletic teams, which operate under a cooperative agreement approved by the Massachusetts Interscholastic Athletic Association (MIAA).

At this point we have not committed to a specific set of courses for each school; rather we have agreed, in concept, to the pathways each school will house. As part of the ongoing public outreach and input process, and in combination with the design process we will resolve and clarify the unique courses and experiences that will be offered at each school. It is expected that the program of study at each school will be fluid, responding to external conditions and internal interests as we move into the future. Thus, flexibility will be critical to the design process.

4. Electronic technology. We believe that the question of how electronic technology will be included in the proposed high schools can be addressed through our technology plan (an outline is provided in Appendix 1), which was approved by the state and the Pittsfield School Committee this past year. Our technology plan includes five domains, all areas of focus for our district and the new high schools. Most importantly, we recognize the need to provide students with access to media-rich learning environments through application of technology on a daily basis. This will include the use of technology by both instructors and students in facilitating learning. Application of potential technologies, for example, include a simulation lab for students in health technologies courses. This lab affords students the opportunity to work on a computerized human model that can be programmed with varying conditions so that students can case manage and problem solve in this simulated setting. Technology will also be used in other areas such as manufacturing technology, metal fabrication, and automotive to support design work (computer aided design), operation of industry standards equipment, and diagnostic and trouble-shooting experiences. Students will also have access to technology throughout the school in computer labs and mobile classroom computing, as is now the case. Pittsfield is also implementing several classroom tablet pilots, in which students will use a tablet in replacement of a textbook, graphing calculator, and word processor.

We also continue to press forward with virtual learning options, having participated in the state-wide virtual learning grant in the 2010-2011 school year. This grant allowed teachers the option to develop and deliver virtual courses to students. Given the need for students to be comfortable and proficient in online learning, we expect our new school will be equipped with spaces for students to participate in virtual learning, both synchronously and asynchronously. In doing so, students will have available to them high level courses being created and taught in other, often remote, locations.

Our technology plan also includes data management, infrastructure, technical services, and communication as domains that will be expanded district-wide and certainly in any new constructed or renovated school. As part of the technology plan, we have implemented a sustainable renewal plan to ensure both hardware and software is kept current. We envision the new high schools as fully wired with projectors and interactive white boards to facilitate instructional delivery.

We are more than pleased to further discuss our technology plans for the school district and the new high schools.

Labor Market Study

Documentation related to student enrollment projections in the various programs is as follows:

1. Attached, Appendix 2, is an enrollment summary of the Career Technical/Vocational programs at both Pittsfield and Taconic high. As has been the case historically, program development and adjustment will be a condition of labor market trends, post-secondary options, and student interest. In addition, feedback from advisory boards will play a role in shaping both programs and curriculum. As such, programs will be added, expanded, or phased out based on these variables. In recent years, several Chapter 74 programs have been added or expanded based on this data including Health Technologies and Construction Trades. Others such as marketing have been eliminated with content shifted to the business academies that were developed in each school. We will continue to explore adding new technical areas, as outlined in the Educational Program, such as plumbing and electrical pathways that we expect will feed into both the construction and “green” trades industries. Others, such as barbering and early childhood, will be considered based on local employment trends. Finally, programs such as the traditional print shop will be shifted to reflect current design, graphic, and visual communications.

It is difficult to fully predict future enrollment trends, yet we will rely on historical trends to somewhat predict future viability of both current and prospective programs. The addition of any new program will require student interest inventories as early as Grade 6, and this data will be used to both gauge the viability of both new and current CVTE programs.

The question of Pittsfield’s role in supporting the career and technical/vocation education of children in neighboring towns is still being considered by both the local School Building Needs Commission (SBNC) and the MSBA. Regardless, Pittsfield expects to play an ongoing role in, at the least, accepting tuition students into CVTE programs from neighboring communities. In recent years, this number has risen slightly, and we expect that with the completion of a renovation/construction project, more students will be attracted into Pittsfield. That said, the question of how many students living in neighboring districts will choose to attend Pittsfield programs is difficult to measure. In recent years, this number has increased, and we would put forth that after the remodeling/construction of the high schools, an increase in students choosing to attend Pittsfield programs will rise. Given 5-15% of students across the state participate in CVTE programs, it is clear that the neighboring towns, particularly southern Berkshire County, are under-serving their students. Pittsfield expects to play an integral role in providing CVTE pathways to these students.

We will also note that for two consecutive years, the district has worked with the New England School Development Council (NESDEC), to conduct enrollment and facilities studies. This study was provided as part of documentation submitted to the MSBA in the spring of 2010. An updated version of the enrollment projections is provided as a supplement to this letter.

2. Data regarding numbers of required classes, elective classes or vocational programs. Currently, the Pittsfield Schools are in the process of creating Program of Study grids for all CVTE students. A sample copy is provided (see Appendix 3). These study grids will outline for all students their high school and post-secondary plans, including core classes, CVTE classes, and electives. In addition, work experiences and post-secondary linkages will be articulated. These grids will also be generated for students in non-Chapter 74 pathways, including thematic academies. Currently, as part of preparation for the Coordinated Program Review and the RTTT, teachers and school staff are working to complete these grids. This will enhance our current program of study grid, presented in Appendix 4 and Appendix 5. As part of our district efforts to promote college and career readiness using outcomes to measure student progress,

we also expect to add metrics to these grids including performance indicators such as MCAS, Accuplacer, and Twenty-First Century/workplace readiness skills.

3. As is the case now, students and families have access to all schools in the district through intra-district choice. In choosing a high school, students are afforded several opportunities to visit each high school to make an informed decision. First, high school staff visit the middle schools to conduct a review of courses, programs, and pathways offered at each of the two high schools. An open house, widely publicized, is held in the winter prior to school selection and registration. This event offers students and parents/guardians an opportunity to visit each high school, tour programs and departments, and speak with teachers. Students are also offered tours of the high schools, with several targeting specific career and vocational/technical education programs. All students also have an opportunity to meet with their guidance counselors in reviewing their goals for high school.

Given that the Educational Programs of each high school will be more specialized than they are currently, we will need to expand outreach and information to students and their families. Under the RTTT, the district is in the process of implementing the Massachusetts Counseling Model. We expect this approach will extend our reach down further into middle school as early as Grade 6, engaging students in a discussion about their high school and post-secondary goals and aspirations. In doing so, students will begin early to consider which high school will support their preferred pathway, understanding that each school will offer a solid academic core consistent with the MassCore, and each high school will lead to preparation for post-secondary options including the most selective colleges and universities. As part of the Massachusetts Model, each student will develop a unique and differentiated high school and post-secondary plan, which will be supported by the concentration of electives housed in each school. Students will review these plans on an annual basis with their parents/guardians and counselors.



Appendix 1. Technology Plan

Pittsfield Public Schools Technology Plan 2011-12

Domain 1: Teaching and Learning

- A. Implement strategies using technology to support instruction through the transition to common core standards and curriculum.
- B. Provide for media-rich teaching, learning and assessments.
- C. Improve the District's Virtual Learning provision, especially course recovery and expanded course offerings.

Domain 2: Data Management

- A. Support the use of data to improve student achievement.
- B. Improve the quality of student and administrative data through data cleansing and correct data entry.
- C. Ensure effectiveness, integration and intercommunication of administrative, personnel and student databases

Domain 3: Network Infrastructure

- A. Upgrade and maintain internal connections within all schools to ensure efficient high-speed network access to computers and electronic devices.
- B. Upgrade and maintain the District's Wide Area Network (WAN) to ensure efficient network communication and Internet access.
- C. Ensure that all network traffic is properly filtered and secure in compliance with legal requirements and local policy.
- D. Segment local area networks to allow different levels of Internet and streaming-media access.
- E. Reduce downtime of District servers and network services.

Domain 4: Technical Services

- A. Ensure that the District remains on an appropriate technology renewal cycle.
- B. Determine the role of mobile and handheld devices to support academic and administrative computing.
- C. Review and improve student access to computers and technology in both high schools.
- D. Review and improve technology assets database.
- E. Utilize teachers, technicians, administrators and others in support and professional development roles.
- F. Revise the District's Acceptable Use Policy.
- G. Evaluate and improve the District's email system including opportunities for student email.

Domain 5: Communication

- A. Coordinate methods and media used to communicate with families, the business community, local government and other stakeholders.
- B. Expand website to gather and promote news and media about the District.
- C. Review workflow of paperwork and documents to determine effective electronic solutions.

- D. Ensure that telephony services are efficient, adequate and cost-effective within the District.

Appendix 2. Enrollment for CVTE programs, 2010-11

Pittsfield High School

2010 Vocational Program	TOTAL
Auto Body	0
Auto Mechanics	0
Carpentry	0
Cosmetology	33
Culinary Arts	35
Electronics	12
Health Assisting	0
Horticulture/Landscaping	15
Manufacturing Technology	0
Metal Fabrication	0
Small Engin Repair	25
Career Exploratory	121
Graphic Arts	0
<i>Subtotal</i>	241

To Become Chapter 74	
Facilities Management	21
Health Assisting PHS	24
Academy of Information Tech	0
<i>Subtotal</i>	45

Non-Vocational Programs	
Nonresident	21
Pittsfield Students	698

Total Enrollment 1005

Taconic High School

2010 Vocational Program	TOTAL
Auto Body	24
Auto Mechanics	27
Carpentry	21
Cosmetology	0
Culinary Arts	37
Electronics	0
Health Assisting	43
Horticulture/Landscaping	0
Manufacturing Technology	18
Metal Fabrication	24
Small Engin Repair	0
Career Exploratory	101
Graphic Arts	16
<i>Subtotal</i>	311

To Become Chapter 74	
Facilities Management	0
Health Assisting PHS	0
Academy of Information Tech	50
<i>Subtotal</i>	50

Non-Vocational Programs	
Nonresident	15
Pittsfield Students	545

Total Enrollment 921

Appendix 3. Manufacturing Technology Program of Study Grid

TACONIC HIGH SCHOOL MANUFACTURING TECHNOLOGY					BERKSHIRE COMMUNITY COLLEGE ENGINEERING TECHNOLOGY – Manufacturing Tech				
	10	11	12	Semester 1	Semester 2	Semester 3	Semester 4	4-Year College Connections	
English	English 9	English 10	English 11	English 12	ENG English Comp/ Writing	ENG English Comp/ Writing		COM 107 Intro to Oral Communication in Business	
History & Social Sciences	U.S History I	U.S History II	World Geography	Elective			General Education Elective	General Education Elective	
Science	Biology	Chemistry	Physics	Elective	PHY 111 Ideas of Physics		PHY 101 College Physics I		
Math	Algebra I or Geometry	Geometry or Algebra II	Algebra II	Advanced Applied Math	ENM 126 Technical Mathematics II	ENM 127 Technical Mathematics III	Graduation Requirements: Forum and Core Competencies Portfolio		
Humanities-Technology	Human Development 9	Human Development 10	Elective	Elective					
Phys Ed/ Health	Physical Education	Physical Education	Physical Education	Physical Education	* Depending on the student's area of interest, two technical electives may be chosen from the following: ENT 136 Interpreting Engineering Drawings II ENT 143 Plastics Material Science ENT 218 Pulp and Paper Technology / Chemistry ENM 255 Statistical Quality Control PHY 102 College Physics II			Health Fitness Requirement – 30 hours	
Foreign Language	<p>Taconic Manufacturing Technology curriculum includes:</p> <ul style="list-style-type: none"> - Tooling University - A virtual online classroom; - Computer Training - Mastercam Software for Design and Manufacturing, AutoCAD, SolidWorks 3D Solid Modeling, Microsoft Word, Excel, and PowerPoint; - Mathematics for the Manufacturing Trades; - Project Based Learning focused on developing Manual & CNC Machining Skills, Quality Control, and Inspection Procedures. <p>A senior year Capstone Project is being proposed.</p> <p>Manufacturing Tech is aligned with the following certifications:</p> <ul style="list-style-type: none"> - National Institute of Metalworking Skills (NIMS) - in progress - MA Certification of Occupational Proficiency (CVTE Frameworks) - OSHA 10/30 General Industry Safety Training 				* ENT 135 Interpreting Eng. Drawings		ENT 129 Intro to Electricity Electronics	ENT 244 Hydraulics and Pneumatics	ENT 238 Elements of Machines
Career & Technical Education Program					* ENT 151 Intro to Manufacturing		* ENT 152 Adv. Manufact. Intro to Comp. Aided Design	* ENT 225 Intro to Computer Aided Manufacturing I	* ENT 226 Intro to Computer Aided Manufacturing II
CVTE Linkage Services	Labor market & career awareness presentation	College/STEM Career Fair at BCC, Hass Ctr. @ WPI	Early College Advising - BCC Scholarships	Campus Connection: BCC College Orientation & Transition Program		Linkage Articulation Advising BCC / Husky Engineering Tech Scholarship BCC College Ambassador			
Work-Based Learning	Career Exploration	Industry Tours Job Shadow	Industry Tours Internship	Internship Co-op	Work Study, Internship, Summer Job				

*Shaded BCC courses are taught in the evenings at Taconic High School as part of a collaborative effort utilizing their Manufacturing Technology faculty and laboratories.
NOTE: Through a BCC articulation agreement, Taconic students may EARN 4 COLLEGE CREDITS FOR ENT 151 upon successful completion of the Manufacturing Tech program.
Additional "early" college credits may be earned through BCC's Bridge to College Program.

EMPLOYER / COMMUNITY CONNECTIONS: This Manufacturing Technology (MT) pathway is collaboration between Taconic High School, Berkshire Community College and the Berkshire Applied Technology Council. Graduates from Taconic's MT Program are encouraged to continue at BCC for their Engineering Technology associate's degree. The MT Advisory Board is supported by numerous local businesses, such as: ~~Intercept Inc., Lander Inc., Stebbins Technologies, Apex Engineering, Larsen Mold, Marand Mold, Trident (Hass) Corp., Cavalieri Plastics, and Data Flute CNC.~~ These businesses offer high-quality work-based learning experiences in order to promote and encourage student interest in the pursuit of a career in manufacturing technologies.
Students interested in transferring may wish to consider the Joint Admissions Program between BCC and the University of Massachusetts and all 4-year state colleges. Students who graduate from BCC with a 2.5 average are guaranteed admission. With a GPA of 3.0 or higher, students receive a 33% in-state tuition rate reduction. Students should sign up before they complete 30 credits at the community college. 10/27/2010

Appendix 4. Sample Program of Study: Cosmetology

The three-year program is designed to develop the student's skills necessary to become a professional cosmetologist. The facility is a modern, complete, operating salon with demonstration areas and practice workstations. Students are exposed to every day experiences as in the world of work. Upon successful completion of the program students are fully prepared and eligible to take the Massachusetts State Board exam for licensure to pursue their career. This program also accepts post-graduates by application. Students should take close notice of four-year academic requirements. Students who are not in good academic standing will not be allowed to progress through the three-year cosmetology sequence until they have satisfied the academic requirements. Students will begin to log lab hours (towards 1,000 hour requirement) at the start of their junior year.

Students should sign up for 70 credits a year from among the following courses: *Please note: Students must successfully complete the 9th grade sequence listed in order to accommodate the cosmetology labs in grades 11/12.

Code	Level	Course	Periods	Credit
<i>Exploratory year (grade 9)</i>				
English 9			5	10
Mathematics			5	10
Biology			5-6	10-12
World History I			5	10
P900		Physical Education	2	4
P905		Human Development	2	4
Career Exploratory			5	10
Elective (recommended business/art)				
<i>First Cosmo Year (Grade 10)</i>				
English 10			5	10
Mathematics			5	10
Chemistry			5-6	10-12
World History II			5	10
P900		Physical Education	2	4
P906		Human Development	2	4
P929		Introduction to Cosmetology	5	10
Elective (recommended business/art)			5	10
<i>Second Cosmo Year (Grade 11)</i>				
English 11			5	10
Physics			5	10
Mathematics			5-6	10-12
P900		Physical Education	2	4
P934		Cosmetology Related 11	3	6
P930		Cosmetology Lab 11	15	30
<i>Third Cosmo Year (Grade 12)</i>				
English 12			5	10
U.S. History			5	10
P900		Physical Education	2	4
P933		Cosmetology Related 12	3	6
P931		Cosmetology Lab 12	20	40

Upon completion of the 1,000 hours required by the Commonwealth of Massachusetts Division of Professional Licensure Board of Cosmetology and successful completion of all graduation requirements, the student is eligible to take an exam, which consists of a written and practical test of technical skills based on established performance criteria. With a passing grade of 80% or higher the student is issued as Cosmetology license.

Appendix 5. Sample Graduation Planning Grid

Technical/Vocational Certificate

Subject	Grade			
	9	10	11	12
English 4 years required (10 credits)				
Mathematics 3 years required (10 credits)				
Science 3 years required (10-16 credits depending on level and labs)	Biology	Chemistry	Physics in 11 or 12*	
Social Studies 3 years required (10 credits)	US History 1	US History 2	World History in 11 or 12	
Tech/Voc	9th Grade Career Exploratory			
Phys. Ed. & Human Development PE: 4 years required, (4 credits) HD: 2 years required, (2 credits)	Phys Ed Human Dev. 9th	Phys Ed Human Dev. 10th	Phys Ed	Phys Ed
Electives				
Total = 244 Credits	<i>65 credits minimum</i>	<i>65 credits minimum</i>	<i>65 credits minimum</i>	<i>65 credits minimum</i>

* Allied Health students take Anatomy & Physiology in place of Physics