

M.S.A.D. No. 75
Mt. Ararat High School
Construction Project

Draft

Educational Specifications

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Introduction

The process for writing the educational specifications for the Mt. Ararat High School Construction Project was designed to engaged students, faculty, support staff, administration, parents, community members, and local officials. Portland Design Team (PDT) played a critical role in the process, collaborating with members of the Building Committee to organize events and facilitate interviews with various “user groups” for the purpose of discovering educational and community priorities. Themes used to guide the writing of the educational specifications emerged from the collection of hopes, dreams, ideas, and thoughts gathered as groups discussed a vision for education, physical features designed to engage students in authentic learning experiences, unique characteristics of the communities served, and efficiencies.

Building Committee Membership

Kim Totten	M.S.A.D. #75 Board Member
David Johnson	M.S.A.D. #75 Board Member
Scott McKernan	M.S.A.D. #75 Board Member
Julie Booty	M.S.A.D. #75 Board Member
Bradley Smith	M.S.A.D. #75 Superintendent of Schools
Donna Brunette	Principal, Mt. Ararat High School
Chris Shaw	M.S.A.D. #75 Facilities Director
Steven Dyer	M.S.A.D. #75 Business Manager
Mike Chonko	Parent and Community Member
John Hodge (Committee Chair)	Parent and Community Member
Krista Chase	Counselor, Mt. Ararat High School
Matthew Cook	Teacher, Mt. Ararat High School
Emily Robbins	Student Representative

Members of the Building Committee generated the list school and community representatives who should be invited to participate in conversations focused on educational goals, programs, services, use of space, and physical features in a proposed new or renovated school. Dates were set for public meetings, invitations sent, school newsletters published the invitation, and media was enlisted to get the word out. A subgroup of the committee worked with PDT architects to create the MTA Construction page linked to District and school websites; the website is designed to inform the public of ongoing work associated with the construction project, provide links to the Maine Department of Education Major Capital School Construction webpage, promote involvement in meeting and sub-committee work, provide input by way of web submissions to the Building Committee.

The activities scheduled and structured to gather input from students, faculty, support staff, administration, parents, community members, and local officials included:

Architects from PDT presented to the faculty on a professional development day in April, sharing images of model schools and opportunity to reflect on what the professional staff liked about the current structure and their hopes in the design for a new or renewed high school.

Public visioning sessions were scheduled on May 19, 2015 and June 4, 2015. People in attendance included parents, students, town officials, local businesses, teachers, school administration, Board members, local media, politicians, law enforcement, and residents from each community in our district that includes Harpswell, Bowdoin, Bowdoinham, and Topsham. Members of the Building Committee supported PDT architects as members of the discussion groups as they facilitated a process focused on gathering community input.

User group meetings were scheduled throughout the month of May and June. These interviews provided opportunity for all staff and students at Mt. Ararat High School to share their insights, hopes, and dreams for education and school design; the level of engagement members of each group demonstrated in the interviews was an indication of the genuine interest and excitement related to this project. Many ideas about what should be incorporated into a new or renovated school were shared. Given the current open concept that has been a concern since the first days in the current high school facility, there was a significant focus on more traditional architecture that includes walls, doors, windows with views the outside, and acoustic privacy.

Students at the high school were invited to participate in a survey designed to gather their independent thoughts about the current structure and hopes the future structure.

MTA User Group Interview Schedule

Dates	Times & Groups
May 1 (Friday)	Administration Learning Commons Facilities Counseling
May 11th (Monday)	IT/Technology Students (Seniors) Science Department Heads
May 19th (Tuesday)	Adult Education Athletics Students (Juniors) Social Studies School Resource Officer and Other Safety Agents
May 27th (Wednesday)	Learning Commons Gifted and Talented/ELL 9th Grade Academy Students (Sophomores) Students (Freshman)
June 3 (Wednesday)	Food Services School Based Health Services Music Department Recreation Departments Middle School Students @ Middle School Secretaries
June 10 (Wednesday)	Math English Visual Arts World Language Health/PE Special Education

As noted, the Building Committee was the forum through which decisions were made regarding planning for the gathering of information. Through this process design themes for a new or renovated school emerged that reflect the thinking of students,

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faculty, support staff, administration, parents, community members, and local officials. These themes have guided the writing of the educational specifications by a group of teachers enlisted to filter through all the notes and survey data collected as a result of this process. The design themes are noted in the following chart:

Design Themes

Flexibility Food Court Main Street Learning Commons as a Hub Ubiquitous Technology Community Connections & Access Life-Long Wellness Sustainable Thinking Safety & Security Maker-spaces Student Work Display Visual References to School Culture Informal Gathering Spaces Small Performance Area Durability and Comfort Outdoor Learning Environments
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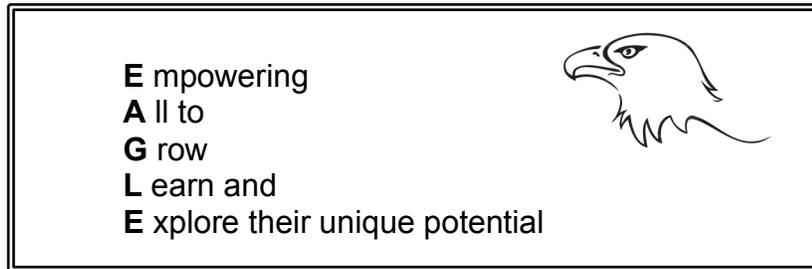
The members of the Mt. Ararat High School faculty who developed the themes into educational specifications are noted in the following chart:

Educational Specification Writing Team

Donna Brunette	Principal
Peggy Callahan	World Language Department Chair, EL Coordinator and Teacher
Tracy Doviak	English Teacher
Ryan Palmer	Technology Integrator - Middle and High School
Ryan Woodside	Science Department Chair, Teacher

A Forward Looking Program for All Students

Question 1: How does the project enhance teaching and learning to meet the needs of learners in the 21st century?



Mt. Ararat High School's mission is for every student to explore and work toward fulfilling his or her unique potential. Our vision is to:

- ensure challenging and personalized learning;
- teach the essential skills necessary to meet the demands of a changing world;
- provide a safe, nurturing, and intellectually vibrant environment where diversity is valued and everyone is respected; and
- work in partnership with families and the community to promote the health and development of the whole individual.

Our school community goal is to meet the needs of learners both now and in the future. The Mt. Ararat High School building project will accomplish this task by using a variety of different and flexible physical spaces both inside and outside the school and providing students with multiple pathways to reach their potential through a student-centered, proficiency-based system.

Describe the manner in which this project aligns with the state and local vision for teaching and learning and how it is supported by current research on high-performing schools. How will the new school:

1. Create equitable opportunities for all students to achieve Maine's Learning Results?

As a district, the vision of MSAD #75 is aligned with the vision of the state's student-centered proficiency-based learning. Mt. Ararat High School is creating equitable access for all students to achieve Maine's Learning Results through a proficiency-based system as outlined in L.D. 1422 from the State Department of Education where students graduate with a diploma that clearly explains what a student knows and is able to do. The curriculum will have clearly defined learning targets and progressions based on

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the Common Core for Mathematics and English Language Arts, the Next Generation Science Standards, and other national standards. Student grades will be reported separate from Habits of Works standards. The district is moving from a traditional time based system to a proficiency-based system.

2. Offer the skills and tools students need to succeed in a global, knowledge-based economy?

Mt. Ararat High School will offer courses with the skills and tools students need to succeed in a global, knowledge-based economy by offering courses that include the knowledge, skills, and characteristics necessary for success in the future. Each graduate of Mt. Ararat High School completes an independent research Capstone Project. The Capstone project is a culminating event linked directly to our mission statement. The goal is to have each senior develop an individual project demonstrating that he/she has the skills to be a self-directed and lifelong learner. Through Capstone each senior will exhibit his/her skills as an effective communicator, a quality worker, a problem solver, and an integrative and informed thinker. Students will be encouraged to create projects of strong personal interest. The intent is to push individuals to reach beyond the academic work, extending and enhancing the traditional school experience. The high school building project will incorporate ubiquitous technology, a learning commons as a central hub, provide maker-spaces to promote innovation, collaborative spaces, a forum for student presentations and honoring student work, spaces to display acknowledge student work, and flexibility in the function of spaces. The facility and programming will promote innovation and offer the opportunity to use tools and apply 21st century learning skills.

3. Be a center of learning for multiple audiences and a partner with the community?

Mt. Ararat High School will be a center of learning for multiple audiences and a partner with the community by providing a space that can be utilized by a variety of user groups including adult education, Topsham Recreation Department, potential use of gymnasium space, fitness center, small theater, outdoor amphitheater, meeting rooms, and school and/or community garden.

4. Address needed improvements based on current and projected school data, such as student attendance, anticipated enrollment, academic performance, graduation rate, and college going data?

The Mt. Ararat High School building project will address facility and programmatic changes central in a design that supports personalizing education in a proficiency-based learning environment. Our enrollment is anticipated to be in the 800s until 2020-2021, when it will dip below 800. Current attendance data reveals that approximately 65% of our students who have missed 17 or more days of school have identified needs associated with health issues (physical and/or mental health) that impact their attendance; approximately half of these students are at risk for school failure. Our graduation rate is 88.4%; although it has been as low as 78.03% and as high as 90.38%. Our current dropout rate is 8.9%. The class of 2014 had the following data about college attendance, 4 year college 46.8%, 2-year college 26.1%, a Certificate Program 4.3%, and Military Service 6.4%. Graduating seniors who took the SAT in 2014 scored an average of 480 in Critical Reading, 481 in Math, and 460 in Writing. Our students generally perform at the State average level on the Maine Educational Assessments with approximately 65% of our students demonstrating proficiency in English and Math. The personalization of education, enhancing the resources, and development of programs focused on engaging students in learning that is authentic and connected with personal learning goals will support higher levels of engagement and increase student achievement.

5. Be flexible enough to incorporate a broad repertoire of instructional practices and strategies?

Mt. Ararat High School will be flexible enough to incorporate a broad repertoire of instructional practices and strategies by utilizing a variety of different classrooms spaces including presentation capacities, outdoor learning spaces, themed hands-on learning or maker-spaces, virtual classroom spaces, and the learning commons and dining area as a hub of the school.

6. Be a personalized learning environment that will create an energized educational culture for students and teachers?

Mt. Ararat High School will be a personalized learning environment that will create an energized educational culture for students and teachers. This environment will be achieved physically by providing a welcoming entrance, connecting the school to the outdoors, providing spaces to display student work both physically and digitally around the school, variety of themed hands-on learning maker-spaces, and utilizing flexibility with a variety of instructional spaces that are bright and warm.

This environment will be achieved consciously through the creation of

- learning commons professional development space for faculty

- collaboration spaces for students and teachers
- food service facility designed for flexible use
- motivational signage and school branding
- student artwork and projects professionally displayed throughout building
- professional displays of school awards
- design elements reflecting of community values

7. Support relevant learning models and instructional practices that can accommodate current and future student needs?

Mt. Ararat High School will support relevant learning models and instructional practices that can accommodate current and future needs by providing multiple pathways for students through a student-centered, proficiency-based system. This will be accomplished by using a variety of instructional strategies including inquiry-based teaching, project-based learning, interdisciplinary collaboration, dual enrollment courses, online courses, independent studies, and off campus courses.

Best Practices in Educational Programming Ensuring High Achievement and High Aspirations

Question 2: How will the range of programs housed in the facility guarantee equitable access to the essential resources needed to achieve the high

expectations of Maine’s Learning Results? And how will the facility’s programs help students become engaged, responsible, and ethical citizens?

Describe how the programs to be included in the facility enhance rigorous expectations, high achievement, and the future aspirations of every student, including:

1. Student-support services that guide students and reinforce high expectations, achievement, and aspirations.

Mt. Ararat High School will have student support services that guide students and reinforce high expectations, achievement, and aspirations by providing a rigorous curriculum that provides clear learning progressions, and a variety of structures; such as a robust advisory program, a student assistance team, attendance tracking procedure, and academic support time; to assist students who are struggling.

The physical arrangement of the building will allow for connections between various school services (guidance, social work, health center, Student Affairs Office, Student Resource Officer, and Special Education services). Academic programming will support multiple pathways for students to demonstrate proficiency and early college experiences through a variety of AP course offerings and dual enrollment courses.

2. Administrative services that are organized to support collaborative leadership.

Mt. Ararat High School will have administrative services that are organized to support collaborative leadership by connecting student resources in the design of a main street that allows for “alternate” access to main office, administration, guidance, and other student support services such as nursing. The emotional health of students would be better addressed and supported by creating more privacy for services focused on management of behavior and care associated with substance use, health and mental health related services.

3. A rigorous academic program that is aligned with Maine’s Learning Results.

Mt. Ararat High School will have a rigorous academic program that is aligned with Maine’s Learning Results. Our proficiency-based learning model includes:

- Academic program which has clear learning targets and progressions
- Multiple pathways
- Next Generation Science Standards

- Math and ELA curriculum based on Common Core
- School-wide Habits of Work rubric
- AP courses, dual enrollment courses
- Virtual courses
- Advisory Programming
- Senior Capstone – Proficient in Guiding Principles

4. Specialized programs that support and enhance the arts, cultural opportunities, and physical education for students and the community.

Mt. Ararat High School will have specialized programs that support and enhance the arts, cultural opportunities, and physical education for students and the community:

- small theater space
- outdoor auditorium
- drama program
- variety of lifelong physical activities; snowshoeing, biking, cross country skiing, would like to add rock wall
- physical fitness facility to be used by students and community members
- access to field space for practices and playing
- access to gymnasium to be used by students and community members

5. Embedded programs that will accommodate rich and diverse multigenerational interaction among students, faculty, and the community.

Mt. Ararat High School will have embedded programs that will accommodate rich and diverse multigenerational interaction among students, faculty, and the community through the incorporation of the following programs:

- adult education
- recreation department
- independent living class with kids
- Capstone Project involves community
- community use of fitness facility
- pre-school
- early childhood education
- interactions with MAMS, elementary school, Highlands

6. Programs that support and enhance multigenerational learning within the facility.

Mt. Ararat High School will offer programs that support and enhance multigenerational learning within the facility through programming associated with...

- adult education
- recreation department
- early childhood education class with pre-schools

7. Programs that encourage small and personalized learning communities, flexible school structures and practices, and professional learning partnerships among teachers.

Mt. Ararat High School will offer programs that encourage small and personalized learning communities, flexible school structures and practices, and professional learning partnerships among teachers by providing...

- variety of instructional spaces
- professional development/collaborative space for teachers
- collaboration among administration
- maker and learning spaces for various programs

8. Programs that overcome demographic and economic challenges to give every student access to the best teaching and learning available.

Mt. Ararat High School will offer programs that overcome demographic and economic challenges to give every student access to the best teaching and learning available:

- variety of sending schools from different communities
- transitioning to Proficiency-Based Learning Model
- meet students where they are to reduce gaps in educational experiences
- ubiquitous and equitable technology
- food services
- health services
- fitness center
- transportation

Connecting Best Practices in Educational Programming to Facility Design

Question 3: In what ways does the interrelationship of instructional and non-instructional programs and facilities enhance teaching and learning, provide a personalized learning environment, allow for program adaptability and flexibility and maximizes collaboration for the benefit of students as a group and individually?

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Describe how the school envisions the relationship among building facilities, instructional and non-instructional programs, and programs that involve multi-generational, community-based learning, including:

1. Creating programs that provide for collaborative, interdisciplinary teaching models instead of the traditional content-driven organization of spaces and programs.

Flexibility within our building facilities will be paramount for our teaching and learning community regardless of the structure of the organization, (departmental vs. interdisciplinary vs. small learning community). There are some subjects/departments that require specific equipment and infrastructure that can not possibly be part of every classroom. For example, it would not be practical for science lab equipment, plumbing and gas to be available in every classroom. If a science lab were placed in every wing of the building, then the organization would be locked into interdisciplinary teaming and would therefore lose its flexibility. In contrast, the needs of classrooms for English, Math, Social Studies, and World Languages do not differ greatly from one another. Those subjects/departments that have special demands need to be centrally located to provide access for those that most need them. Therefore...

- Create clusters of standard teaching spaces that can be used by either a team of interdisciplinary teachers or a department.
- Place science, art, music classrooms so they are easily accessed by (touching) other team or department clusters.
- Performing and visual arts classroom are similar to science in that they also have special needs for their classrooms.
- Each cluster should have a team/department leader office, as well as a conference room.
- Each cluster should also contain smaller classrooms and/or maker spaces that can be utilized by students for group work. These areas should have glass partitions so that students can be passively supervised.

2. Building facilities that incorporate personalized work environments for students to work either individually or in small teams.

Proficiency-based learning is all about the individual, rather than a whole class, learning what they need, when they need it, and at the pace they learn best. Therefore, there are more options for learning with proficiency-based learning than with traditional seat time/credit approaches. Students may have self-paced work, small group instruction,

online courses, and/or off campus learning options. All classrooms should have comfortable and flexible furniture that can be easily reconfigured throughout the day for different types of learning. Wifi access should be strong and ubiquitous throughout the campus (indoors and out.) Students will need to have spaces available to them where they can work individually or in small groups. These spaces should be located throughout the facility and available for as many hours in the day as possible. Individual study areas should be located in hallways, classroom cluster common areas, and within the learning commons and that allow for passive supervision. Each classroom cluster should also have some smaller rooms (noted in #1 above) where small groups of students can work. Small group work areas should be available to students in the learning commons that provide line of sight for supervision by learning commons staff. Small group areas should have technology available to share and/or present work to group via technology.

3. Arranging libraries, performing arts spaces, gymnasias, health centers, cafeterias, community education centers, and other multi-use areas to maximize use by students and community.

MTA will be welcoming and accessible to not only students and staff, but to members of the community as well. It will continue to be used by Merrymeeting Adult Education as well as the Topsham Recreation Department. Many students, especially those involved in sports and other school activities, remain on campus well beyond the school day since it is not practical for them to go home and then return to MTA later when their event occurs. Therefore, the facility needs to be a place that is not only safe and welcoming, but a place where they will want to be. In order to maximize use by students and community...

- The cafeteria and learning commons should be centrally located and should each have access to eating and study areas outside of the building.
- Gymnasium, health center, and school-based health center should all be adjacent to one another with the school-based health center having separate and secure entrance where an ambulance could just pull up.
- The main office, guidance, social work, student affairs office, and student resource officer should all be adjacent to one another creating an Administrative Center, and should be located near the main entrance to the building.
- The Administrative Center should also have a separate and secure entrance so individuals can enter and exit more privately.
- While MTA will be welcoming to the community, the ability to secure areas of the building not being utilized by Merrymeeting Adult Education, Topsham Recreation Department, students who staying after school hours, or other school/community-based group will be important.

4. Considering the physical and social-developmental stages of youth when designing areas for students to gather (inviting social gathering spaces communicate to students that the school values and respects them.)

The facility should not only be a welcoming and safe place where students can learn, but it should emit the feeling that it was designed with them in mind.

- The majority of storage for student belongings should be located in classrooms (advisories) rather than lockers in hallways. Space in hallways can be used for small gathering areas for students.
- Multiple device charging and water bottle refill areas throughout the building.
- Round outdoor tables and Adirondack chairs should be available in outdoor cafeteria and learning commons areas. These can serve as areas for both small group and individual work areas.
- The learning commons will have areas designated for small group work as well as quiet spaces for individual study.
- An Internet cafe with comfortable furniture should be adjacent to or within the learning commons
- The smaller rooms within each classroom cluster will also serve as places for students to gather.
- The cafeteria will also continue to be a place for social gathering.

5. Designing spaces that honor student individuality and communicates respect for the diverse interests and social lives of students.

- Artwork displayed throughout the building should be student-made.
- Student work should be professionally displayed throughout the building.
- Motivational signage and school branding should show our students working, learning, and playing.
- Bulletin boards and display cases should display student achievements in academia, the arts, and technology, not just athletics.

6. Addressing the interrelationship of specialized programs, such as special education, with regular academic curricula to help ensure an inclusive, cohesive school program that encourages collaboration among staff.

- Offices/meeting rooms for Special Education consulting resource teachers (case managers) will need to be spread throughout the facility. These offices/meeting rooms should be located in the classroom clusters so they can be close to English and Math classrooms where they are used most often. Case managers

also work with social workers. These social workers will also need offices for meeting with students and staff.

- Those offices and meeting rooms for specialized services (speech and language, therapeutic services, etc.) should be centrally located in the building for ease of access by the students who require these services. While they should be centrally located, they should not be so closely tied together that there is a stigma attached to going to that area of the building. In other words, we want to avoid having a Special Ed Wing. These specialized services need the following:
 - Functional Life Skills Room: Typical high school room of 1,200 s.f. with kitchen, laundry, cubbies, bathroom with shower. Room broken into two parts (academic part and group project portion).
 - an OT room of 300 s.f.
 - a PT room of 300 s.f.
 - a speech therapist area of 150 s.f.
 - a sensory room of 400 s.f.
 - a behavior classroom of 900 s.f. This room has 6-8 students on average but that number can be as high as 11-14. Students in this program are taught English, math, social studies, and science. There are usually two ed. techs. in the room. This room needs to be next to the assistant principal because of discipline and behavior problems. These students are mainstreamed for health, art, technical education and science. The behavioral classroom would like to have a series of alcoves and private sensory rooms. Behavior classroom would like round tables with a mix of private desks for students to work independently.

Organizing People to More Effectively Deliver Programs

Question 4: How does the grouping of people (staff, support personnel, other) guarantee the support and resources needed for all students to meet or exceed Maine's Learning Results?

Describe school staff, their responsibilities, and the varieties of staffing configurations required to fulfill the vision for the teaching and learning outlined in Questions 1 and 2, including:

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1. The potential grouping of professional staff that will enhance opportunities for integrated project- and community-based learning (as envisioned in Maine’s Learning Results.)

Mt. Ararat High School will promote ways to collaborate with multi-disciplines for learning, maintain traditional classrooms, walls, windows, and doors but integrate access to larger multi use spaces for collaboration. Think of a wheel spoke where the individual classrooms are on the outer edges of the spokes but toward the center is where there are larger classrooms, breakout spaces, individual study spaces where the “hub “ of the wheel (Cafeteria, Learning Commons) is where all core disciplinary offices resides and where both staff and students would collaborate with other subject matter, develop interdisciplinary projects and invite community members to support community based projects.

2. Locating student-support and administrative services in close proximity to classrooms and learning areas in order to encourage professional collaboration and support between guidance, administration, and teaching staff.

Mt. Ararat High School nursing and guidance services will be in close proximity to each other as they consistently work together . There should be ample spaces for private meetings and conferences. Perhaps a private, easily accessed area for IEP meetings and urgent disciplinary actions. One community support that plays a vital role at our high school is the resource officer who should be easily visible, accessible while having a place where private meetings can take place. Main office personnel, administrative staff, and the SRO should have a centrally located office where they too are easily accessible, prominent upon entering the building, with some transparency so they are able to observe activity, people entering and exiting the building.

3. The groupings of professional and support staff that will help ensure the inclusion of all learners.

Mt. Ararat High School would provide several hubs for support staff. A centralized support staff office with hubs throughout the building will provide for ease of movement from classroom to classroom to support and tutor students in a private small conference areas.

4. Groupings that minimize grade-level and content-driven models of organizing spaces for teaching and learning.

Although there has been some interest in collaboration there has been a strong sense that content areas want to maintain some physical autonomy of the individual departments while providing opportunities through shared spaces for collaboration and interdisciplinary work at will.

5. The grouping of personnel (office, food service, security, custodial, etc.) necessary to support a healthy and safe environment for youth.

Administrative offices will be easily accessed as well as have the ability to visualize the entry and exits from the building. Security will be a priority; a system designed to greet and manage all visitors entering the building that requires direct interaction with school personnel before gaining entrance and access to the entire building. Entry systems would include visual and sound features for use by visitors and a secondary set of secure doors as a person or people sign in to the office. Our resource officer should be in close proximity to the entrance and have clear visuals of visitors coming and going.

Food service should have ample space to work as well as opportunity to work with students. Authentic learning opportunities will be fostered as health classes and other programs would be placed in close proximity to the kitchen where students could observe and participate in the design of menus, food preparation, and other health and job related learning opportunities. Incorporating a school garden and kitchen where students can experience hands on food preparation, a food services maker-space would be ideal for providing access for all students and staff that may want to utilize and explore learning through food creation.

6. Groupings and facility designs that enhance the professional skills essential to preparing youth for college and work, including skills not currently possessed by existing staff.

Our community is unique in that it is vast and many students do not go home after school before afternoon activities, meetings, practices, etc. Our community needs to be a place where students can collaborate, socialize, quietly study, explore interests, and perhaps eat after school. Spaces will be designed to be comfortable, accessible and easily monitored for safety and comfort of students and staff. Access to snacks would be provided during after school hours; student run facilities would offer students the opportunity to learn about and make healthy snacks and gain access to nutritious food while waiting for the late bus, a practice or contest to begin, and so forth after school. Spaces for student to develop print material such as magazines, newspapers, and other publications will actively acknowledge and promote an authentic opportunity for students to apply learning and demonstrate learned skills.

7. Other potential uses for the school that broaden the learning experiences of students and the community.

Mt. Ararat High School will provide opportunity for the adult education program to offer a wider variety of coursework given the facilities and equipment within the design for more diversified academic programming. The design features would include spaces that promote student and community wellness both inside and outside. The opportunities for outside education programs and community gardens would be enhanced as a result of developing the land surrounding the school.

Furnishings as a Key Strategy for Teaching and Learning

Question 5: How will the School's furnishings and equipment enhance its long-term vision for teaching and learning?

Describe the kinds of furnishings and equipment that are comfortable, durable, and age appropriate. All furnishings and equipment should engender a highly personalized environment for teaching, learning, and living in the school and should be appropriate for both working and socializing, including:

1. The use of tables – and other furnishings – that will maximize student collaboration and minimize isolation.

The furnishing offer flexibility, to be either set up for individual work or as group work spaces. Classroom will be organized to provide for spaces that have small tables for collaborative work and other desks or tables that are small for independent work. Students do not utilize lockers as they state the lockers are inconvenient to get to and access impacts time for socializing with friends. Therefore, lockers will need to be centrally located and placed locations where students gather to promote student access and use for storage during the school day. Storage spaces within classrooms will also support limiting the number of lockers needed since many students prefer to carry materials and personal items with them throughout the day. Cubbies in classrooms would be designed to allow students to secure valuables to eliminate distractions caused by concerns students may have if they know others have access to these items.

Furniture should be comfortable and inviting at the same time ideal for a learning environment. Spaces developed with comfortable, durable, and safe materials will offer students opportunities to relax , socialize, and do school work with peers. Seniors have generally had spaces designed in our school for gathering and design elements in a new high school should provide similar opportunities for students at every grade level.

2. Furnishings and equipment that are easily rearranged and provide for the flexible grouping of students and multiple uses.

- furniture should be light, easy to move.
- furniture should be sturdy and durable for continued use by students
- both tables and single student desks should be available for personal choice of current teachers
- may need tables for specific use ie. science, art (various size tables)
- furniture should be easy to stack and move for easy cleanup

3. Furnishings and equipment that foster student “ownership” of space (i.e., they can be personalized by students.)

- bulletin boards, places students can display artwork , awards

4. Locating lockers, student “cubbies” or similar storage spaces in student work areas.

The student survey data indicates that most students do not use lockers. Many students carry their belongings all day long. Perhaps limited cubby spaces in classrooms, places where students could store sporting equipment.

5. Furnishings in public spaces, including the dining area, that support safe and appropriate social gatherings.

Variety of styles of furniture to eat. Bar height tables, booths, round tables , tables where students could stand and eat with room for phones, laptops etc.

6. Specialized furnishings and equipment essential to specific programs, such as multi-media, science-lab, and special-needs equipment, etc.

Not sure specifically what this would entail, equipment would be based on what science, technology and Special Education departments deemed necessary.

7. Furnishings that provide flexible, project-based work areas for individuals and groups of students.

variety of tables, different sizes and shapes, lightweight, easy to move, stackable for easy cleanup.

8. Furnishings that maximize the use of existing, emerging, and potential technologies.

charging stations, USB outlets everywhere or even part of the furniture. Wireless ports everywhere for reliable internet

9. Furnishings that allow for the display of student work in all areas of the facility, and that provide space for various presentations (artistic, academic, performing) of student work.

spaces that have a green wall for film making, projectors mounted on the ceiling, walls where students can display work (places to clip up work) . Have a screen where there could be a continuous running of student film projects

10. Furnishings that allow for large- and small-group instruction.

large and small tables as well as individual desks.

11. Furnishings that enhance the aesthetic appeal of all spaces, making them warm and inviting as well as functional.

soft seating that is lightweight and mobile that is comfortable yet appropriate for learning.

12. Play and athletic equipment that are safe and durable and can be integrated with student learning.

Smart, Safe, and Environmentally Sound Construction

Question 6: What special environmental and/or technological provisions are required to fulfill the school's long-term vision for teaching and learning, including personalized, safe, and aesthetically enhanced environments?

Describe the environment and/or technological requirements that are required to fulfill the long-term vision for student programs, including:

The MTA facility will not only inspire learning and creativity, but will be the epicenter of the community. Students will want to learn there, teachers will want to work there, and the community at large will want to be involved there, thus making the MTA facility a great source of pride for the people in our four communities. Not only should it have beautiful, creative, and practical design, it should utilize technology available that will make it environmentally sound and cost efficient to maintain.

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With proficiency-based learning, students learn what they need, when they need it, at the pace that works best for them. Because the element of time is removed from student learning, high schools will need to be utilized all year long, as opposed to following the agrarian calendar. So, the facility will require the use of not only HVAC, it will use all systems year round.

One of the variables that students, staff, and community members expressed is an appreciation for the current campus, its feel of being remote and near nature while actually being a short distance to businesses and highways. Its access to vernal pools and forests make it a great place for learning to occur. They want to utilize the area's natural beauty and resources in the design of the new facility. Students and staff encourage the implementation of sustainable measures in the building in order to lower long term costs by using less energy. Students and staff mandated the need for not only walls and doors for all classrooms, but also the use of natural light via windows to the outside and improved air filtration systems and better acoustics.

1. Controlled environments in spaces that are used year-round by the community (library/media areas, tech labs, the arts and performing arts spaces.)

We will explore the use of electronic (key card) access systems in order to control access to portions of the facility that are not open to the public. Currently, many classrooms do not have doors to their classrooms, thus making their teaching spaces insecure and vulnerable to theft. Teachers need to have the peace of mind that comes from being able to have the ability to secure their classrooms during times that the building is being used by the public.

Since the facility will be used year round, green technologies for various systems (electricity, HVAC, water, septic, ventilation, etc.) will lower energy costs and help offset the increased use of the building and lower its environmental impact. System controls will need to be adaptable and easily controlled to maintain comfort for those using the facility regardless of current climate conditions.

2. Controlled environments as required or determined by equipment (e.g.: computers, lab instruments.)

- It is our current and past practice to collect student issued computer devices at the end of the school year. These devices are stored, repaired, and prepared in the learning commons. In order to maintain security of these devices the learning commons has had to remain closed and unavailable for district and community

based events during the summer months. Having classroom areas that can be secured within a new learning commons would allow for the summer storage of computer devices and yet allow for use of the learning commons by the learning community.

- All teachers should be have the ability to control the climate of their classrooms in order to maintain a comfort level for their students and themselves, but the following areas have special considerations:
 - Classrooms in the visual arts classrooms will need proper ventilation in order to utilize special equipment such as kilns, darkroom, airbrushes, paints and other art materials that may have toxic fumes.
 - Gymnasium and fitness rooms will require proper ventilation and climate controls.
 - Specialized climate controls will be required for server rooms and computer cafe or lab.
 - Climate controls and proper ventilation for the cafeteria kitchen as well as any classrooms (life skills, health, home ec. etc.,) that may have a kitchen and/or washer/dryer.

3. Technical consideration for acoustical enhancement as required for various learners and teaching strategies.

Audio enhancement technologies and improved acoustics within all learning areas can result in higher student engagement, higher test scores and improved student behavior,

so should be implemented in the new facility. Audio enhancement technologies should also be compatible with audio/visual technologies that will be installed in classrooms. Acoustics should be a consideration for all performance areas as well as those that are used for active learning and/or maker-spaces.

4. Increased ventilation in multipurpose rooms, science- and wet-lab areas, and enclosed small-group workrooms to maintain air quality standards.

There are industry standards that must be maintained for ventilation in areas where chemicals are being utilized. Areas such as science labs, visual arts classrooms, custodial areas, and kitchens will require specialized ventilation based on the tools, equipment, and chemicals used in them. These areas should also have the ability to open screened windows in order to utilize natural ventilation if needed.

5. Maximized use of daylight and seasonal movements of the sun to enhance teaching and learning environments and public spaces, while also promoting energy efficiency throughout the year.

As stated previously, students and staff wish to utilize natural light and have windows looking outdoors in all classrooms. There is also the wish to utilize green technologies (such a solar) to not only reduce energy costs but to lessen the environmental impact of the building's use.

6. Provide for wireless internet access throughout the facility, including some outdoor areas.

Technology will continue to be an important tool used in teaching and learning in the years to come. And while the technology tools may change in the future, access to wifi probably will not. With that in mind; wifi access should be strong and ubiquitous throughout not only the building, but also in any outdoor learning areas such as outdoor learning commons area, outdoor dining area, athletic fields, student and staff parking areas and vernal pool areas.

7. Staff training in all new technologies and “smart tools” to be used for teaching and learning: digital communications, smart boards, video projectors, wireless and hard-wired technologies, distance learning equipment, etc.

Professional development that targets instructional use of new technologies and systems will continue to be a part of our district's technology plan. Teachers will gain skills for utilizing new equipment through:

- workshops provided by technology integration specialist(s)
- access to online training materials and resources
- one on one support from learning commons staff
- online courses and/or webinar sessions

8. To the extent affordable, utilize the principles of “green-facility design.”

Cost effective green technologies will be explored that will help save money, conserve resources, and lower the environmental impact of the facility. Some examples include:

- Solar panels for electricity generation
- Geothermal heating
- Screened windows for climate control and natural light in classrooms

- Minimal carpeting and use of hypoallergenic, non-permeable products where carpeting is desired
- Automatic timer /motion activated lighting
- Motion activated bathroom fixtures (sinks, dryers, flushing)
- Low-flow toilets and urinals
- Use of building green and/or recycled building materials

9. Safety considerations for “lock-down” management.

One main entrance equipped with security cameras that remains locked until “buzzed in” so that entrance into the building can be controlled.

Security cameras showing main hallway arteries as well as any other entrances/exits to the building.

All classrooms windows have blinds or curtains that can be closed during a lockdown.

All classroom and office doors should be able to be locked from the inside.

Installation of intercom and VoIP phones for communication

Emergency “panic button” system where teacher can get immediate assistance in a subtle/inconspicuous manner.

Main hallway arteries and stairwells should be wide enough to entire student body and staff to exit quickly and safely.

10. Outside landscaping that serves as an extension of the learning environment and that provides for additional outdoor educational programs.

Outdoor dining and learning commons areas should include landscaping that will draw students to those areas during and outside the school day.

Area for school/community gardens and outdoor art installations should be planned for.

Maintained trails will provide access to forests and vernal pools for science and art classes.

Designing a Building for the Future

Question 7: What will the future require regarding learning spaces for public-school youth?

Consider the multiple means through which our youth may acquire an education and describe how the facility may be used beyond daily instruction, including:

1. Flexibility in the size, number, and configurations of rooms to accommodate changes in teaching and learning strategies.

The current Mt. Ararat was built based on the open-concept design. Its design satisfied the educational trend in the 1970's that students should enjoy a more dynamic, more organic educational experience, and therefore the building had few walls dividing classroom space. It did not take many years of its operation before students, teachers and the greater school community recognized that open-concept classrooms were not the most conducive design for student learning. It is important to note that the school community has had to live with this structurally flawed building and over the years has

had to reconfigure its classroom spaces by erecting temporary walls and flimsy room dividers which only slightly improved visual and sound disturbances.

Over the years, however, the Mt. Ararat school community discovered that the ability to circulate through the building, and by necessity, through others' classrooms, provides an environment that promotes camaraderie and collegiality and is appreciated by many. Therefore, the recommendation for the new building is to create teaching spaces that are practical yet flexible, where spaces can be used by classes of various size and subject; where there is the capacity to alter room configurations in order to accommodate change, yet still allow for the practicality of classrooms with walls. Students and staff alike are very clear that they require rooms where work can get done without outside distractions, where the air circulates well and the sunlight brightens the rooms.

In order to design a building that will stand the test of time and satisfy the needs of all constituents, Mt. Ararat's teaching spaces should be organized in such a way as to offer clusters of standard teaching spaces that can create team, interdisciplinary or departmental groupings; these clusters of classrooms will be interchangeable and allow for optimum flexibility. Classes that require specialized equipment or features like performance areas or lab spaces will be placed adjacently to other team/department clusters. In addition, within each cluster, there should be a team/department leader office, small classrooms and maker-spaces and a conference room for each area.

2. New and varied uses for public spaces (library/media centers, gymnasium, arts and performance arts, dining areas, etc.) to build a strong connection between the school and the community.

The geographic region that encompasses the MSAD #75 district is considerable. The four towns that make up the district are distinct not only in their topography, but in their cultural identity. The school, therefore, must be a hub for these four towns: a central location that provides the community with public spaces that not only are accessible to them but that welcome them inside. Visitors to the new facility will be greeted with visual representations of their towns as well as student artwork displayed throughout hallways and gathering places.

The school's cafeteria and learning commons will be a hub of activity and productivity. A top-notch kitchen facility will enable food service workers the space and equipment necessary to produce a variety of healthy food on-site. Currently, the school's cafeteria prepares two meals a day, with many students eating both breakfast and lunch there. Also, the high school kitchen serves as a satellite kitchen for four schools, with food

being stored at the middle school due to space issues. A larger kitchen with adequate storage, both dry and cold, will support the continued use of the satellite program.

With the addition of a small theater, there is opportunity for the community to utilize the space after school hours; if it is wired with up to date technology then there is the prospect of business organizations using the theater space for presentations/seminars as well. Of course, our students would make the most of the space both during and after regular school hours, but the potential exists that a new performing arts space would help integrate the general public effortlessly into the school community.

The Mt. Ararat High School campus is extensive and the current building sits in an area with acres of playing fields, adjacent walking trails and even a vernal pool. With improved fitness facilities to include better fields, concession areas, bathrooms, to name a few, it is expected that the public will attend even more sporting events at the high school as well as make use of those improved exercise facilities.

3. Classrooms designed to be spacious, bright, and multi-use, and accommodate diverse teaching methods and varied class sizes.

Many of the classrooms at the current Mt. Ararat High School do not have windows or doors, many do not have walls. There are even some rooms that have neither walls, windows or doors. It comes as no surprise, then, that one of the greatest desires for students and staff alike is to have a building with workable spaces, with “real classrooms.” The new building must have teaching spaces that are bright due to natural daylight, where students have adequate room to work and where teachers have the resources within their own walls to provide top-notch instruction. Teaching spaces should be designed with flexibility in mind in order to fit a variety of courses, with various sizes and/or teaching methods.

4. The use of space for independent work and year-round use beyond the traditional school day, including open, 24-7 access to specific areas.

Due to the vast geographic area that encompasses students in the MSAD #75 district, it is necessary to create a building that will be accessible beyond the school day. As students move toward proficiency-based diplomas, it may be necessary to offer less-traditional school hours. As it stands now, many students stay after regular school hours in order to complete work or participate in an after-school activities, as transportation issues often hamper students’ abilities to return to school once home.

In order for students to undertake any independent work beyond the school day there must be after hours access. To securely offer services after regular school hours, custodial staff should work on a longer, rotating, schedule, so there is someone at all times in the building. In addition, a “key card” system” should be instituted to allow classroom access by teachers after hours, yet upholding security.

5. Spaces that provide work and social areas for students beyond the context of their school programs (clubs, projects, co- and extra-curricular activities, etc.)

Designated spaces that provide both work and social areas to be utilized for extra-curricular activities, clubs and other projects are a necessary component of this new facility.. Also, as a place for students’ continued academic investigation both independently and with others, the learning commons should be available to students outside of the traditional school day. In addition, since many of our students live a great distance away from the school, the school cafeteria should be able to provide nutritional snacks after school while students are in the building. These areas will provide students with a safe and engaging learning environment that will help spur their educational curiosities and allow them to explore and fulfill their potential.

6. Spaces that can be used by entrepreneurs, private businesses, and other ventures that may enhance student opportunities, such as student internships, community healthcare, family agencies, higher education, etc.

The facility should also be designed to include spaces that could be used by private businesses and other organizations in order to enhance student learning. To offer spaces that were designed specifically to be flexible enough to allow community partnerships, thus strengthening the school’s authentic learning opportunities for its students. At this time, our students are linked with a community mentor during their senior year, as they tackle the culminating assessment: the Capstone Project. Currently our students meet with their community mentors at various locations, oftentimes at the community member’s job site, mostly due to the lack of meeting space at the current high school.

Other programs that have spaces currently in our district include a local Child Development Services program and a school-based health clinic. Both of these organizations could provide a greater connection between students and their services if they had more space with which to work. The expansion of their spaces would also mean an extension of their abilities to engage students in internships, and learning opportunities beyond the traditional classroom.

7. Spaces used to enhance student opportunities, such as pre-school, childcare, Head Start, community-based learning, internships, community college or university partnerships, etc.

The design of Mt. Ararat High School should provide spaces that enhance student opportunities outside of the traditional classroom/learning situation. Many community programs would seek out opportunities to involve students in their businesses or educational programs; by ensuring there were spaces that can be used for these connections in the new facility, community programs would have the impetus to create those internships or partnerships.

8. Spaces that enhance alternative-instructional and learning opportunities, such as distance learning or early college options.

Creating areas adjacent to or within the learning commons that provide students with a space where they can access alternative educational programs will sufficiently allow for students to access distance learning or other alternative-instructional opportunities on campus. Smaller meeting rooms and study areas which are designed to be generic in nature will give students the privacy needed to participate in alternative-instructional opportunities that enhance their education.

9. Design and organize the cafeteria and performing arts spaces to ensure maximum educational utilization.

The current cafeteria at Mt. Ararat High School, the Commons, is a favored place according to the majority of the students. The new space should be designed to be as welcoming as possible, yet still be able to manage seating and feeding the student population efficiently. A food court style, with a variety of seating choices would appeal to students. Seating areas should be able to be reconfigured or moved if needed, so very few seating areas should be fixed to the floor. The new cafeteria should be a bright space, with lots of natural daylight; it should also function as an informal study or gathering space and be available throughout the day.

Currently, Mt. Ararat High School uses its cafeteria, the Commons, for performing arts space. Without proper seating (students sit on the floor for performances), lighting or acoustics, performances and presentations are not presented in the most optimum manner. Oftentimes, chorus classes practice for concerts in one of the stairwells, as the acoustics are better there than in the chorus room or the large Commons. With a small performing arts space, teachers can make use of the area for presentations, community speakers, and informal class performances throughout the day. Community members

will also be able to use the space after school hours as well, ensuring that the school function as a significant feature of the town and surrounding areas.

10. Best use of current and emerging learning technologies to enhance instructional strategies

In order to ensure that the students of Mt. Ararat High School are given the tools necessary to compete in this global and technologically-driven society, advanced technology should be integrated throughout the building, with access to state-of-the-art technology in many of the active learning spaces. It is imperative that with the new and improved technology delivered to the facility, ample staff development by the school's technology team must occur for optimum use of any new or improved technology resources.

A Building Designed for Multiple Generations

Question 8: How will the school (1) be an attraction to people of all ages, (2) honor community partnerships, and (3) encourage year-round use by the community?

Describe how the facility's design and programs will enhance the life, work, and culture of the community, including:

1. The full range of services provided to the community, such as day-care, pre-school, library, health, and social services.

Currently, Mt. Ararat High School is used after-hours by various community organizations; its athletic fields and gymnasium are used by the Topsham Recreation Department. Many of the school's classrooms are available in the evening for Merrymeeting Adult Education. The MSAD #75 School Board holds its meetings in a large classroom at the high school as well. One of our school's health courses is entitled, "Early Childhood Education." Students enrolled in that class design and run a school-based pre-school during the school day. There are multiple opportunities for students to engage in connections with community members through the school's Capstone Project. With its updated design it is foreseen that in addition to these opportunities, the new building will expand its availability and services to the community while continuing and strengthening the current community relationships; specially

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designed meeting rooms will be beneficial for various town meetings. Also, with the added small theater space, both business organizations and community theater groups may find the theater accommodates their needs for presentations, seminars and performances. A modern fitness center that can be accessed after school hours will also be a draw for community members. The new facility will be a bridge connecting the four geographically diverse towns; acknowledging the diversity within its walls while integrating them under one roof.

2. The building design must accommodate many hours of use and extended school days without compromising the security of other spaces, while maximizing energy efficiency.

Security in school buildings is crucial; when schools offer extended school days and public access after hours it is even more imperative that the facility be safe as well as energy efficient for its extended use. Therefore, areas in the building that will not be designated for community use will remain secure after hours; those spaces made available will be supervised by personnel from the specific organization, the community program, or by persons designated by school leadership.

3. Community use of technological tools in the facility (computer and science labs, on-line libraries, media technologies, etc.)

The use of the facility's technological tools will continue and expand. For instance, currently Merrymeeting Adult Education programs make use of the school's Tandberg virtual media equipment; it is assumed that with the development of a learning commons with state of the art technology available the use of computer and media services will increase. As technological tools increase and services improve, it can be expected that the community's access will increase as a natural result.

4. The potential integration and availability for adults and youth in the school's program, including child-care, senior-citizen, community health center, distance-learning, and adult-educational programs and services.

Designing a school that is accessible after hours and with meeting space availability for community members creates a seamless integration of school and greater community, an integration that our area will embrace wholeheartedly. With a large retirement facility nearby, our school should be able to offer these adults a place where they can establish relationships and educational partnerships with some of our school's youth. The school's senior year Capstone Project will be strengthened by deeper relationships and

more contact with community members. Distance-learning and other adult-educational programs and services will continue and strengthen in the new facility, as the availability of appropriate space will validate these services by providing them with adequate space with which to work.

5. The potential use and availability of gymnasia, fitness facilities, athletic fields, meeting rooms, computer labs, and performance spaces to the community.

The new facility should be designed for not only its present use but its future availability as well. It must be able to provide the public with athletic fields and fitness facilities for many years. Performance spaces, meeting rooms and technology areas must be designed to stand the test of time; unlike the current structure, the building must maintain the highest degree of functionality over the course of many years.

6. The availability of meal programs and other community-based services to special populations.

The current building is not fully ADA accessible. It is paramount that the new facility be accessible to all members of the greater community under federal guidelines. The new facility will be easily accessible for all. With an expanded kitchen facility, there are opportunities to enlarge the scope of the district's food services. Use of the facility beyond the regular school day will increase as its availability and overall structural improves. Opening the school's doors to community-based services would require not only ADA regulatory compliance, but a facility that is easily navigable and welcoming to all its community members.

7. Spaces designed to support community mentorship, internship, or early college programs for students.

The newly designed Mt. Ararat High School will have its learning commons as a prominent feature of the school. The learning commons will contain meeting areas as well as small rooms designed to be used for students working on alternative learning opportunities, such as distance learning or early college programs. Seniors working on their Capstone Project which requires a mentor from the community, will have the capacity to meet and work with their mentors right on campus, making use of either a maker-space or a small room within the learning commons. Community mentors will also be able to make use of the learning commons meeting rooms to meet with small groups of students, which will develop stronger community relationships.

8. Spaces that may be made available to private businesses, entrepreneurs, service agencies, etc. that could enhance student-learning opportunities (banking, marketing, media, communications, etc.), including local media needs (television, video production.)

Creating spaces in the new facility that will be made available to private businesses as well as various service agencies will increase student-learning opportunities, as students and community members will share spaces in the learning commons and interact naturally as they share space with one another.

9. Use of the facility to promote local culture and history.

The main entrance and lobby area, as well as the learning commons and theater lobby will contain artifacts and artwork from artists in the school as well as those in the community. Maintaining their distinct cultures at the same time as integrating the four distinct towns that make up the school community will aid in creating a welcoming and integrative school facility.

10. Educational and recreational use by multigenerational community members that takes into consideration potential changes in use and demographics.

Currently, our building is used by community members for their recreational use after school hours to a limited extent. There is a wellness area that once expanded and developed with multigenerational use in mind, will allow for more community usage inside the building. The public does make use of the campus' outdoor green spaces, specifically the walking paths that currently exist. Future improvement of the outdoor spaces, updated walking paths with proper signage and improvements to the trail itself will aid in increasing community use over many years; the vernal pool could become a favored location for those seeking a retreat.

SCHOOL SYSTEM AUTHORIZATION

Mt. Ararat High School

School

M.S.A.D. No. 75

School System

Date Approved by School Board

Vote

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Superintendent's Signature

Date

Draft