



Shrewsbury Public Schools

Patrick C. Collins, Assistant Superintendent for Finance & Operations

16 August 2017

To: School Committee

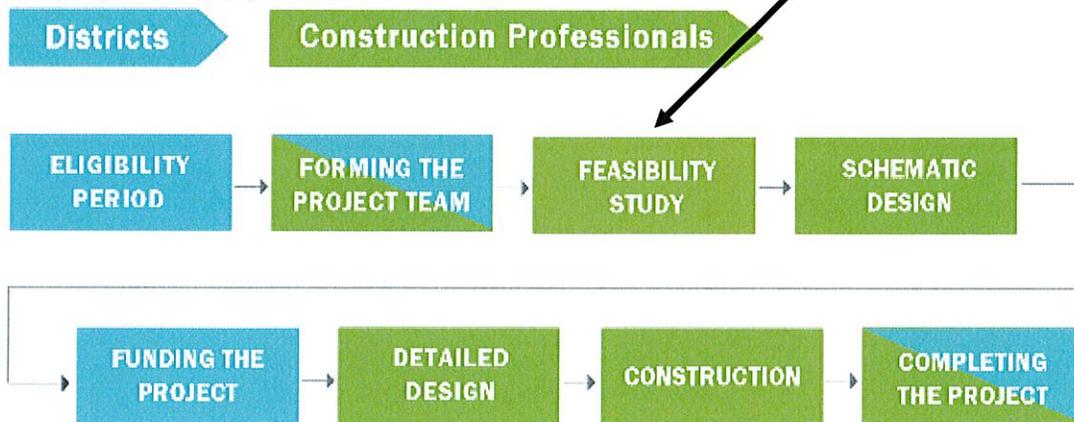
Subj: STATUS UPDATE ON BEAL SCHOOL PROJECT

Overview

As you know from my prior communication we have officially completed Module 2 [*Forming the Project Team*] with the contracting of Lamoureux Pagano Associates as our architect/designer. So, a full eight months after the December 5, 2016 appropriation of \$1.2M for the Feasibility Study and Schematic Design, we will actually now be able to begin that work. We are here at Module 3, the onset of the Feasibility Study.

MSBA Building Process

Steps primarily for:



Major Milestones and Timeline for Modules 3 & 4

Our OPM, PMA Associates, has devised a “First, Preliminary Schedule” and it is attached as part of this update. The Feasibility Study is expected to take approximately nine months from August 2017 through April 2018. The two main outcomes are completion of the Preliminary Design Program [PDP] which is expected to take six months and completing a Preferred Schematic Report [PSR] which is expected to take three months.

Included in the development of the Preliminary Design Program are two major tasks for the School Department staff and School Committee:

- **Deciding our future grade configuration as either K-1, 2-4 or reconfiguring all elementary schools to a K- 4 configuration** and phasing out the early childhood center concept. This will require a **School Committee vote this fall**. The earlier this decision is made, the better as it will provide the required clarity for our Educational Program development.
- **Development and School Committee approval of our Educational Program will be required by February 2018 to keep to the attached schedule**. An Educational Program defines the regular and special education curriculum, delivery methods, technology integration, student support services such as nursing and food service, and building/site security, use of outdoor space, and traffic/parking considerations. An exemplar plan has been provided by MSBA and it is also attached as part of this report.

Completion of Educational Program will require the input of many stakeholders and require a significant time commitment from administrative staff. The Educational Program is the key driver of the design of school facility and along with it goes a very detailed space planning worksheet.

Also during PDP is development of several facility alternatives to support the Educational Plan and identification of a suitable site for each alternative.

Once these objectives are met to the satisfaction of MSBA, we move into development of the Preferred Schematic Report [PSR]. Cost estimates are derived for each alternative and these are weighed in context of site options and acquisition/development costs as well. The School Committee and Building Committee will arrive at a Preferred Solution by vote and submit it to MSBA for their review and approval. The current MSBA Board of Directors meeting schedule and our project schedule are leading us towards MSBA Board approval of our Preferred Solution at their June 2018 meeting.

Provided this occurs we will subsequently move into Module 4 [*Schematic Design*] wherein detailed building plans are devised to 60% completion with detailed costs estimates. All of this information would be submitted in time for the MSBA Board of Directors meeting scheduled for October 2018 and **if approved would lead us to a local vote of approval [Town Meeting and town-wide votes required] in Fall 2018.**

In closing, it's important to note that there are many factors can affect this schedule. There are factors we control such as decisions regarding grade configuration and development of the Educational Program. There are other factors such as site assessment and selection and MSBA meeting schedules where we have less control. It seems unlikely that we could move any quicker and more likely that we may need more time than afforded here to accomplish the aforementioned tasks.

Beal Early Childhood Center (ES) Project - MSBA FS/SD Schedule							PMA Consultants							14-Aug-17 10:57																								
Activity ID	Activity Name	Original Duration	Start	Finish	Actual Start	Actual Finish	Total Float	Calendar																														
								2017				2018				2018																						
								M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
Beal Early Childhood Center (ES) Project - MSBA FS/SD Schedule																																						
OPM Selection																																						
A1010	OPM Selection Period	33	15-Mar-17 A	01-May-17 A	15-Mar-17	01-May-17		Standard 5 Day Workweek w holidays	■ OPM Selection Period																													
A1000	PMA Interview	0		30-Mar-17 A		30-Mar-17		Standard 5 Day Workweek w holidays	◆ PMA Interview																													
A1020	Contract Negotiation	4	31-Mar-17 A	06-Apr-17 A	31-Mar-17	06-Apr-17		Standard 5 Day Workweek w holidays	■ Contract Negotiation																													
A1380	MSBA OPM Review Panel	2	01-May-17 A	03-May-17 A	01-May-17	03-May-17		Standard 5 Day Workweek w holidays	■ MSBA OPM Review Panel																													
Designer Selection																																						
A1030	OPM Draft Designer RFS	6	04-May-17 A	12-May-17 A	04-May-17	12-May-17		Standard 5 Day Workweek w holidays	■ OPM Draft Designer RFS																													
A1040	MSBA Approval Designer RFS	10	12-May-17 A	26-May-17 A	12-May-17	26-May-17		Standard 5 Day Workweek w holidays	■ MSBA Approval Designer RFS																													
A1060	Designer RFS Advertisements	3	24-May-17 A	29-May-17 A	24-May-17	29-May-17		Standard 5 Day Workweek w holidays	■ Designer RFS Advertisements																													
A1050	Designer RFS Response Period	13	29-May-17 A	16-Jun-17 A	29-May-17	16-Jun-17		Standard 5 Day Workweek w holidays	■ Designer RFS Response Period																													
A1070	Evaluate Responses & Submit to MSBA	4	17-Jun-17 A	23-Jun-17 A	17-Jun-17	23-Jun-17		Standard 5 Day Workweek w holidays	■ Evaluate Responses & Submit to MSBA																													
A1080	Designer Selection Panel Mtg #1	0		11-Jul-17 A		11-Jul-17		Standard 5 Day Workweek w holidays	◆ Designer Selection Panel Mtg #1																													
A1100	Negotiate & Execute Contract	27	12-Jul-17 A	17-Aug-17	12-Jul-17		316	Standard 5 Day Workweek w holidays	■ Negotiate & Execute Contract																													
FEASIBILITY STUDY - 9 MONTHS																																						
Preliminary Design Program (6 Months)																																						
A1390	Kick Off Meeting with MSBA	0		08-Aug-17 A		08-Aug-17		Standard 5 Day Workweek w holidays	◆ Kick Off Meeting with MSBA																													
A1110	School Dept Update Education Program	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ School Dept Update Education Program																													
A1130	Evaluation of Existing Conditions	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Evaluation of Existing Conditions																													
A1190	Education Program Refined with Designer Input	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Education Program Refined with Designer Input																													
A1200	Final Review & Acceptance of Education Program	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Final Review & Acceptance of Education Program																													
A1140	Establish Site Development Requirements	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Establish Site Development Requirements																													
A1400	Identify Short List of Alternate Sites if/as required	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Identify Short List of Alternate Sites if/as required																													
A1120	Draft Initial Space Summary	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Draft Initial Space Summary																													
A1150	Preliminary Evaluation of Alternatives	120	01-Aug-17 A	23-Jan-18	01-Aug-17		0	Standard 5 Day Workweek w holidays	■ Preliminary Evaluation of Alternatives																													
A1210	Cost & Schedule Analysis of PDP Alternatives	5	24-Jan-18	30-Jan-18			0	Standard 5 Day Workweek w holidays	■ Cost & Schedule Analysis of PDP Alternatives																													
A1220	SBC Approval of PDP Alternatives	5	31-Jan-18	06-Feb-18			0	Standard 5 Day Workweek w holidays	■ SBC Approval of PDP Alternatives																													
A1160	Compile & Submit PDP to MSBA (DUE 8 WEEKS PRIOR TO PSR SUBMISSION)	6	07-Feb-18	14-Feb-18			0	Standard 5 Day Workweek w holidays	■ Compile & Submit PDP to MSBA (DUE 8 WEEKS PRIOR TO PSR SUBMISSION)																													
A1170	MSBA Review Period	15	15-Feb-18	08-Mar-18			0	Standard 5 Day Workweek w holidays	■ MSBA Review Period																													
A1180	Respond to MSBA Review Comments	6	09-Mar-18	16-Mar-18			6	Standard 5 Day Workweek w holidays	■ Respond to MSBA Review Comments																													
Preferred Schematic Report (3 Months)																																						
A1230	Evaluation of Existing Conditions (Phase II Exploration)	26	16-Feb-18	26-Mar-18			0	Standard 5 Day Workweek w holidays	■ Evaluation of Existing Conditions (Phase II Exploration)																													
A1240	Final Evaluation of Alternatives	26	16-Feb-18	26-Mar-18			0	Standard 5 Day Workweek w holidays	■ Final Evaluation of Alternatives																													
A1250	Identification and Development of Preferred Solution	26	16-Feb-18	26-Mar-18			0	Standard 5 Day Workweek w holidays	■ Identification and Development of Preferred Solution																													
A1260	Local Actions and Approvals	26	16-Feb-18	26-Mar-18			0	Standard 5 Day Workweek w holidays	■ Local Actions and Approvals																													
A1410	Develop System Narratives & Conceptual Bldg Plans/Site Plans	26	16-Feb-18	26-Mar-18			0	Standard 5 Day Workweek w holidays	■ Develop System Narratives & Conceptual Bldg Plans/Site Plans																													
A1420	Cost Estimate - 3rd Party Estimators	10	27-Mar-18	09-Apr-18			0	Standard 5 Day Workweek w holidays	■ Cost Estimate - 3rd Party Estimators																													
A1430	Reconciliation of 3rd Party Estimates	5	10-Apr-18	17-Apr-18			0	Standard 5 Day Workweek w holidays	■ Reconciliation of 3rd Party Estimates																													
A1440	SBC Approval of Preferred Solution	5	18-Apr-18	24-Apr-18			0	Standard 5 Day Workweek w holidays	■ SBC Approval of Preferred Solution																													
A1310	Compile and Submit PSR	5	25-Apr-18	01-May-18			0	Standard 5 Day Workweek w holidays	■ Compile and Submit PSR																													
A1280	MSBA PSR Review Period	29	02-May-18	12-Jun-18			19	Standard 5 Day Workweek w holidays	■ MSBA PSR Review Period																													
A1300	Design Team Response to MSBA PSR Review Comments Due	6	13-Jun-18	20-Jun-18			19	Standard 5 Day Workweek w holidays	■ Design Team Response to MSBA PSR Review Comments Due																													
A1290	MSBA Facilities Assessment Subcommittee (FAS Mtg)	0		06-Jun-18			29	Standard 5 Day Workweek w holidays	◆ MSBA Facilities Assessment Subcommittee																													
A1270	MSBA Board of Directors Approval of PSR	0		13-Jun-18			24	Standard 5 Day Workweek w holidays	◆ MSBA Board of Directors Approval of PSR																													

■ Remaining Level of Effort ■ Remaining Work ◆ ◆ Milestone
■ Actual Work ■ Critical Remaining Work

Data Date: 10-Aug-17
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Note: Preliminary Schedule

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*subject to change

4.2 EDUCATIONAL PROGRAM

INTRODUCTION

- A. GRADE AND SCHOOL CONFIGURATION POLICIES
- B. CLASS-SIZE POLICIES
- C. SCHOOL SCHEDULING METHOD
- D. TEACHING METHODOLOGY AND STRUCTURE
- E. TEACHER PLANNING AND ROOM ASSIGNMENT POLICIES
- F. PREKINDERGARTEN PROGRAM
- G. KINDERGARTEN PROGRAM
- H. LUNCH PROGRAMS
- I. TECHNOLOGY POLICIES/PROGRAM REQUIREMENTS, MEDIA CENTER/LIBRARY
- J. ART PROGRAMS
- K. MUSIC AND PERFORMING ARTS PROGRAMS
- L. PHYSICAL EDUCATION PROGRAMS
- M. SPECIAL EDUCATION PROGRAMS
- N. VOCATIONAL AND TECHNOLOGY PROGRAMS
- O. TRANSPORTATION POLICIES
- P. FUNCTIONAL AND SPATIAL RELATIONSHIPS
- Q. SECURITY AND VISUAL ACCESS REQUIREMENTS

INTRODUCTION

Clyde F. Brown Elementary School is a vibrant, close-knit school community that serves students in Preschool through Grade 4. Recognized for its award-winning Spanish Immersion program and designation as a *Tools of the Mind* Northeast Regional Demonstration Site School, which proudly models exemplary early learning practices for visitors from around the nation and from Europe, Clyde F. Brown Elementary School actualizes its prior designation as a Lighthouse School in Massachusetts as students consistently meet or exceed averages on statewide tests.

Clyde F. Brown Elementary School strives to fulfill the Millis Public Schools deeply held philosophy of personalized learning for all students. This occurs at the elementary level through the infusion of technology in day-to-day learning, through the promotion of project-based learning at all grade levels, and through integrated curriculum that fosters inquiry-based experiences in learning STEM concepts through literacy. These educational practices, combined with more differentiated instruction through a fully articulated Response to Intervention instructional model, provide students with an academic foundation that allows for more student voice and choice in learning processes.

Clyde F. Brown Elementary School is proud of its ability to maintain innovative programming like Spanish language programming for all students in grades Kindergarten through four (and expanded to Grade 5 at the Middle School) through FLES (Foreign Language in the Elementary School). Equally proud of our designation as an International Spanish Academy (ISA) Elementary School, Clyde F. Brown Elementary School has served as a regional model for Spanish Immersion programming, welcoming visitors from around the Northeast region who are looking to implement and expand their own Spanish Immersion programming. Other innovative programming that directly and positively impacts our students includes our Music/Movement program in Kindergarten and Grade 1, which encourages further development of self-regulation skills necessary for independent executive functioning through integrated Music programming that dovetails rhythm and movement with literacy-based curriculum themes. Ongoing university partnerships with Tufts University, Boston University, and Framingham State University enhance programming for our students while providing exemplary professional development opportunities for faculty and staff.

In preparing both the PDP and PSR submissions the District has worked with the Architect and OPM to develop the educational program as well as the proposed space template. This process included two visioning sessions with educational planner Frank Locker and the school staff and administration as well as a public forums that solicited the input of parents and residents to develop an understanding of the strengths of the current program and the constraints and challenges posed by the existing facility.

Key components of the District's Educational Program include a new grade configuration of PK to Grade 5, meeting the District goal of bringing 5th Grade back to the Elementary School level. Creating three small learning communities of Early Learning (PreK & K); Primary (Gr. 1 & Gr. 2); and Upper Elementary (Gr. 3, Gr. 4, Gr. 5). Developing a focus at the upper Elementary level on Project Based Learning and STEM including incorporating a STEM classroom into this learning community. Creating a distributed Media Center that promotes access to information and technology at the primary and upper elementary levels and emphasizing peer assisted learning in a small group context with teachers are facilitators of learning. Another goal is to develop a site plan that has separate outdoor learning classrooms for each learning community and age appropriate play areas for all students.

The proposed building diagram supports these goals. There are three distinct classroom wings, one for each learning community. The media center is distributed between the primary and upper elementary classroom wings promoting student use of these areas for multiple project based activities and different group and individual learning opportunities. A STEM classroom is located on the upper floor adjacent to the upper elementary school wing but available for use by all students. There are three outdoor classrooms and three play areas proposed on the conceptual site plan. The youngest students will be able to access the school through a separate and dedicated early learning entrance.

A. GRADE AND SCHOOL CONFIGURATION POLICIES

The Clyde F. Brown Elementary School (CFB) serves all students in Millis in grades Preschool through 4. Grade levels within the school are organized by location and core programming: Preschool and Kindergarten are organized within the Early Childhood wing; Grades 1 and 2 are organized within the Primary wing; and Grades 3 and 4 are organized within the Upper Elementary wing. Within the primary and upper elementary wings, Spanish Immersion classrooms are located near their English classroom peers. Configuring grades into similar range groupings allows for greater flexibility in programming; for example, two grade levels can choose to collaborate on interdisciplinary projects, or switch classes for more diversified learning experiences if they are located near each other. Furthermore, configuring spaces into “neighborhoods” allows for the intentional planning of space needed for shared small group instruction, for project-based learning and for sharing of resources and staff.

At all grade levels, classrooms are organized in self-contained design, where students stay with their homeroom teachers for all core content subjects throughout the course of the academic day. Teachers now plan more collaboratively for interdisciplinary project-based learning experiences as the Influence of more contemporary instructional practices has become more prevalent at Clyde Brown, and classroom space is utilized at times for this combined instruction and learning collaboration. Special Education programming occurs within a full inclusion model, where many academic services are provided directly within the classroom setting. 1:1 Special Education services are provided in smaller classroom settings located within the Student Support Services offices or within available spaces located in classroom wings.

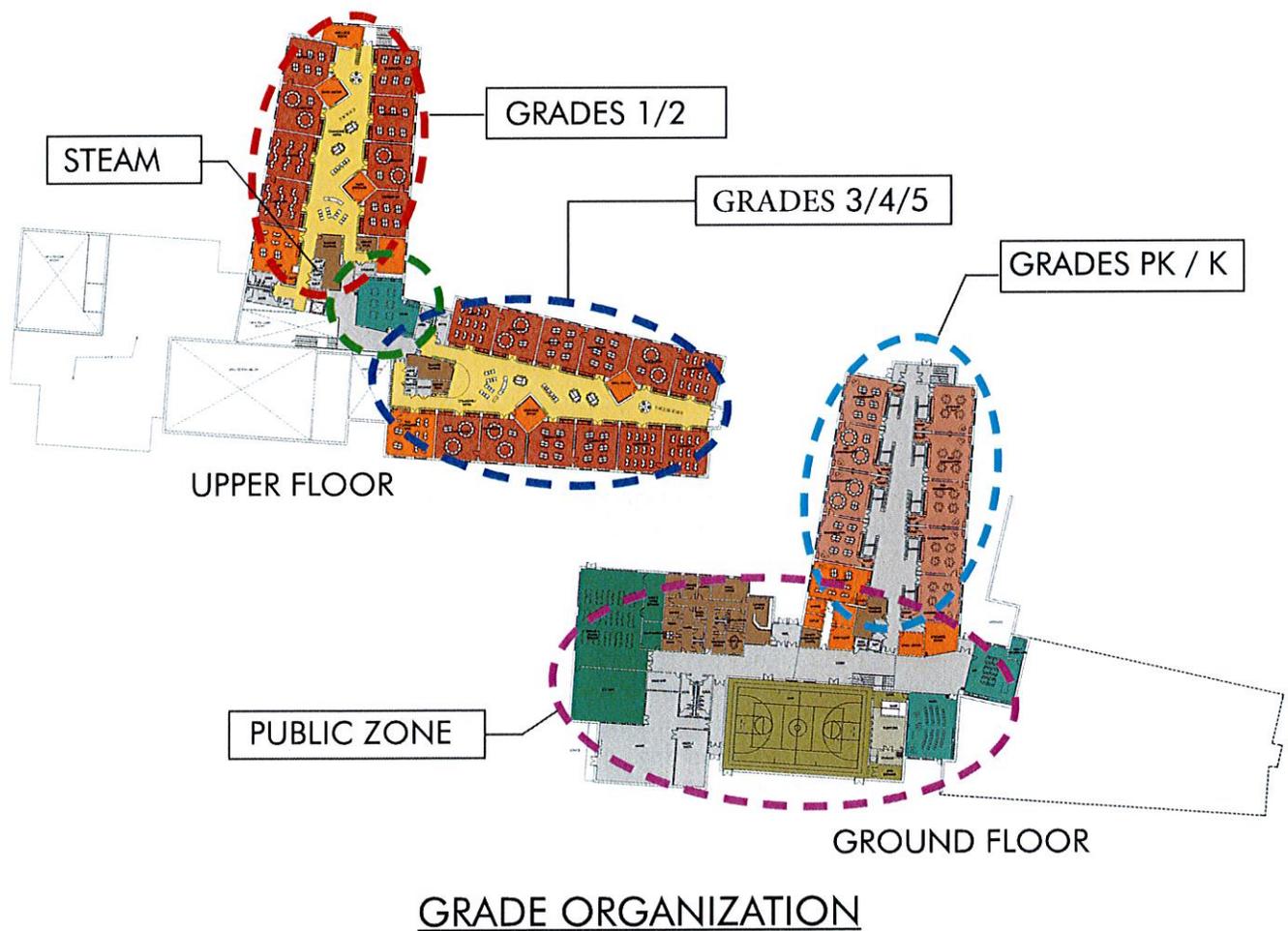
Grade 5, once considered part of the elementary school, was moved to the Middle School as a solution to overcrowding at Clyde F. Brown School. At this time, space is at a premium both at Clyde F. Brown and at the Millis Middle/High School. It is proposed that Grade 5 will move back to the Clyde F. Brown School as part of a new project, thereby providing a more age-appropriate environment for Grade 5 students as well as freeing up space at the Middle School for program expansion at that building. Grade 5 currently operates within the team model for core academics, with ancillary programming shared between the middle school and the high school. Grade 5 currently shares Spanish

FLES programming with Clyde Brown, and the FLES teacher schedules time between Clyde Brown and Grade 5 to accommodate these classes.

Therefore the preferred grade configuration for the Clyde Brown School will be Grades PK – 5 with the Middle High School supporting grades 6 – 8 and 9 – 12. Relocation of the 5th grade will be more appropriate educationally and will allow the Middle / High School to improve programming for the upper grades. The transition from Grade 5 to grade 6 will be more educationally appropriate as grade 5 at the middle school level has tended to be isolated at that location.

Design Response:

The proposed new building is organized into three distinct learning communities. These communities are in building wings, with the early childhood center on the ground floor and the primary and upper elementary wings on the upper floor. The reconfiguration of the Clyde Brown Elementary School is accomplished by locating the fifth grade in the upper elementary wing along with grades three and four. The fifth graders will have immediate access to the STEM classroom so that the resources that they are able to use at the middle school such as video production will continue to be available at their new location.



B. CLASS-SIZE POLICIES

The Millis School Committee supports target class sizes at the elementary level of not more than 23 students per classroom, with the exception of Spanish Immersion classrooms which should not exceed 26 students. Current enrollment trends confirm a pattern of average class sizes of approximately 19-21 students per classroom. Staffing trends that maintain these lower class sizes are fully supported by the School Committee, particularly at the Early Childhood and Primary levels, in recognition of the fact that teachers are better able to address student learning needs when student class sizes are lower.

The proposed space template for grades K – 5 includes four classrooms per grade. At an enrollment projection of 515 students, this would translate into approximately 86 students per grade or approximately 21 students per classroom.

Design Response:

The proposed plan accommodates four classrooms per grade in each wing as well as similar support and special education spaces for each of the three learning communities.

C. SCHOOL SCHEDULING METHOD

Academic programming at Clyde F. Brown Elementary School is centered around the philosophy of *Tiered Systems of Support and Enrichment* (TSSE), which promotes a data-driven instructional response to three instructional tiers - *whole-group instruction* for all students, skill-specific “double dosed” *small group instruction* for some students identified by data, and *intensive instructional support* for a few students whom data determines are academically at-risk. The schedule is designed around seven Academic Intervention blocks that are designed to personalize student learning by providing students with these opportunities to extend, enrich, review or remediate ongoing skills in English Language Arts and Mathematics. Each Intervention Block is 40-minutes in length; English Language Arts and Mathematics Intervention occur simultaneously and are staggered to accommodate whole-group instruction and small group instruction sections; for example, during the 8:40 - 9:20 Intervention Block, Kindergarten students receive small group interventions in English Language Arts while students in Grade 1 receive Enrichment and/or Intensive Intervention in Mathematics. Benchmark assessments that provide teachers with student learning data are conducted three times each year - at the beginning of the school year (September), at mid-year (January), and at end-of-year (May/June); the data generated and analyzed during these benchmark assessment periods allow staff to identify the skills, for all students at all grade levels, that need enrichment, review, and remediation. These scheduled Intervention Blocks provide the central instructional focus for skill development at Clyde F. Brown Elementary School.

Unified Arts classes are scheduled around the Intervention Blocks and are 40-minutes in length. Students at Clyde F. Brown Elementary School enjoy Physical Education twice each week. Instructional Technology is offered for students once each week with the Instructional Technology teacher in the Technology Lab, and also during an additional block once each week as part of integrated classroom learning where classroom teachers bring their students to the Technology Lab for a co-planned, co-taught lesson by both the classroom teacher and the Instructional Technology teacher; these co-taught lessons provide students with the opportunity to incorporate technology into interdisciplinary content learning. All students participate in a weekly Art lesson. Music classes for Grades 2, 3 and 4 occur once each week and are scheduled for the first block of the schedule to accommodate the Music teachers, who teach students at Clyde F. Brown Elementary School, Millis Middle School, and Millis High School. Students in Kindergarten and Grade 1 take part, once each week, in Music/Movement classes that integrate music and movement with ongoing curriculum themes and reinforce self-regulation skills. All students have the opportunity to visit the Library once each week to take out books. All students not enrolled in Spanish Immersion classrooms at Clyde F. Brown School participate in a 40-minute Spanish language class once per week.

Design Response:

The proposed school is self-contained and all programs for students are accommodated by the proposed space template and schedule. The start and finish times for the elementary school are staggered allowing for the same busses to complete separate routes for Middle/High students and elementary students. This staggered schedule allows for use of a shared pick up and drop off zone located between the two schools.

Clyde F. Brown School Schedule:

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:40 - 9:20 Music (Grades 2, 3, 4+) 8:42 - 9:18 Intervention Block 8:50 - 9:20	Music - 2A Hackett/Shea PE (A) - PREP PE (M) - closed Art - 2 Migos Library - Tech - PREP FLES - 4 Nardone	Music - 2C Migos Music - 3A Mellin PE (A) - 3 Valluzzi PE (M) - closed Art - 4 Colcord Library - Tech - 4 Nardone FLES - 1 Al-Haza	MUSIC - 3B Lucey/Tashian Music - 3C Merusi/Valluzzi PE (A) - PREP PE (M) - closed Art - PREP Library - Tech - 4 Al-Haza FLES - 4 Hernandez	Music - 4A Colcord Music - 4B Al-Haza PE (A) - PREP PE (M) - closed Art - PREP Library - Tech - 3 Mellin FLES - 4 Carlson	Music - 4C Nardone Music - 4D Carlson/Hernandez PE (A) - PREP PE (M) - closed Art - 1 Eaton Library - Tech - PREP
9:22 - 10:02 Intervention Block 9:22 - 10:02	PE (A) - ADAPTIVE PE PE (M) - K Taft Art - 4 Carlson Library - Tech - 4 Hernandez FLES - K Guertin	PE (A) - PREP PE (M) - K White Art - PREP Library - Tech - PREP FLES - K Lafferty	PE (A) - K Lafferty PE (M) - K Guertin Art - PBL Block Library - Tech - 4 Carlson FLES - K Taft	PE (A) - Adaptive PE PE (M) - Art - 4 Nardone Library - Tech - PREP FLES - K White	PE (A) - Adaptive PE PE (M) - Art - PREP Library - Tech -
10:04 - 10:44 Intervention Block 10:04 - 10:44	PE (A) - 1 Eaton PE (M) - 1 Baglioni Art - 1 Ball/Giordano Library - Tech - K Parachio FLES - 1 Giunta	PE (A) - 1 Ball/Giordano PE (M) - 1 Giunta Art - 1 Baglioni Library - Tech - FLES - Class Make Up	PE (A) - 1 Eaton PE (M) - 1 Baglioni Art - PBL Block Library - 1 Giunta Tech - PREP FLES - K Parachio	PE (A) - 1 Ball/Giordano PE (M) - 1 Giunta Art - 1 Osborne Library - K Parachio Tech - FLES - 1 Baglioni	PE (A) - 1 Osborne PE (M) - Art - K Parachio Library - 1 Baglioni Tech - FLES - 1 Ball/Giordano
10:46 - 11:26 Intervention Block 10:46 - 11:26	PE (A) - 1 Osborne PE (M) - Art - K White Library - Tech - 4 Colcord FLES - 2 Lang	PE (A) - 2 Lang PE (M) - 2 Hackett Art - PK Art Block (AM) Library - K Lafferty Tech - FLES - 2 Shea	PE (A) - 2 Shea PE (M) - 2 Migos Art - PBL Block Library - 1 Osborne Tech - PREP FLES - Class Make Up	PE (A) - 2 Lang PE (M) - 2 Hackett Art - K Taft Library - K Guertin Tech - FLES - 1 Eaton	PE (A) - 2 Shea PE (M) - 2 Migos Art - 1 Giunta Library - 1 Ball/Giordano Tech - (K Guertin) FLES - 2 Hackett
11:28 - 12:08 11:28 - 11:48 11:50 - 12:25	UA Lunch Block UAD	UA Lunch Block UAD	UA Lunch Block UAD	UA Lunch Block UAD	UA Lunch Block UAD
12:00 - 12:40 Intervention Block 1:02 - 1:40	PE (A) - 4 Al-Haza FLES Lunch & Prep	PE (A) - 4 Carlson FLES Lunch & Prep	PE (A) - 4 Nardone FLES Lunch & Prep	PE (A) - 4 Hernandez FLES Lunch & Prep	PE (A) - 4 Colcord FLES Lunch & Prep
11:30 - 11:55 11:45 - 12:25 12:15 - 12:55 12:45 - 1:25 1:00 - 1:15	DAILY Grade 1 Lunch Grade 2 Kindergarten and Grade 2 Grade 4 Grade 1 Recess	LUNCH BREAK	BLOCKS	11:45 - 12:00 - Recess 12:15 - 12:30 - Recess	12:00 - 12:25 - Lunch 12:30 - 12:55 - Lunch 1:00 - 1:25 - Recess
12:15 - 12:47 Intervention Block 12:15 - 12:47	FLES - Lunch Duty	FLES - Lunch Duty	FLES - Lunch Duty	FLES - Lunch Duty	FLES - Lunch Duty
12:41 - 1:21 Intervention Block 12:41 - 1:21	PE (A) - 3 Valluzzi Art - 3 Tashian Library - Tech - FLES - 3 Merusi	PE (A) - 3 Merusi Art - PBL Block Library - Tech - FLES - 3 Lucey	PE (A) - Art - PK Art Block (PM) Library - Tech - FLES - Class Make Up	PE (A) - 3 Merusi Art - PBL Block Library - Tech - 3 Valluzzi FLES - 3 Tashian	PE (A) - 3 Lucey Art - 3 Merusi Library - Tech - 3 Tashian FLES - 3 Valluzzi
1:23 - 2:03 Intervention Block 1:23 - 2:03	PE (A) - 3 Lucey Art - K Guertin Library - Tech - (K Lafferty) Ms.Elaine -	PE (A) - 3 Tashian Art - 3 Lucey Library - K Taft Tech - Ms.Elaine - K Guertin	PE (A) - 3 Mellin Art - 2 Hackett Library - Tech - (K Taft) Ms.Elaine - K White	PE (A) - 3 Tashian Art - K Lafferty Library - 2 Migos Tech - (K White) Ms.Elaine - 1 Eaton	PE (A) - 3 Mellin Art - 2 Lang Library - K White Tech - Ms.Elaine - K Lafferty
2:05 - 2:45 Intervention Block 2:05 - 2:45	PE (A) - 4 Nardone Art - 3 Mellin Library - Tech - 3 Merusi Ms.Elaine - 1 Giunta	PE (A) - 4 Hernandez Art - 4 Al-Haza Library - 2 Shea Tech - Ms.Elaine - 1 Osborne	PE (A) - 4 Colcord Art - 4 Hernandez Library - 2 Lang Tech - Ms.Elaine - 1 Ball/Giordano	PE (A) - 4 Carlson Art - 2 Sheas Library - Tech - 3 Lucey Ms.Elaine - 1 Baglioni	PE (A) - 4 Al-Haza Art - 3 Valluzzi Library - 2 Hackett Tech - Ms.Elaine - K Taft
2:50 Dismissal					

D. TEACHING METHODOLOGY AND STRUCTURE

Clyde F. Brown Elementary School subscribes to a varied teaching methodology that occurs in all classrooms across the building. The focus, as a district, on Personalized Learning has expanded opportunities for teachers to utilize approaches such as project-based learning in the classrooms as well as in an integrated curriculum context in Art - all grade levels are afforded the opportunity to enhance classroom content-based learning through co-taught Art classes in which the Art teacher and classroom teacher co-plan and co-teach a lesson. For example, students in Grade 4 who are learning to construct circles using compasses in Mathematics class learn more about spheres and circles in design, and work to solve a problem that involves thinking about creating circles for a real-life purpose - say on a basketball court. These Project Based Learning (PBL) blocks provide creatively integrated learning experiences that directly connect classroom concepts to real-life context through problem solving.

While the preferred pedagogy of the Millis Public Schools is one of active, project and inquiry- based learning that engages students and addresses higher-order critical thinking and problem-solving skills, educators at the Clyde Brown Elementary will continue to utilize different teaching methodologies to personalize learning in response to student interests, skill gaps and learning styles and to encourage students to take a more active role in goal setting and monitoring their progress.

Because teaching methodologies at Clyde F. Brown Elementary School are widely varied and designed to engage students in greater critical thinking practices, classroom design must be flexible enough to allow for frequent transitions from whole group instruction, to small group instruction, to peer-assisted interaction. In traditional classrooms, students sit at desks in rows and listen more passively to teacher-directed instruction; at the Clyde F. Brown Elementary School, student learning occurs in a small group, collaborative context as students sit at tables, then move to create smaller ad hoc “circles” with their chairs to dialogue around the learning at hand. Classroom design should accommodate this flexibility with an intentional focus on mobility of space (walls that move to accommodate large groups of students, or which can be drawn to create smaller, more intimate learning spaces) to accommodate co-teaching models when indicated. In addition to small group instructional classroom spaces located in each learning community, it is important to have nooks where small groups of students can meet to research, discuss, and create within the learning process, thereby providing for more individualized and personalized instruction at all grade levels.

A typical classroom is designed with active project-based and personalized learning in mind – furniture is easily moved to create configurations from large groups to smaller groups. Interior windows from 4 feet up allows teachers to view and monitor students who are accessing resources or working in the Media Center, as technology is now located centrally to classrooms to allow for more immediacy of access to resources. Natural lighting and furniture that allows for less restrictive movement and more comfort will allow students the opportunity for greater focus. Easy access to outdoor spaces, with perhaps an outdoor classroom area for each learning community, allows for greater integration of nature themes into academic curricula. Adequate storage within each classroom for project-based learning is key for hands-on learning

Inquiry-based learning occurs at Clyde F. Brown Elementary School through several university-based partnerships that have provided rich professional development for staff as they have applied this learning with students in the classroom. Through partnership with Tufts University, students benefit from the “STEM Through Literacy” program which promotes identification of problems in literature and forces students to work collaboratively in creating solutions

to these problems. Students in Grade 2 communicate with the Annuncion School in Malaga, Spain via Skype as they work to conduct life-science research through the Boston University-sponsored ECUSA program where students share solutions and results of their research as they create data-based hypotheses concerning the differences in findings. In Grade 4, teachers actively promote inquiry-based learning framed through *Genius Hour*, where students select a topic of passion, conduct research, and share results with an audience through a self-formulated presentation. Outdoor learning takes place in an integrated context as students in Grade 3 learn about crops grown in Colonial Massachusetts and work to germinate seeds, plant and harvest crops as part of a unit on life in 17th Century Massachusetts Bay Colony. Students in Grade 3 expand their understanding of the elements of design in nature as they work in small groups to design, test and revise their collaboratively created “bird nests” that withstand the “wind” created by a fan. Students in Grade 2 learn the fundamentals of engineering as they create, test, and revise bridges that support the weight of a small car. These rich and varied learning experiences encourage deep levels of collaboration and communication as students develop and refine 21st Century skills that will become essential for the world they will join as adults. In all cases where collaborative learning occurs, teachers combine classrooms and groups of students work on the floor to create the space needed for this interactive learning - many times students will opt to work in the hallway or will plan instruction around the availability of the Cafeteria or the Music Room as they seek suitable space to maximize spatial opportunities for project design. Clearly, space constraints limit the ability of teachers to expand these learning opportunities.

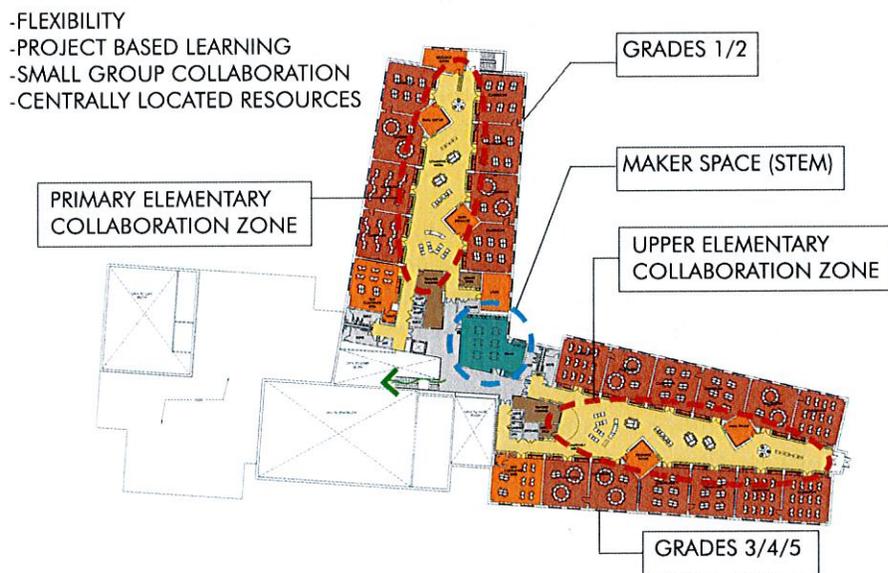
Maker spaces within the new school design to address current constraints will be created in both elementary learning communities through the redesign of the Media Center: rather than have one designated Media Center that students access, in classroom groups, following a traditional schedule, learning communities will have resources (trade books, devices, “construction” materials) redistributed throughout the “corridor” of each wing, thereby allowing students immediate access to information and technologies they need to construct learning in the moment. Typically corridors allow for passage to and from classrooms only; redesigning corridors to now become inviting maker spaces for students to engage in more collaborative and hands-on learning experiences contributes to the model of a more flexible learning environment for all learners. By design, the maker spaces allow for maximal adult support, when needed – classrooms in the learning community convene around these spaces; this is essential particularly for younger students who require more direct instruction and modeling around how to manage collaborative learning. The Media Specialist now serves as a consultant who is scheduled to be in each of the three learning communities on a rotating basis to assist in facilitating learning along with classroom teachers.

The use of technology is inherently woven into the teaching methodology of Clyde F. Brown Elementary School. Teachers embrace technology daily as they use SMART Boards, SMART Notebooks and the Internet for connected and interactive learning. Teachers have been trained in the use of Google Suite, and students use Google Docs as a means of collaborative communication and writing - feedback is provided instantaneously to students, who are better able to make more accurate revisions to their assignments. iPad carts provide students with opportunities for whole class connectivity, and teachers utilize web-based programs like Socratic and Kahoot to engage students in review of content that fosters deeper levels of understanding. Students use iPads to chronicle their learning, to collect information, to conduct research, and to create and introduce presentations that demonstrate their understanding of what they are learning. Use of the mobile iPad carts assists students in making learning flexible as learning can now happen anywhere students gather, whether in a classroom, in a hallway, in the Media Center, or outside - teachers at Clyde F. Brown School understand that today’s learners need choices in how they will learn.

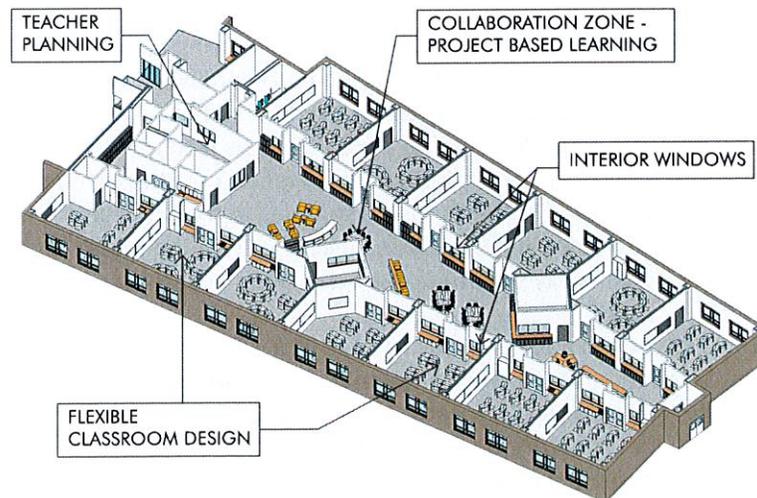
Teachers at the Clyde F. Brown Elementary School have invested much collaboration and professional learning around the development of “power standards” that guide content learning. Taken from the Massachusetts Common Core Curriculum Frameworks, quality instruction in a standards-based sense springs from the development of collaboratively developed “proficiency rubrics” that measure ongoing learning and skill mastery of these power standards in all content areas. This attention to *assessment for learning* assists in the focus of instruction on key elements of learning designed to maximize student learning experiences.

Design Response:

The design of a new Clyde Brown School is organized to support the schools teaching methodology. Lockers and cubbies have been pulled out of the classrooms to allow for maximum flexibility within the rooms, making them easily reconfigurable. Transparency is anticipated on the interior walls to allow views into either the corridor at the early childhood wing or the project based common zones in the primary and upper elementary wings. The direct adjacency to a central common will provide flexibility for learning to occur within the classroom as well as the adjacent space simultaneously, whether it is project based, group or individual activity. Collaboration between classes is enhanced by doors between classroom and double doors into the common, allowing multiple classrooms to congregate in a central location.



TEACHING METHODOLOGY



TEACHING METHODOLOGY / COLLABORATION ZONE

E. TEACHER PLANNING

Currently, teachers at the Clyde F. Brown Elementary School are assigned rooms in classroom wings by grade level location - every effort is made to locate similar grade level teachers nearby one another to better promote instructional collaboration. By contract, teachers work a total of 6 hours and 45 minutes daily and are provided a duty-free lunch block equal to that of their students, as well as a 50-minute daily preparation block, during which time students take part in Unified Arts instruction.

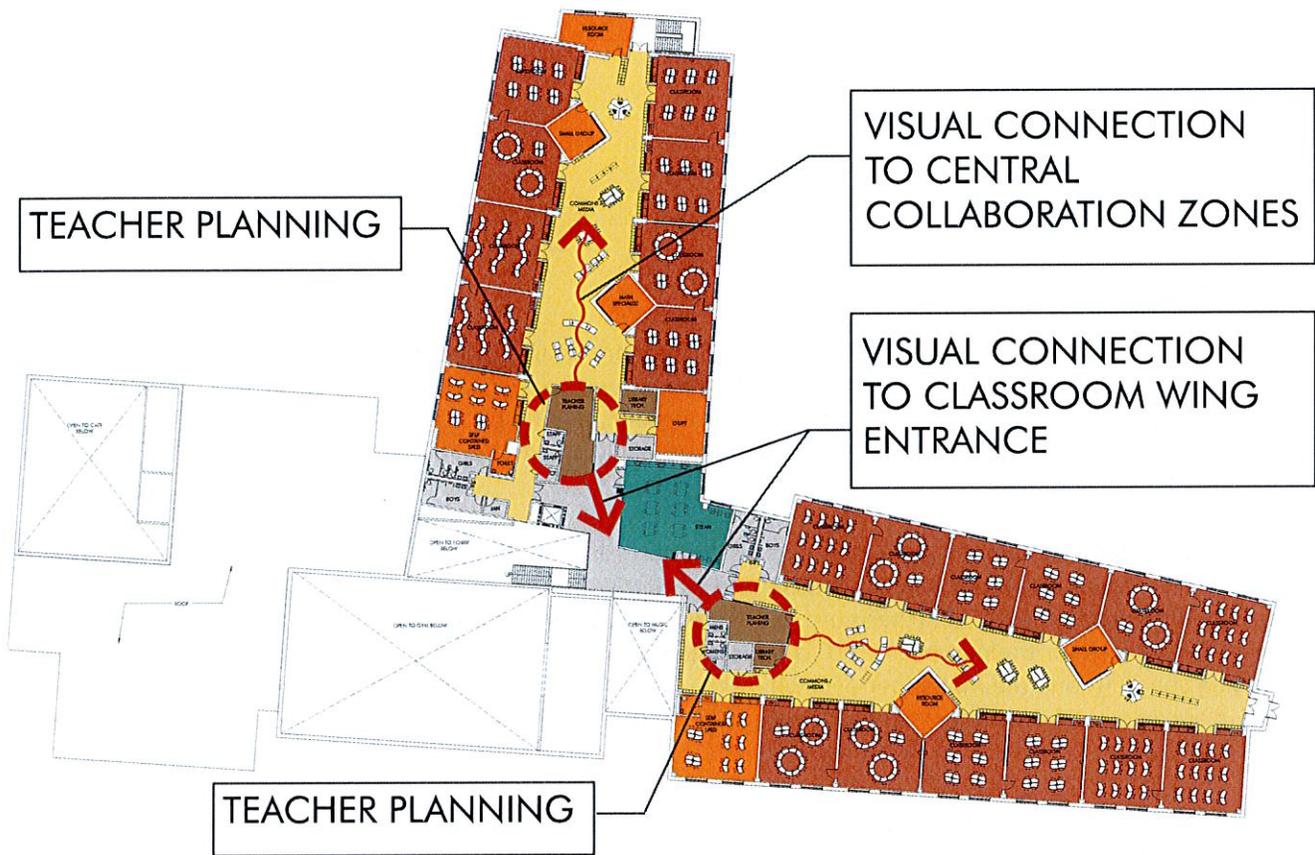
In addition to the daily preparation block, teachers also utilize Professional Learning Community (PLC) planning blocks: a monthly, after-school PLC block enables teachers to work together on collaboratively developed student learning and professional practice goals. Furthermore, teachers are provided with an extended, duty-free block that aligns with their lunch block for the purpose of PLC collaboration, as well as a bi-weekly planning block with, alternatively, the Reading Specialist and the Math Specialist where the grade level team discusses strategies to support all learners in Reading and Mathematics. Most PLC and grade-level meetings occur in a classroom due to lack of meeting space within the school.

While there is a common room for teachers to make photocopies, this room is housed in a former supply closet and is not used for any other purpose due to its cramped conditions. No large-space areas are available for more large-scale planning, and teachers must conduct planning of this nature either before school or after school to allow for their own physical transport of planning materials to the designated classroom in which they gather to plan for instruction.

To address these shortcomings, the proposed space template proposes three teacher planning centers, one for each of the anticipated learning communities within the school (PK – K, 1 – 2, 3 – 5). Having three teacher planning centers will enhance professional collaboration and will allow for age and grade specific common planning. These locations will also act as localized copy centers to reduce the time teachers currently need to travel to access a single central location. This is an important aspect of the District's educational vision as it promotes common planning, professional development and collaboration and the supervision of the proposed multi-purpose project areas being developed in the classroom wings.

Design Response:

Each Teacher Planning Center is located with a view of the central common or corridor and they are at the head of the corridor so that visitors will pass them on the way into the classroom wing. This location offers supervision of students and of visitors for any teacher who is in the planning center and not in a classroom. The goal of these centers is to promote, support and enhance common planning time and professional collaboration. They also act as general meeting rooms and will have small copy centers and storage areas for book and material storage.



TEACHER PLANNING

F. PREKINDERGARTEN PROGRAM

Currently Clyde F. Brown Elementary School houses an integrated Preschool program comprised of 3.5 classrooms that services students in 2 morning sessions, 3 afternoon sessions, and 1 extended programming session. Pre-school classes offer 2.5 hours of instruction, 4 days each week. During SY 2015-16, a self-contained Extended Programming session was added to accommodate specific student needs. This program provides an instructional model for students on IEPs to benefit from peer models as they navigate the program; students for whom the program is designed attend class for 5 hours of instruction, 5 days each week, and peer models attend class for 4 hours of instruction, 5 days each week. Due to space constraints, 1 afternoon Preschool session shares space with a morning Kindergarten class; space for program materials storage is problematic, as the space is jointly shared within the one classroom.

The proposed use of space within the Early Learning community in the new school as an Extended Day classroom is designed to complement early learning programming in PreK and Kindergarten. This classroom is used as a space for providing supplementary general education services for our youngest learners in academic and social experiences within a small group setting. Rather than use other programmatic spaces within the building (cafeteria, the Gym, existing classrooms, or the STEAM classroom), which are utilized by large numbers of students throughout the building, all day long, the use of a designated Extended Day classroom space is designed to keep this classroom programmatically within the Early Learning community to better serve the needs of our students. There is dedicated staff for this program and students are enrolled in the program throughout the school day so a dedicated space is needed to accommodate these students and staff.

Preschool programming centers around the structure of the *Tools of the Mind* curriculum. Because of the multi-age mix of students (3- and 4-year-olds), the *Tools* curriculum is enhanced and modified to accommodate the developmental and skill range of all students, and teachers present thematic units aligned with the *Massachusetts Early Education and Care* (EEC), which are instructed within the framework of the *Tools of the Mind* program. The instructional focus of *Tools of the Mind* centers around learning skills through the curriculum that enable children to self-regulate their feelings and, subsequently, their choices in learning. Children learn through thematically-based topics that build upon their prior knowledge while expanding their understanding of the world. Peer-assisted learning is encouraged as students learn social and collaboration skills as they begin to manage their learning.

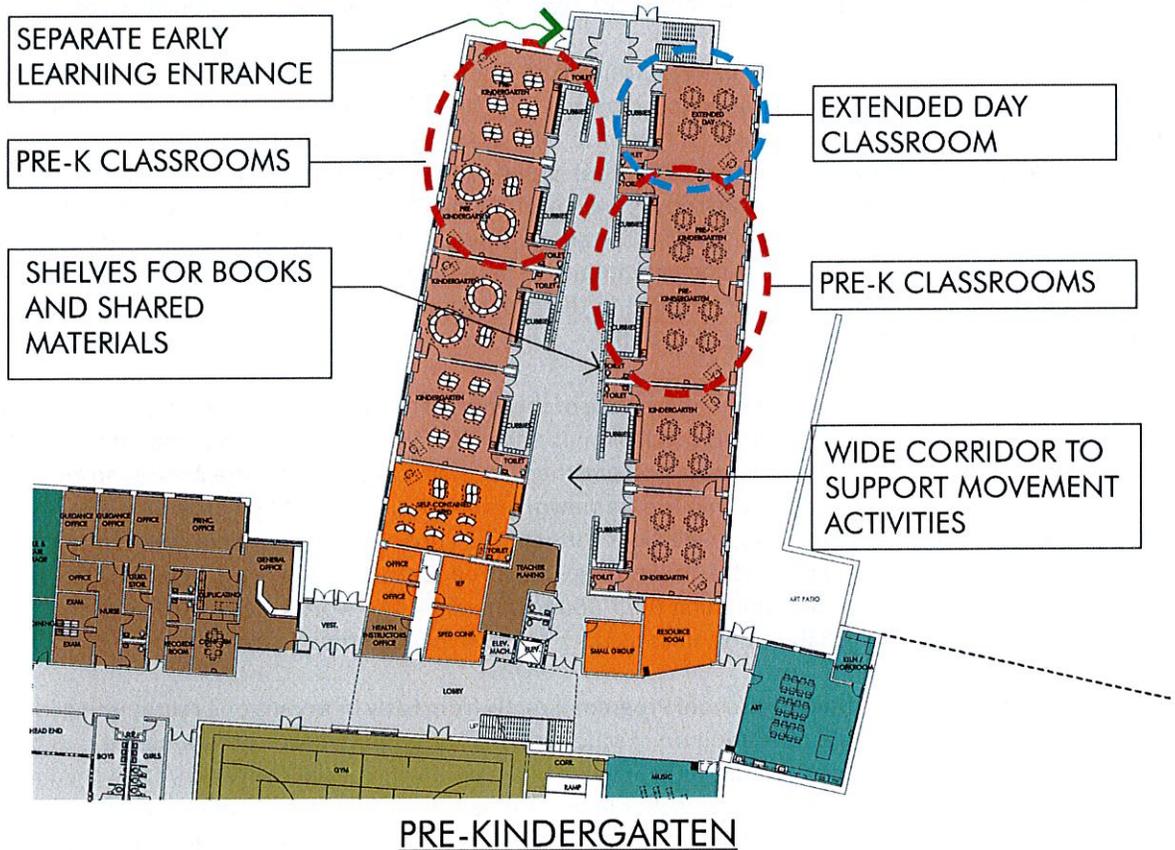
Currently, students enter the Millis Preschool Program directly from Early Intervention programming in the community. Space constraints do not allow for the addition of school-driven community-based programming that provides families with much-needed opportunities to engage in activities that promote Special Education/early childhood efforts that enrich critical early learning experiences. School-based experiences like play groups, parenting focus groups, and “story time” activities, for example, provide more opportunities to partner with our state-funded Coordinated Family and Community Engagement Program in reaching families with young children with and without disabilities, and also support our ongoing efforts to Child Find. It is our hope that the Clyde F. Brown Elementary School project will enable us to begin reaching our youngest learners at earlier ages by incorporating this early childhood learning programming as a supportive and coordinated part of our Early Learning Community educational focus.

The **program impact** on Prekindergarten programming involves current space constraints. The area of the Pre-school classrooms does not meet current program requirements, and the classroom spaces are simply not large enough to provide the quality of instruction that is required by our instructional programming. Pre-school students currently store their belongings in hallway lockers designed for use by older children; this creates accessibility issues for our young children who often need assistance in hanging/retrieving coats and backpacks. Inadequate storage space in the Pre-school classrooms makes storage of important learning materials impossible.

An updated facility offers the opportunity to have appropriately sized PK classrooms that support school programs. A full four classrooms will allow us to expand offerings as there is a high demand for these programs and will also help to accommodate an afternoon session for special education intensive intervention which research indicates is highly effective.

Design Response:

The four pre-kindergarten classrooms plus the one extended day classroom are included within the early childhood wing. These classrooms have direct access to the exterior which allows for students to enter directly into the classroom wing from the parking area and playground. This is particularly beneficial for half day programs. This wing of the building also houses kindergarten, a substantially separate special education classroom and resource rooms as well as a teacher planning center. Student cubbies are located in the corridor which allows for maximum flexibility within the classrooms themselves.



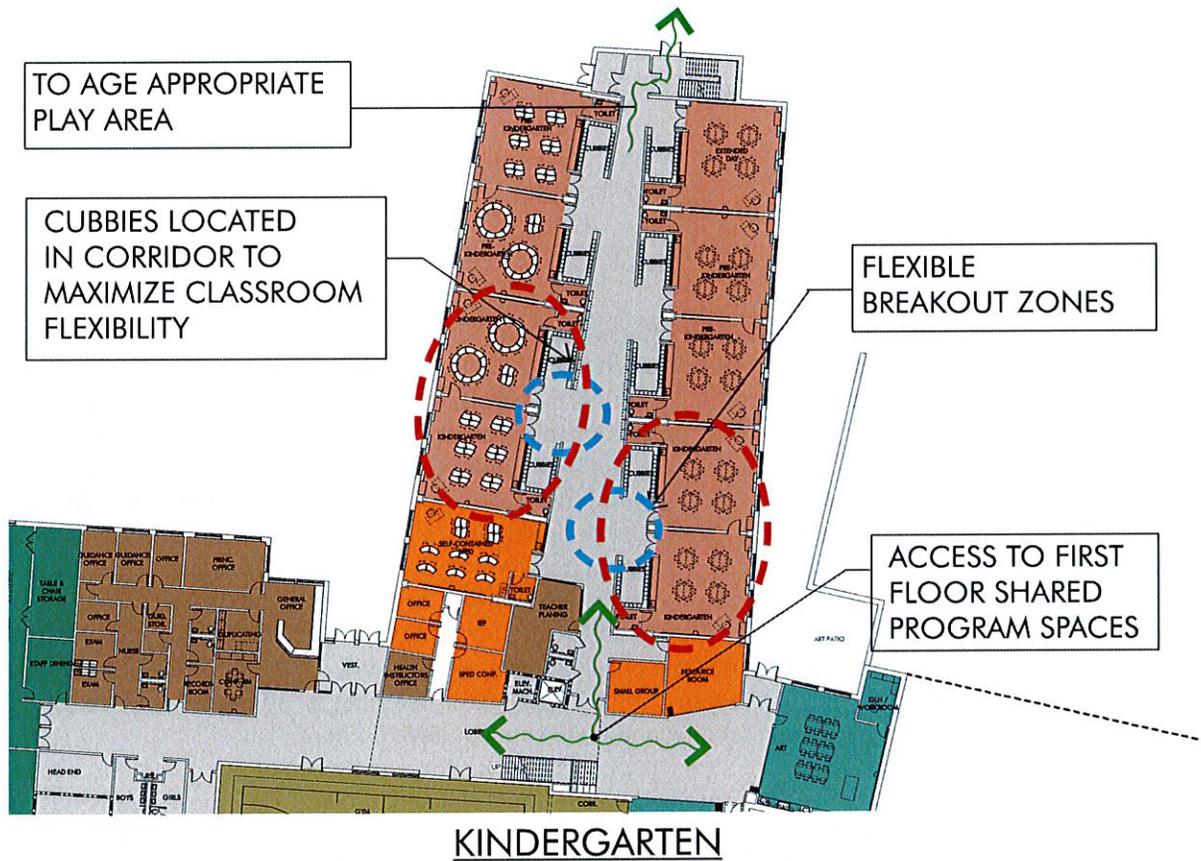
G. KINDERGARTEN PROGRAM

Currently, Clyde F. Brown Elementary School offers 4 sections of tuition-based full-day Kindergarten, as well as 1 half-day A.M. session Kindergarten class which is provided at no charge to families. Full-day Kindergarten is offered by lottery to families on a sliding-scale tuition based format; both the full-day and half-day Kindergarten classrooms operate 5 days each week and utilize the *Tools of the Mind* program that emphasizes the development of self-regulation skills designed to promote greater self-awareness and independence through peer-assisted learning. Now in its fifth year of implementation, the Kindergarten *Tools of the Mind* program has been recognized as a *Northeast Regional Model School of Excellence* in programming, and is designated as a Demonstration Site School for promoting best *Tools of the Mind* practices. Our Kindergarten program frequently receives visitors from around the United States and from as far away as Russia, and welcomes visitors who wish to learn more about how this programming best benefits young learners. Instruction occurs through literacy-based themes which develop student background knowledge and expand learning and understanding through role play and prop building; the dynamic curriculum is highly interactive and emphasizes the development of student choice and voice in learning as students work collaboratively, with teacher guidance, to frame their understanding and build concept development.

Currently, Kindergarten classrooms are contained within the 1954 section, and classroom size is not meet current program standards. This impacts learning for our students as space and storage is at a premium; student belongings are contained in hallway lockers designed for use by older students - student have difficulty in storing and accessing their belongings in these narrow locker spaces. Four of the five Kindergarten classrooms currently do not have toilets inside the classroom, and instruction must be interrupted for whole-class visits to the restroom. In order for our youngest learners to maximize opportunities to learn, we need large, bright classrooms, with accessible toilets, that are conducive to movement. Imaginative role-playing is a key element of literacy development. As part of this imaginative role play that fosters deep levels of comprehension through developmentally appropriate practice, students construct their own props that are used in acting out the roles of key characters within the literacy component. For example, in a unit on Knights, students construct castles - both table-top style and child-size, in which to act out roles from the literature as they reinforce comprehension and experientially apply the concepts they are learning both collaboratively and interactively. Therefore, it is important to have flexible classroom space for prop making and imaginative role-play. For further flexibility and collaboration, classroom spaces in the Early Learning Community area should have movable walls so that several classrooms of students can gather together in larger group learning.

Design Response:

The kindergarten classrooms are also located in the early childhood wing of the proposed new school. Cubbies are located in the corridor to maximize flexibility and available space within the classrooms. Bathrooms are located within each classroom. Kindergarten students will benefit from direct access to the exterior allowing for easy access to their play area and outdoor classroom zones.



H. LUNCH PROGRAMS

The Cafeteria at Clyde F. Brown Elementary School was constructed within the 1991 renovation. Currently, 4 lunches are held in the cafeteria due to space constraints. Lunches begin at 11:30am and conclude at 1:30pm. With the exception of Kindergarten and Grade 2, who share a Lunch block in the Cafeteria, each grade has an individually designated Lunch block of 25-minutes. Additionally, students participate in a 15-minute recess block prior to their scheduled Lunch block, as well as enjoy a 10-minute “movement break” at another scheduled time during the course of the school day; this movement break allows teachers to re-engage students in the learning process during a lengthy stretch in the day when student attention may flag - getting students up and moving re-ignites attention and focus

The kitchen equipment is 25-years-old, and is in need of replacement; it is not uncommon for equipment to lose functioning for long periods of time while an outdated part is located and installed. Currently, the cafeteria contains a serving line space that adjoins the cafeteria, and a kitchen space that contains ovens and warmers. Because the Cafeteria does not contain a designated dishwasher, meals are served on disposable styrofoam trays, and cooking implements are washed by hand in the sink area. The kitchen contains a large mixer which is currently not in use due to the fact that much of the food purchased is pre-processed and frozen, requiring that it be baked in the ovens before serving.

The proposed lunch program will reduce the number of seatings from four to three. Three lunches will be conducted: Lunch A - Kindergarten and Grade 1; Lunch B - Grades 2 and 3; and Lunch C - Grades 4 and 5.

Design Response:

A cafeteria of 3,000 sf is proposed which is anticipated to accommodate three servings with some room for expansion should there be a future population bubble. Because the cafeteria is on the edge of the building an addition at this location could also be a future consideration. The cafeteria is located in the public zone of the school to allow for community use and has windows facing the front of the building to create a welcoming character to the entrance area. The cafeteria could also easily be used for before or after school activities due to its proximity to pick up and drop off zones.

I. TECHNOLOGY POLICIES/PROGRAM REQUIREMENTS

Clyde F. Brown Elementary School has always benefitted from the Millis Public School's forward-thinking philosophy in providing our students with the use of technology across disciplines to promote critical thinking, problem solving, and personalized learning experiences as part of their ongoing education. Currently, the Instructional Technology space is located in a classroom that has been retrofitted and has been wired as a technology classroom that provides a dynamic, multi-functioning space for both instruction and project design. The technology space houses twenty-eight desktop iMac desktop computers that are used for both direct instruction in the use of application programs as well as for web-based assessments used formatively in Reading and Mathematics. In addition to the direct instruction provided by the Instructional Technology teacher, classroom teachers also utilize this space as a place to conduct some elements of project-based learning connected to content. In these instances, classroom teachers co-teach lessons with the Instructional Technology teacher and explore research skills, collaboration, data analysis and refining of hypotheses as they learn from one another through technology. As space within the building is limited for large-group work, the Instructional Technology space serves as a place for more large-group learning, by scheduled appointment. Though this does meet the needs of some students, some of the time, a technology model that utilizes a more interwoven use of devices and learning resources would certainly allow more students to access technology for learning, more of the time during the course of the school day - structuring multiple spaces for technology use, rather than one designated technology classroom, would provide this opportunity for students to maximize their learning more flexibly.

Wireless hubs, located in each of four wings throughout the building, provide access for portable devices that are used in daily instruction. Students use iPad-1 devices stored on one of four mobile iPad carts; these iPads, inherited from the high school's 1:1 device replacement program, the iPad-1s are rotated between classrooms at each grade level, and teachers actively plan technology-driven lessons for their scheduled time with the iPad carts. Additionally, students benefit from the use of two mobile laptop carts as part of instruction; again, the mobile laptop carts are shared in a rotation schedule, and teachers plan accordingly for the inclusion of the devices in their instruction on their scheduled days with the devices.

Through a donation from the school parent organization, the school has access to twelve iPad-2 devices which are used by students in Grade 4 in the creation of digital presentations that are created, edited and produced by students - students quickly learn the elements of digital editing and are eager to expand their learning in this area!

All classrooms at Clyde F. Brown School are equipped with overhead-mounted LCD projectors and SMART Boards; teachers use district-assigned laptop computers to access SMART Notebook programs used instructionally as a complement to the SMARTBoard software. Each classroom also contains three or four aged iMac desktop computers; due to their vintage, these devices are almost exclusively used for word processing in Writing or in creating digital illustrations for Writing assignments as the devices are so old that connectivity is an issue.

As part of technology learning, students are instructed in creating presentations that use video to relate learning to a broader audience. The use of software to edit video using iPads is an essential part of this learning process, particularly for students in Grade 4 and Grade 5 at the middle school. The use of a "green wall" in video production of presentations is an integral part of the skill set necessary to produce quality presentations at the upper elementary level. Students in Grade 5 at Millis Middle School currently have access to the TV Production Studio at Millis Middle/High School; incorporating video presentation and editing space in Clyde F. Brown Elementary School ensures that these returning students will continue with equal programming access in their new school, while encouraging the use of this learning technology with other students in the Upper Elementary Learning Community.

While the existing school has an instructional technology space, the proposed space template does not include this classroom. It is anticipated that a new or renovated school would have adequate mobile devices to accommodate technology instruction in individual classrooms. It is anticipated that the proposed STEM classroom will offer the opportunity for video production and will be a technology rich environment as will the proposed central Media Center zones.

Design Response:

A STEM classroom has been located adjacent to the upper elementary wing to accommodate video editing as well as a stem curriculum for the older students. It is anticipated that the school will be a wireless environment and that device carts will be distributed throughout the school in classrooms and in other select locations.

MEDIA CENTER / LIBRARY

The Media Center at the Clyde F. Brown Elementary School is located centrally within the building and serves students in grades Kindergarten through Grade 4. The Media Center organization is split between the Library space and the Technology classroom space, which occupy two distinctly separate areas within the building.

The Media Center configuration was reorganized with the hire of an Instructional Technology Specialist. The role of the Instructional Technology teacher is to provide direct instruction to students in the use of technology in learning, and to support classroom teachers as they integrate technology into classroom instruction and learning. Students learn a variety of skills supported by both learning applications and web-based products; for example, students in Grade 3 complement a literacy unit on “Biographies” by conducting research from bookmarked websites as they synthesize their learning through skills learned in Powerpoint, while Grade 4 students conduct research and quantify their measurable outcomes through creation of databases using Excel that are then displayed in a variety of graphs – this learning nicely dovetails with skills and concepts from the Grade 4 Mathematics curriculum. Learning how to apply these technology skills through classroom learning assists students in a personalized context as they become more independent learners who are better able to capture and communicate what they have learned. Students are provided with a scheduled Instructional Technology class once per week; additionally, classroom teachers plan for an additional block in the technology classroom in which they either use the Tech classroom for their own whole-class instructional projects, or choose to co-teach a specific topic with the Instructional Technology teacher. Additionally, classroom teachers in Kindergarten, Grades 1 and 2 request a block in the Technology classroom with which to integrate technology within the scope of their own curriculum through the use of web-based assessments like Lexia Learning or Scootpad; these programs support ongoing classroom learning.

The Library component of the Media Center is staffed by a full-time paraprofessional who manages the general circulation and, for students in Kindergarten through Grade 2, promotes love of reading through read-aloud programming designed to spark student interest in specific content themes or authors. For example, prior to a school visit from the children’s author Jeff Kinney, the library paraprofessional read excerpts from the novel “Diary of a Wimpy Kid”, thereby providing all of our younger students with a common frame of reference on the work of this author. Library classes are scheduled once per week for students in Kindergarten through Grade 2; students in Grades 3 and 4 are afforded a 15-minute visit to the Library once per week to return books and select new reading material. Teachers in Grades 3 and 4 regularly visit the Millis Public Library for student self-selected reading materials, as the Public Library is located within walking distance from the school building.

Because of building space constraints, the Library space, in addition to promoting love of literacy, also serves as a space for Reading and Math tutors to meet with small groups of students throughout the day. Additionally, the Library serves as a space for the entire faculty to gather for meetings – a section of the Library has been partitioned off and serves as an ad hoc “conference room” for meetings during the school day, and the space is used after school for faculty and staff meetings. The Library is used after school for tutoring and for some community meetings, on a sign-out basis.

We anticipate that the best use of the Library/Media space would occur as distributed throughout the school building, with trade books, reference books, and other resources organized within each Learning Community; this “bring the resources to the students” philosophy encourages greater flexibility in learning and more immediacy with access to resources needed in a more project-based learning context. In the course of a typical day, students would access these spaces within their Learning Communities as the need for information gathering occurs within the learning

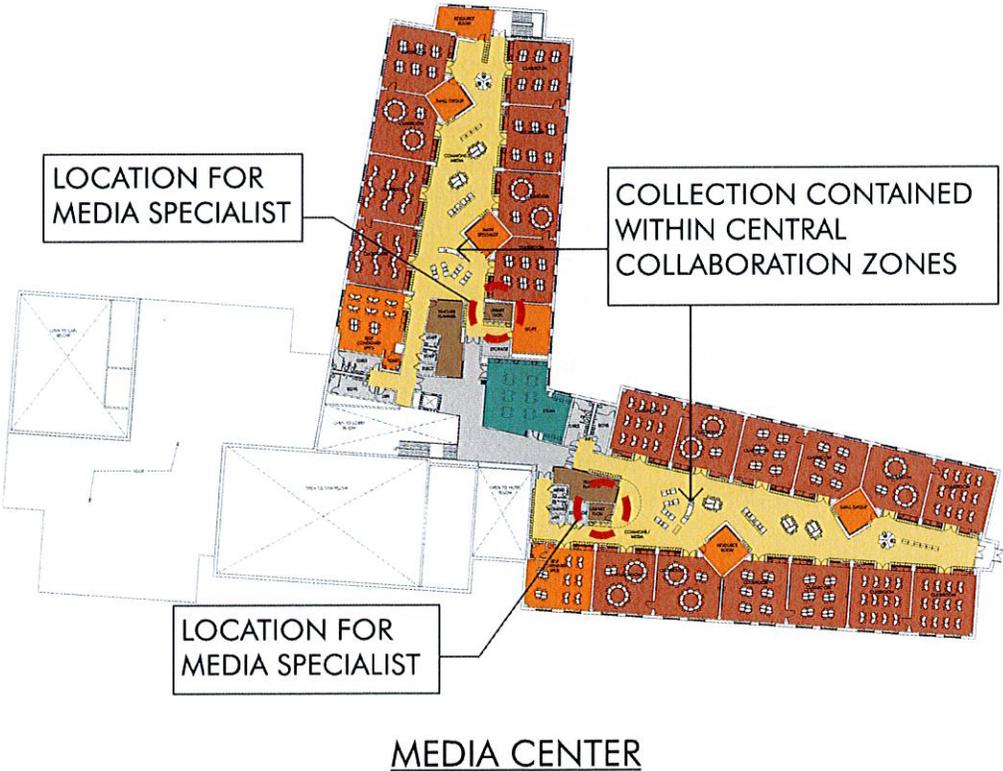
process. It would not be uncommon for a student to access this space several times during the day – for self-selection of reading materials, for small-group research, for individualized information gathering, and for personalized learning task work. This “distributed Media Center” model would greatly increase student access to resource materials while providing the impetus for a more personalized and independent approach to information gathering; rather than a once-per-week opportunity, students would now have more flexible information access that meets their in-the-moment learning needs.

Technology access, too, would operate in a distributed model: rather than have an identified “technology classroom”, mobile devices like laptops and tablets would be distributed throughout the building and reside in mobile charging carts located within each learning community, thereby allowing students to access information more spontaneously as dictated by their learning needs. Again, making technology more mobile and distributed creates a school community where access to information is guaranteed to all students, thereby fostering a culture of problem solving as students work both collaboratively and independently in finding answers to the questions that drive their learning.

Potential Changes to Programming: In keeping with the distribution of technology throughout each of the learning communities, the role of Instructional Technology teacher would shift to become one of Technology Integration Specialist, whose function would be to consult with teachers around the use of distributed technology in their instruction, as well as to work with students in accessing the resources located within these resource spaces. This shift in role from “teacher” to “consultant” provides direct support to the community vision of Clyde F. Brown Elementary School’s evolution to a school where personalized learning is central to both curriculum and instructional methodologies, and where students are empowered to take greater charge of their own learning.

Design Response:

The central common area in the primary and upper elementary learning communities will be multi-purpose. An area will be identified for performance and projection and a location will be designated for the media specialist to house materials, manage the collections and provide assistance to students. The two commons will each have multiple zones to support different activities including group projects, small group instruction, individual learning and hands on project based activities.



J. ART PROGRAMS

Clyde F. Brown Elementary School is proud of its visual arts program that assists students in both the development of inquiry skills, creativity, and conceptual extensions to the core curriculum, as well as in the development of executive functioning skills necessary for project planning and design execution. All students in Kindergarten through Grade 4 are offered an Art class each week; classes are designed to be project based with a finished product realized at the end of an instructional unit.

The Art program utilizes mixed media in programming: drawing, papier mache, watercolor and tempera painting, 3-D design, printmaking, jewelry making and ceramics are all presented with a collaborative eye towards expanding content learning. For example, students studying the biomes of ocean creatures in Life Science have learning extended in Art class as they study texture by creating clay-based fish. The “fish project” provides students with the opportunity to demonstrate wax resist methodology with crayons as they score and slip clay to show scales, patterns and colored texture - these Art-based experiences add an important dimension to holistic learning! Students work with clay and learn about glazing techniques as their projects are fired in the kiln. Student creativity is celebrated in displays outside the Art room and in display cases located within the school building.

Art projects are created in the Art room, a retrofitted classroom space located within the Grade 1 and 2 academic wing; the space is used by all students in Kindergarten through Grade 4, who must travel to this academic wing to access the Art room. The Art room itself contains tables for project-based work, multiple storage cabinets and two sinks. Technology is integrated through the use of a document camera that projects modeling of Art techniques for students onto a large flat screen monitor. A SMART Board allows the Art teacher to access the Internet for in-the-moment research, videos and interactive digital skills that enhance classroom learning. Currently, the Art room houses a kiln that was retrofitted into the classroom space. Because of the potential danger and safety concerns when firing and cooling, the kiln can only be operated before or after school, or at times when no students are present in the classroom. This limits the extent of learning that can take place around the media of clay and ceramics within the Art curriculum. A large storage space, for materials and student projects-under-construction, is essential for adequate storage in the Art room.

Ideally, the Art room contains a whole-group learning area for instruction that includes a SMART Board and document camera for demonstration and modeling, and a large-screen display; a project-based area that contains storage for ongoing projects; and a ceramics area, with multiple sinks, for use of mixed media materials. The kiln is housed in a separate accessible area to the instructional space, and is able to be secured to avoid potential danger when firing and cooling. There are portable display screens that can be used for displaying student work throughout the building, as well as movable display cases that the teacher can use for exhibitions of student projects. A large materials storage area provides adequate storage for materials. The scope of curriculum offered in Art programming requires the use of a kiln to fire ceramics created in both Art content lessons and project based learning blocks. A kiln is currently in use for Art instruction at Clyde F. Brown Elementary School; ceramics, as an artistic medium, is designed to make learning connections to content-based learning. For younger students, clay is used as a medium for learning about the earth (clay as a natural resource), and for the development of fine motor skill practice as well as in demonstrating techniques from ancient times (rolling coils of clay to produce both coil and pinch pots). For older students, these skills are carefully connected to content as students build upon these themes in Mathematics (patterning, tessellations), in Social Studies (creating “authentic” Native American art), in Science (elements of the earth that create clay, states of changing matter – firing ceramics in a kiln), and in collaborative design process (balance and design as students create a “bobblehead”). While there are commercially prepared products that could be substituted for clay, these products would alter the curriculum in ways that would not allow for the direct connections of clay as a naturally occurring medium.

We anticipate that, with a change in building design and the addition of a kiln room, programming in Art will not only continue at the same level of service but will expand opportunities for scheduled PBL blocks and for after school enrichment programming.

Design Response:

The proposed art classroom is on the first floor near the music room. This allows for the possibility of art and music working together on arts based projects. This art room is also accessible to the public for community use if desired. The classroom has direct access to the exterior allowing for the potential to make art outside when the weather will allow it expanding the scale of the room and the type of media that can be used

K. MUSIC AND PERFORMING ARTS PROGRAMS

Music classes occur at Clyde F. Brown Elementary School through Music teachers who share distributed instructional responsibility between all three schools in Millis. All students in Kindergarten through Grade 4 receive instruction in Music once per week. Students in Kindergarten and Grade 1 take part in Music/Movement classes, which combine elements of Music instruction with movement-based dance; this programming reinforces self-regulation skills and curriculum themes contained in the general curriculum. For example, students in Kindergarten, as part of a unit of study about the African savannah, listen to native African music as they take on the roles of lions, antelope and other animals, acting out through movement how the animals move and interact in their native environment. Due to the part-time, half-day nature of PreK programming, PreK students are afforded physical education exposure through visiting instructors who provide classes in yoga and in Music/Movement on a periodic, rotating basis; this model supports early learning skill growth in self regulation through a physical movement context.

Students in Grades 2, 3, and 4 have more formal choral music instruction as well as an introduction to reading music, where all students in Grade 3 learn to play the recorder. Beginning in Grade 4, students can elect to take part in the introductory instrumental program, which meets before school for small group instruction. Students contract privately to rent musical instruments, and are taught in small groups. Performances occur twice each year - in winter and in spring - as a showcase for emerging student competency in instrumental instruction and have become cultural events for the school community.

The Music room is a large, flexible space that accommodate two classes simultaneously. Currently, Music space is shared with the Extended Day director's office, as well as other small office spaces; much of the space is used as storage for the Extended Day program, and houses additional Music materials. In cases where two classes meet simultaneously, one class meets either in the Cafeteria or on the stage. Ideally, a Music classroom has a flexible room design which allow for movement of walls to create one large classroom area for choral music and instrumental instruction

Music and Movement – allow for free movement and self-expression for students in Kindergarten and Grade 1. Currently, the Music and Movement program meets in the Music room, where movement is constrained by materials placed there in storage due to overcrowding. An ideal Music and Movement space needs to be carpeted and have adequate storage space for instruments, props, music equipment, etc.

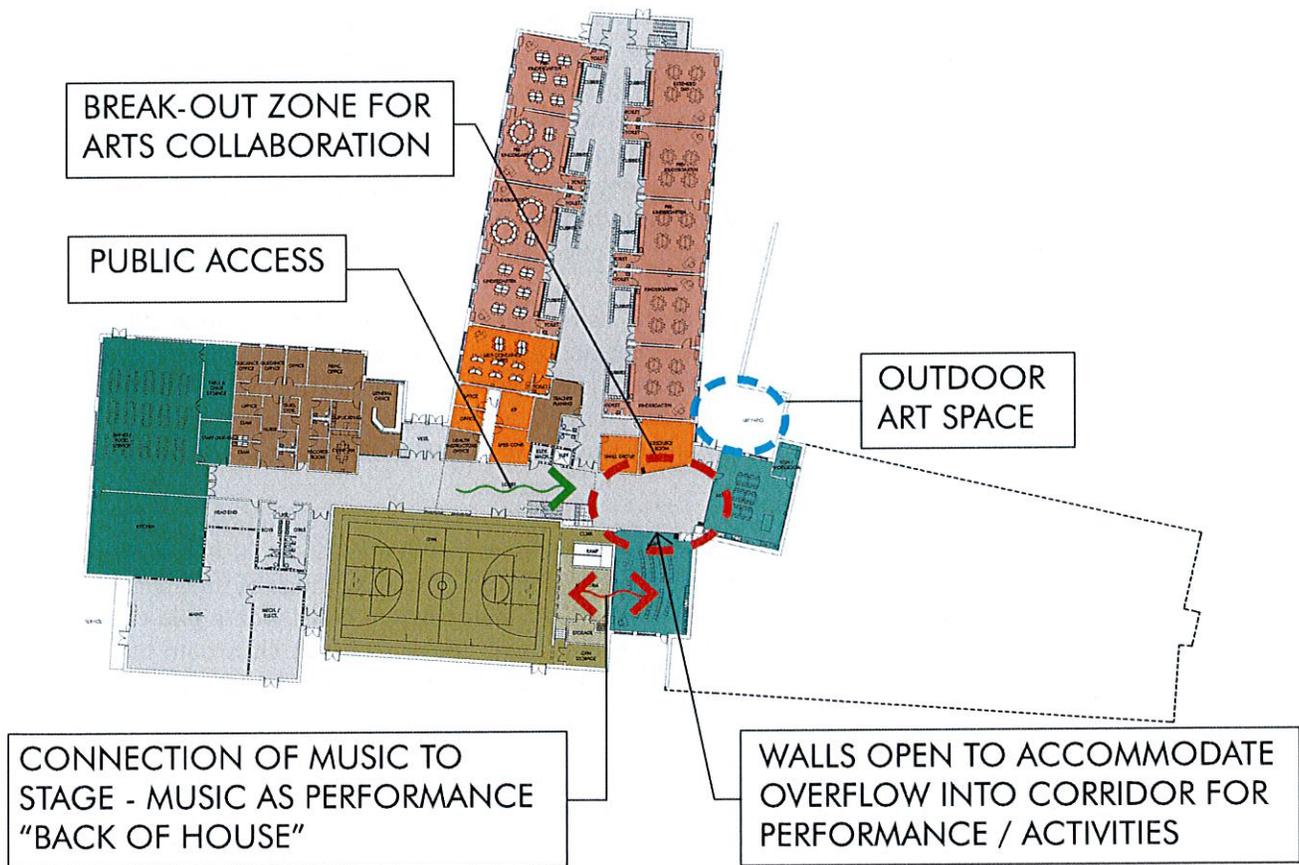
Instrumental Music – occurs in a small-group format in the Music room before the start of the school day to accommodate space and scheduling needs. As students prepare for performances, practices are held on the stage area of the Cafeteria; there is sometimes competition for this space as Choral music programming occurs simultaneously.

Choral Music – teaches students the elements of “voice as instrument” as students practice songs that have a direct connection to grade-level curriculum contexts. All students in Grades 2, 3 and 4 take part in choral music as part of Music education; performances occur for Grade 4 (winter) and Grade 3 (spring) each year.

The proposed new building design, with the addition of a flexible Music classroom that supports programming in both vocal and instrumental music instruction as well as space in which to conduct Music/Movement programming, will provide continuity in ongoing programming and will expand opportunities for scheduled PBL blocks and for after school enrichment programming. Moreover, locating these Unified Arts programs adjacent to one another and centrally within the building will serve the school community as a Unified Arts “hub”, and will encourage greater collaboration and integration of academic curriculum.

Design Response:

The music room is located adjacent to the art classroom. The space accommodates storage of instruments and props and is directly adjacent to the stage in the gymnasium allowing for relocation of materials for performances. The music room can also be used as a “back stage” area for major performances and events that happen on the gym stage.



MUSIC & ART

L. PHYSICAL EDUCATION PROGRAMS

At Clyde F. Brown Elementary School, the ultimate goal of Physical Education programming is to teach students about the important health benefits of enjoying an active and healthy lifestyle. Using the Massachusetts Comprehensive Health and Curriculum Frameworks and the National Standards in Physical Education, Physical Education programming encompasses a skills-based learning approach through a spiraling curriculum that guides students in introductory skill exposure, having students practice these skills alone in Kindergarten and Grade 1, and having students practice skills with a partner in Grade 2 before then applying the learned skills in small group, game capacity in Grades 3 and 4. Due to the part-time, half-day nature of PreK programming, PreK students are afforded physical education exposure through visiting instructors who provide classes in yoga and in Music/Movement on a periodic, rotating basis; this model supports early learning skill growth in self regulation through a physical movement context.

Two levels of skills instruction are addressed within the K-4 Physical Education curriculum. *Locomotor skills*, like skipping, galloping, hopping and jumping, assist students in moving purposefully from place to place with balance and agility, while *manipulative skills*, like throwing, catching, striking with a racquet, and dribbling, enable students to move objects from place to place. Both skill sets work in conjunction to instructively provide students with the foundation for both organized sports and individually-based sports that assist in fulfilling the program goal of espousing physical activity as part of an active and healthy lifestyle.

Health and Wellness instructional themes focus around both fitness and social/emotional support - these themes are intertwined within the curriculum themes at each grade level, from Kindergarten through Grade 4. The Physical Education staff uses *Hellison's Model of Self-Responsibility* to complement the social/emotional program learning in teaching students how to evaluate their own participation, helpful and empathy towards others.

Grade 5 Physical Education instruction is currently a hybrid of the elementary program and the middle school curriculum that emphasizes a more game-based approach to fitness rather than a skills-based focus. One Physical Education teacher has instructional responsibility for teaching Kindergarten and Grade 2 students at Clyde F. Brown Elementary as well as classes in Grade 5 at the Millis Middle School; this educator, within this role, has recognized that Grade 5 students are developmentally more similar to elementary students - she has made adjustments to the Grade 5 curriculum to reflect the need for Grade 5 students to have more opportunities for direct instruction, feedback, and small group practice before they attempt the skills necessary for the larger team-based middle school instructional model. At such time that Grade 5 rejoins the Clyde F. Brown Elementary School, the Grade 5 Physical Education curriculum would be revised to be more similarly aligned with the current Kindergarten through Grade 4 model.

Currently, 2 Phys Ed classes are taught in the Gym each morning to accommodate smaller-sized students in Grades K, 1 and 2; the movable wall is unfolded, thereby creating 2 Gym instructional spaces for younger learners in Grades K, 1 and 2 who need less physical space for Phys Ed instruction. Older students in Grades 3 and 4 are accommodated in the full Gym in the afternoon; the full Gym is necessary due to the larger physical size of these students, where a split-Gym option is not feasible. Offices for the Phys Ed staff are located in the equipment storage area, which is next to the boiler room. There are no provisions for a designated office space for these staff members, or for a handicap accessible restroom for students. As is the case in many elementary gym spaces, the Gym does not have spectator space. Currently, the Gym is heavily used by the community after hours as part of an inclusive sports model - the Clyde F. Brown Elementary gym is used as a practice space by the middle school.

Planning for the needs of the gym should include the following components:

- A handicapped-accessible restroom should be part of the Gym space to allow all students equal access to programming without differentiation based upon physical needs
- A platform for performances - locating a platform, with a curtain, in the Gym space allows for greater expansion of curriculum as dance, theatrical performance, and large group presentations could now be presented for the entire school community.
- A folding wall that divides the Gym into two distinct instructional spaces - while the use of "sports curtains" provides a more current use outlook, as many schools have adopted the sport curtain to define areas within the Gym, the instructional integrity of Physical Education programming demands that a folding wall is a better consideration. Much of the individual skill work at the elementary level demands the use of "wall space" for practice; some curriculum themes, like the dance unit, involve different music selections being played simultaneously for 2 different classes. Incorporating a folding wall, rather than a "sports curtain", allows for greater flexibility in programming, more developmental instructional options, and greater variety in possible space use by the community after hours.

Design Response:

The proposed gym can be divided to allow for multiple activities. A stage is provided within the gym to allow for performances for a larger audience than would be possible in the cafeteria. This platform can also be used for watching athletic activities on the gym floor. Directly adjacent to the gym is a large bathroom that will be shared with the cafeteria and can be used both by students and by visitors at public events. The gym is located within the public zone of the school and can be easily accessed for event and for community use on weekends and evenings.

M. SPECIAL EDUCATION PROGRAMS

At Clyde F. Brown Elementary School, Special Education programming is provided under the guidance of the Student Support Services Office, which provides student support for students who have Individualized Education Plans (IEPs). Inclusive of Special Education services are: Speech and Language services, Occupational Therapy, Physical Therapy, Adaptive Physical Education, Counseling, Social Skills instruction, and academic support, as well as Applied Behavioral Analysis (ABA) services. Special Education services are provided in an inclusion model, where education specialists provide services within the general classroom setting wherever possible, in keeping with the least restrictive environment philosophy of service delivery. In cases where student needs demand that services be provided in a setting other than the general classroom, student may receive these services in an academic resource room setting or, as dictated by students' IEPs, within a substantially separate classroom setting. However, students who receive some services in a parallel alternate setting are included in the general classroom setting for all academic elements that are not directly prescribed by their IEPs. The allocation of space for resource rooms and separate classrooms for students with disabilities, in determining programmatic needs, are given equal consideration and priority as general education programs for student and program access within the building. Every effort is made to ensure that the facilities and classrooms serving only students with disabilities are at least as equal in physical respects to the average standards of general educational facilities and classrooms, despite the challenges faced by space constraints within the Clyde F. Brown Elementary School.

Currently, spaces for instruction, therapeutic services and identified classrooms for students with disabilities are housed adjacent to general education classrooms to the greatest extent possible, so that students with disabilities receive services within the same portions of the building with their same-age peers. However, space constraints and the changing needs of students can impact this space assignment. For example, the PreK and Kindergarten section of the building houses a substantially separate classroom as well as a resource room classroom for primary and upper elementary students; locating these services together keeps student programming aligned with their age-appropriate peers even though the services are not located within the general classroom wings for primary and upper elementary students.

Speech and Language services are located together centrally within the Office of Student Support Services area, as many of these services take place within an inclusion classroom setting, while individualized services are accommodated within these small office spaces. Occupational Therapy and Physical Therapy services are located in a small classroom space within the primary section of the building; this ensures that some primary students who need these services are able to receive therapy as close to their general education classrooms as possible. Due to the current space limitations at Clyde Brown, students on IEPs with specialized instruction in grades 1-4 must leave the wings in which their general classes are located in order to receive these services. Additionally, space limitations within the building have made it impossible to establish programming for students with disabilities who require comprehensive programming related to their disability in a substantially separate environment. At this time young students are placed in collaborative settings where specific educational needs rising from disabilities such as Autism Spectrum Disorder (ASD) and Social Emotional Disabilities (SED) can be provided.

Currently, issues identified with Special Education Programming include:

Local review of Out of District placement and expenditures finds that, due to the current space limitations, the District cannot provide substantially separate programming for students with significant and specialized needs related to ASD and SED- this interferes with LRE provision for students and increased costs for the district. Currently ASD programming occurs within a fully inclusive model at Clyde F. Brown Elementary School. Elements of ASD programming that require specialized instruction take place in a substantially separate classroom setting. SED programming occurs within a fully inclusive model at Clyde F. Brown Elementary School. Elements of SED programming that require specialized instruction take place within the offices of the School Adjustment Counselor, the School Psychologist, or the district Behavior Specialist, who work together to tailor individualized services according to stated goals within a student's IEP.

- In addition, increasingly students with SED returning from hospitalizations or experiencing other challenges are demonstrating behaviors incompatible with being successful in a general classroom. These students would benefit from a separate setting for the provision of evaluation and support to continue to be in their neighborhood school in their own community. In the proposed new school small group spaces within each learning community wing will serve as spaces for the discrete programming needs of these students.

- As previously mentioned, the need for several settings for small group and individualized instruction, therapies and support, located in proximity to general classrooms will allow for greater inclusion of students with disabilities. These spaces should be flexible and include groups rising from the tiered intervention system- further removing the possibility of stigmatization of students on IEPs.

- There are NO Collaborative spaces or programs in the current school
 - o Currently there are the following specialized programs:
 - 1 Substantially separate Preschool full day class
 - 5 Half-day integrated Preschool classes
 - 1 Substantially separate special education class

These programs will continue without interruption within the organization of school programming. Additionally, there is no plan to reduce or eliminate any special education programming on the conditions of space constraints

- Previous issues identified with prior Special Education Coordinated Program Review (2010) include:

SE 17, Initiation of services at age three and Early Intervention transition procedures - Department of Elementary and Secondary Education Findings: Interviews and documentation demonstrated that the district is not attending the transition planning conferences at Early Intervention programs to ensure effective transition of young children with disabilities from the local Early Intervention Program.

SE 24, Notice to parent regarding proposal or refusal to initiate or change the identification, evaluation, or educational placement of the child or the provision of FAPE - Department of Elementary and Secondary Education Findings: A review of student records and interviews indicated that the written notices to parents are inconsistently completed. Specifically when the district is seeking consent to evaluate and issues a Notice of Proposed School District Action (N1 form) attached to an Evaluation Consent Form (N1A) the written notice does not meet all of the content requirements set forth in federal regulation.

o During the 2013 CPR Mid-cycle review the NO issues or problems were raised; as indicated the problems/issues found during the 2010 CPR were resolved by the time the Mid-Cycle took place in 2013

o The District is currently (2016) participating in the Self-Assessment portion of CPR, with the team visit and review to be conducted in the 2016-2017 school year.

Potential Changes to Address: The proposed new plan provides for small group and individualized instructional spaces for students with and without disabilities in each learning community. The new plan provides for classroom locations for these needed programs whether they be district or collaborative administered.

The plan for the new school is to house instructional, therapeutic and classroom spaces for students with disabilities in the early childhood or elementary portions of the building with their same-age peers.

Speech and Language

Speech and Language services are provided by two licensed Speech Pathologists in the general classroom setting, or in a small classroom setting located in the Student Support Services suite. Each Speech Pathologist maintains a space for small group instruction that doubles as an office space. Speech services, when delivered in a small group, parallel setting, are comprised within a 1:2 or 1:3 ratio; students whose learning needs demand a small group setting benefit from the direct instruction provided by the speech pathologists.

Occupational Therapy/Physical Therapy

Occupational Therapy and Physical Therapy services that are not delivered in the general classroom setting, by IEP designation, are provided in a small classroom space located within the first and second grade classroom wing due to the larger numbers of young students who require these services; students in PreK, Kindergarten, Grade 3 and Grade 4 must walk through the building to the OT/PT classroom for their academic support services. Each year, placement of OT/PT service space is re-evaluated, based upon the existing needs of students who require these services, as ongoing space constraints require that OT/PT services space be more fluid to accommodate these student needs in locating this space as close as possible to nearby classroom spaces. Currently, Occupational Therapy services are conducted by a licensed Occupational Therapist and a licensed Occupational Therapy Assistant. Physical Therapy services are conducted by a licensed Physical Therapist. Ideally, OT/PT services should be conducted as close as possible student general classroom settings to avoid unnecessary disruption caused by lengthy travel time to service delivery areas; this is not always possible given the current space constraints faced by the Clyde F. Brown Elementary School.

Adaptive Physical Education

The purpose of Adaptive Physical Education (APE) at the elementary level is to provide students with support in strengthening the developmental acquisition of motor, physical and social skills in a small group, safe, and highly

supported setting. Adaptations are made programmatically to ensure that students have maximal opportunity to reach the goals set within their IEPs. Students receive APE services in addition to their general Physical Education classes. APE services are most often delivered in a small group setting, and paraprofessionals are part of the instruction to assist students with motor tasks that may require direct support.

Adaptive Physical Education is provided by one of the licensed Physical Education teachers, who provides additional Physical Education instruction in a small group setting for students whose IEPs indicate that they need additional support in acquiring developmental physical skills. Adaptive PE classes are provided in accordance and frequency with individual student IEPs. Adaptive PE classes must be scheduled into the existing Physical Education schedule; this is sometimes difficult, as the entire Gym is utilized for much of the day, and Adaptive PE classes must be scheduled at times when the entire Gym is available for the scope of equipment and instruction necessary for individualizing this instruction.

Academic Support

Clyde F. Brown Elementary School believes in fully including all students in general classroom settings for academic instruction whenever possible, and in providing students with direct special education services within this general classroom setting to maximize the education of all students. When student academic needs dictate that students require additional academic skill support in a separate small group setting in Reading and Mathematics, this instruction takes place within the Resource Room. Two licensed Special Educators with credential in Moderate Special Needs work in a 1:1, 1:2, or 1:3 service delivery model to meet the small group academic instruction needs of students in Reading and Mathematics as outlined in their IEPs. The Resource Room is a small group classroom with two instruction areas that also serves as an office space for the two teachers who occupy this classroom. Ideally, small group instructional support should take place as close to student classrooms as possible; however, this is not able to be actualized due to the current building space constraints.

Behavior Support and Applied Behavioral Analysis (ABA) Services

Millis Public Schools employs a full-time licensed board-certified ABA director who also serves as a district-wide consultant for the social/emotional/behavioral needs of students who have IEPs written for these needs. At the Clyde F. Brown Elementary School, the BCBA shares office space with the School Psychologist; in addition to their two desks, this space contains a small group instructional area that is utilized by the BCBA for social skills instruction, and by the School Psychologist for testing and delivery of counseling services. As both employees provide services district wide, student service delivery is dependent upon varying schedules of the staff as it is impossible to conduct social skills groups and educational testing simultaneously within the same space. Additionally, space needed for these programs relies upon smaller, quieter spaces with which to work with students in a 2:1 or 1:1 setting, as dictated by their needs; space constraints at Clyde F. Brown Elementary School are such that these required services take place in cubicles located in a variety of places around the school building, where space allows.

Counseling

Counseling services are provided by a licensed School Adjustment Counselor, who maintains additional credentials as a Licensed Independent Clinical Social Worker (LICSW). Counseling services are provided for students whose IEPs goals center around emotional adjustment concerns. Individual and small group counseling takes place throughout the school day for those students who require this additional support within their IEPs. Additionally, the School Adjustment Counselor conducts social skills "lunch bunch groups" that are designed to offer social skills and counselling support to students that complements their stated IEP goals. Due to building space constraints, counseling services are currently provided in a former storage closet that contains no windows and less than adequate ventilation; the space doubles as a small group space and office area. This arrangement is difficult, as the School Adjustment Counselor must sometimes make or receive confidential phone calls in space that offers no privacy. Ideally, counselling services would take place in a space that is well lit, has a window, and has a separate small group space in addition to a small office area where private telephone calls could be made or received to ensure that students receive support in a bright, uplifting environment.

As noted, providing three self-contained classrooms addresses the needs of each of the learning communities anticipated in the proposed facility while increasing small group rooms accommodates multiple learning situations for small groups and individuals. Special Education will continue to be delivered in a manner consistent with the current program but with improved facilities and better accommodation of all students.

Health

The Health Office at Clyde F. Brown Elementary School is overseen by a licensed RN School Nurse. The scope of the Health Office encompasses, but is not limited to administering medications, evaluating student health needs as they visit the Health Office, triaging immediate student illnesses and health concerns, communicating with families and other health care providers around specific student health needs, maintenance of student health records, screening all students in Kindergarten and Grade 4 for height, weight and vision, collaborating with the counselling staff around student emotional needs, overseeing the completion of injury incident reports, etc. Additionally, the school nurse collaborates with other district nursing staff to head the Millis Health and Wellness Committee, whose work reaches students through writing grants for ancillary before and after school movement programming and, most recently, a whole-school breakfast program for all students at the Clyde F. Brown Elementary School. The role of the School Nurse is a vibrant, far-reaching position that impacts all areas of health and wellness for the students of Clyde F. Brown Elementary School.

Currently, the Health Suite consists of one large room where the school nurse treats students, make and takes telephone calls, evaluates student health issues, and conducts record keeping. Two couches, placed foot-to-foot, provide space for up to two students to rest if they are not well; several chairs placed against the wall near the nurse's desk serve as the treatment waiting area. Additionally, there is a smaller room in the back that serves as a storage area and as an area for contagious students to be isolated in as they wait to be taken home; this space also is used by nursing mothers on staff as a place to privately take care of their nursing needs. One lavatory serves as a changing area for young students who are toilet training, for students who are ill, and for students whose health issues require a supervised area for toileting. Personal medications/ EpiPens, etc., are kept in a locked cabinet on the wall above the student waiting chairs. Space constraints within the Clyde F. Brown Elementary School impact the scope of services that are provided for our students.

Design Response:

Each of three learning communities has a self-contained classroom along with two small group resource rooms. The OT/PT classroom is located in the primary elementary wing as this student population (grades 1 & 2) will use this resource most intensively. Reading and math specialists are distributed through the learning communities. Counseling offices are located on the first floor adjacent to administration so that it is central to all three classroom wings as well as close to the entrance for visitors. Special Education offices are located in a central location that is between administration and the learning communities also accessible to visitors.

N. VOCATIONAL AND TECHNOLOGY PROGRAMS

STEAM learning at Clyde F. Brown Elementary School occurs in each grade level within the context of integrated curriculum themes. Currently, classroom teachers, using the Massachusetts Common Core Curriculum guides, develop thematic instructional units that create a learning framework integrating cross-curricular content themes that incorporate Science, Technology, Engineering, the Arts, and Mathematics.

Through the Tufts University “STEM Through Literacy Program”, a partnership is established in Grades 2, 3 and 4 that provides teachers with training in the integration of inquiry-based problem analysis thinking within the structure of children’s literature. For example, students in Grade 3 use “The Mouse and the Motorcycle”, by Beverly Cleary, to use engineering, technology, critical thinking, and creativity in designing a collaboratively driven solution as students devise ways to assist the mouse in rescuing himself from a trap – students use an inquiry-based problem solving approach to brainstorm possible solutions, construct working models that test their hypotheses, and the revision of design strategies to arrive at more data-based solutions. Teachers use these learned strategies to promote greater fluidity and creativity in thinking and problem solving with students as their students create and recreate solutions to potential problems that, in many cases, have real-world application of learning.

STEM education also occurs through design construction, analysis and revision as students work collaboratively to create and test their thinking. For example, students in Grade 2 take part in a “Bridge Design Challenge” – after learning about some of the engineering concepts behind the construction of bridges, student groups use a variety of materials to create a bridge that is strong enough to withhold the weight of a Tonka truck passing over it. Another example of the “design challenge” occurs in Grade 3 when, following a literacy-based lesson on birds and why they build nests, student groups gather materials from outside and work to create their own group-designed “nest” that is evaluated for structural integrity in branch placement and wind effect (“nests” are created and then tested on the juncture of a branch that must withstand “wind” generated from a fan), as well as strength in holding a hard plastic “egg”; emphasis is placed more on success of the redesign process than on being the “winner”, as students gain valuable skill in design re-evaluation.

Technology is utilized in STEM learning as students in Grade 2 conduct simultaneous experiments with seed germination and plant growth with a school in Malaga, Spain – students communicate via Skype to share information (Millis in Spanish, Spain in English) as they evaluate possible differences in experiment outcomes and practice language skills at the same time. Students in Grade 4 use technology as part of “Genius Hour” – a weekly hour-long block that

encourages students to identify a “passion project” that is deeply researched, analyzed, and communicated out to a larger audience, with the presenter serving as a topic “expert”. Technology, for these purposes, takes the form of using devices to conduct personal research, gathering and quantifying information, organizing findings using a variety of apps, and ultimately in the creation of a presentation; many students work to use iMovie in capturing the presentation and then use software to video-edit their presentations for a polished end-result.

The Arts are interwoven within STEM learning as teachers collaborate with the Art teacher in integrating visual arts within a more Science and Engineering-driven context. As part of a geometry unit in shape patterns, students in Grade 1 learn about where patterns occur naturally in nature, and then work to replicate these patterns visually into collaboratively designed lessons which are co-taught between the classroom teacher and the Art teacher. Kindergarten students, as part of their Music/Movement class, learn about how muscle groups work together to move the bodies of animals on the African savannah as they observe video clips of animals stalking prey, and then use their own bodies as learning tools as they replicate the movement of these animals while listening to African tribal music – this Arts-based approach to Science learning greatly enhances the students’ emerging sense of self-regulation as they access multiple learning modes.

Currently, STEAM learning occurs in individual classrooms; students are often observed working in hallways or stairwells as space is at a premium. Programming is limited by space constraints, as students must disassemble and reassemble projects in make-shift spaces and travel to other parts of the building to find the space needed for project-based learning. Large, multi-use spaces are necessary for both project design and collaboration, as well as for integration of the Arts into STEM-based curriculum.

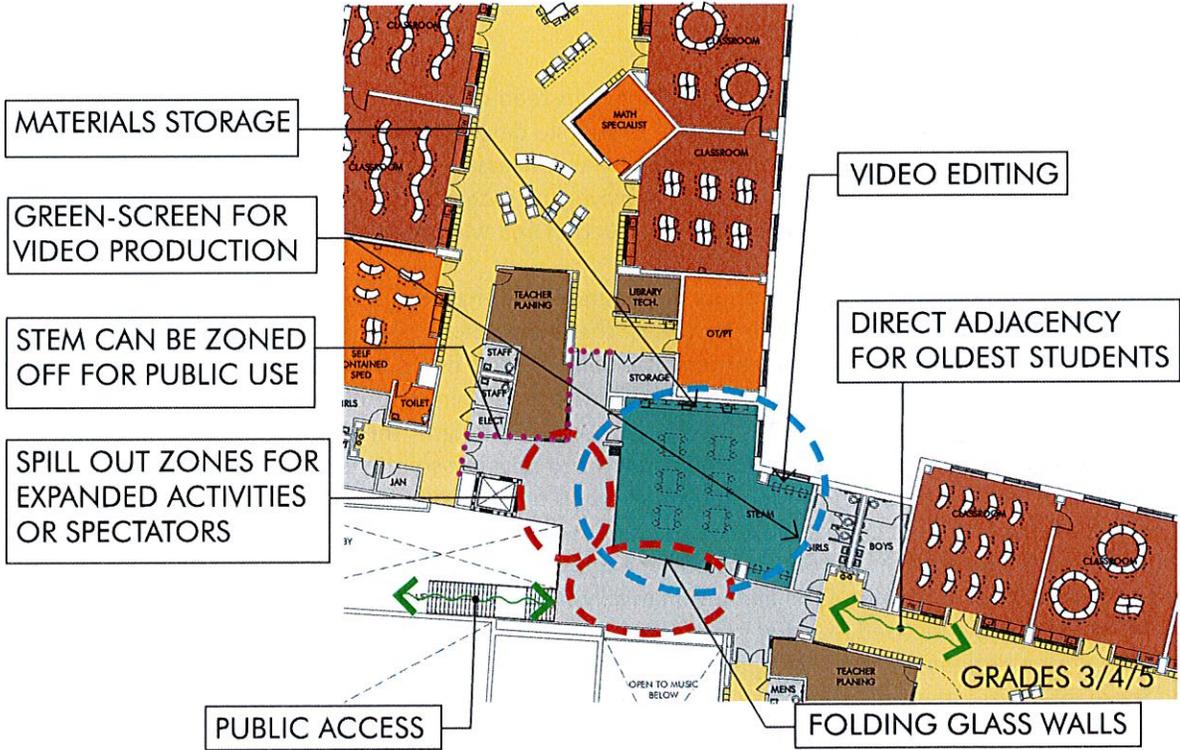
The proposed space template includes a STEM space instead of a dedicated technology lab. The goal is to integrate technology into the classroom through the use of mobile devices while at the same time increase the focus of the curriculum towards STEM education. This project based classroom would be located near the upper elementary learning community and would be used most intensively by the upper grades (3 – 5). This new approach represents a change in the schools approach to technology instruction and will better align with the curriculum goals.

The STEAM classroom will serve the school community as a maker space, as well as a space where Project Based Learning will occur, and will be available for use by the entire school community. Because students developmentally gain expertise and independence as learners gradually, guided practice with the teacher on a scheduled basis for teacher guided projects in the STEAM classroom would be predominantly utilized by older students in grades 3 through 5. In grades Kindergarten through 2, students are explicitly taught, through direct instruction and modeling, how to use the engineering design process to brainstorm and develop solutions to identified problems. Through guided practice in both whole group and supported small group process, our youngest students learn the skills necessary to become more independent critical thinkers. As students enter grades 3 through 5, they now have greater certainty in skill to be more independent learners who assume more responsibility for their own learning; they are now ready to expand their skill set in collaboration and problem solving as 21st Century learners as they collaboratively decide how to best manage project-based learning practices in a small group context. The STEAM classroom provides our older students with a designated space to explore problem solving and the design process in greater collaborative depth and more intermittently throughout the school day; materials can be left intact while under construction, or quickly moved to one of the storage spaces for easy access. Equipment necessary to promote learning in the STEAM would include multiple storage cabinets along the walls (for materials and storage of students projects in progress); 3 or 4 sinks (for water access during STEAM project time); a stove or cooktop, with small refrigerator (useful, under direct teacher supervision, for projects that might involve cooking, as well as for after school enrichment programming). Professional development for teachers in grades 3 through 5 has been previously provided through partnership with Tufts University – all teachers have benefitted from the “STEM through Literacy” training, and now regularly integrate this pedagogy into lesson design across contents. In order to expand opportunities for STEAM learning, teachers will use designated, district-provided professional development time within the school year to create lessons and engaging learning units that further promote the use of the STEAM classroom as new curriculum units are designed.

Scheduling for the STEAM classroom will take place, for each classroom at each grade level, on a rotating basis. Within a 6-day cycle, each classroom will have an assigned block (useful for more long-term planning); unfilled blocks will be available for use through a “sign-out” system (useful for longer instructional blocks that demand greater time constraints and allow students to continue working on projects in a more ongoing capacity).

Design Response:

The proposed location of the STEM classroom that is included within the new space template is between the primary elementary and the upper elementary wings. This location gives this space a central location for all of the 1st through 5th grade students. It is anticipated that the upper elementary students will make the most use of the space and it is easily accessible to their classrooms. The goal is to also allow this space to spill out into the corridor when a large project is underway or there are spectators for an event taking place in the space. The space will be designed as a multi-use maker space including video production, technology based instruction and hands on project based instruction. Because it is located outside of the classroom wings it will also be available for public use as it is readily accessible from the lobby when the classroom wings are closed off.



VOCATIONAL & TECHNOLOGY

O. TRANSPORTATION POLICIES

Students who attend Clyde F. Brown Elementary School can ride a bus to school or be driven to school. Millis Public Schools maintains free bus transportation for students who live more than a mile and a half distance from the school; families may opt to sign up for bus transportation, in a fee-for-service model, for student living within the mile-and-a-half distance. Millis Public Schools maintains a sliding scale payment for all fee-for-service models for families who qualify for the free or reduced federal lunch program. Students with special needs work with the Office of Student Support Services in identifying specific transportation based upon their individualized needs.

Six school busses transport the students of Clyde F. Brown Elementary School to and from school each day. To provide the safest possible disembarking and boarding of school busses, the front of the building is closed to through traffic and designated as bus lanes only; all busses load and unload student at a designated drop-off area in front of the school.

Families of Preschool students, as well as families who access the Millis Extended Day Program, drop off and pick up students in a small parking lot located adjacent to the school. Staff who work in the Extended Day Program, in the Millis Preschool Program and in the Kindergarten program park in designated spaces within this lot, and families access the remaining spaces. This parking lot has 66 parking spaces available for both families and staff. This parking lot extends behind the building to the loading dock access area connected to the kitchen; tractor trailer deliveries are scheduled around Preschool start and dismissal times, but due to the volume of parking in this small parking lot, trucks sometimes have difficulty making the turn into the loading dock area, creating safety issues with anyone accessing the parking lot at those times.

Families who choose to drive their students in Grades Kindergarten through Grade 4 to school access the Spring Street parking lot, located adjacent to the school building. This parking lot provides 74 parking spaces for both Clyde F. Brown Elementary staff as well as parking for families who are dropping off or picking up students. At the start of school and at dismissal time, the Spring Street parking lot is congested, and creates safety concerns for pedestrians walking to and from the building as they access the parking lot. This congestion is exacerbated in winter months when snow removal by the DPW further limits available parking spaces, further limiting the number of active parking spots available for use. The town of Millis has responded to safety concerns by assigning a crossing guard to assist with crossing students and families from the parking lot to the school building. The addition of more parking spaces would unequivocally relieve safety concerns and congestion in the parking lot as families and students seek access to the school during school hours.

Design Response:

The preferred alternative proposes to separate bus traffic from auto traffic by creating a bus zone on the rear of the building adjacent to the middle/high school. Due to staggered start and end times conflict with the activities of the other school are not anticipated. Bus students will be able to enter the school and be distributed to the gym or café as the wait to go to their classrooms in the morning. Parents who pick up and drop off will have a designated loop next to the main entrance. A main parking lot will act as a visitor lot and two separate lots can be designated as staff lots which should alleviate some of the current congestion experienced at the school. The early learning center is directly adjacent to the parking lot allowing for easy pick-up and drop-off. The proposed option shows an overall increase in parking spaces on site over the current condition.

P. FUNCTIONAL AND SPATIAL RELATIONSHIPS

The hub of the school building should be the Unified Arts Enrichment spaces, which are shared by all academic wings and remain central to the interactive, inquiry-based instructional approach espoused by the faculty. Locating the Gym, the Art room, the Music Room and the video editing area centrally allows for equal access to these spaces by students at all grade levels, and keeps these more interactive spaces central for larger groups of students to access in a project-based learning capacity.

Academic wings are to be organized by developmental similarity: an *Early Learning Community* wing would house PreK and Kindergarten students; a *Primary Learning Community* wing would contain students in Grades 1 and 2; and an *Upper Elementary Community* wing would encompass the oldest students in Grades 3, 4, and 5. Grouping students developmentally in this capacity allows for more flexibility in instructional planning and in collaboration between larger and more varied groups of students who are more developmentally connected. Storage spaces for students' coats and personal belongings must be part of classroom and building design; whether incorporating lockers into hallway design or creating a "coat hook and cubby" space in each classroom, it is essential to include a thoughtful and intentional plan for effectively storing students' personal effects.

Special Education spaces are to be located within each learning community to promote greatest accessibility to learning resources for students who require these services while honoring the least restrictive philosophy and environment for learning.

Large group interactive Science-based spaces are to be located nearby each learning community. A STEM classroom and makerspaces are to be located near or within the Upper Elementary Learning Community to promote broader inquiry based, project-based learning for the oldest students at Clyde F. Brown Elementary School.

Programmatic adjacencies that would further support collaboration, flexibility of space and increased opportunities for interactive learning would include:

Administrative Area

- **Administration** located centrally to the building entrance ensures adequate safety monitoring; the Administrative area includes the general office/waiting room, the records room, the principal's office, and the supervisory office
- **Medical suite** to be located near the Administrative office area and Guidance office - this adjacency offers the school nurse additional support at short notice when necessary
- **Guidance** office is to be connected to the Administration area
- **School Psychologist office** to be located next to Guidance, near the Administrative area - the school psychologist and school adjustment counselor frequently consult and the scope of their work requires close proximity

Commonly Shared Community Areas

- The **Gymnasium** is located centrally to promote equity of access for student programming as well as greater community involvement during after school hours through community-based sports events and performing arts events; the Gymnasium contains a staff office and toilet
- The **Cafeteria** is located within the shared community area to encourage greater student access from all academic wings of the building; additionally, the Cafeteria space is used after school hours by the community for meetings and gatherings; gang-style boys and girls rooms are located next to the Cafeteria
- The **Staff Lunch Room** is connected to the Cafeteria
- The **Conference Room** offers an equidistant neutral space for meetings that do not require access to the academic wings of the building. As this space will also serve as a space for the entire faculty to gather for meetings and professional development, the space should be large enough to accommodate 30 – 35 people. The Conference Room is available for use after school hours for smaller community-based events

- The **Art classroom** and **Music Room** are located centrally for equity of student access from all academic wings
- The **Media Center/Library** space is distributed throughout each of the learning communities, thereby allowing all students to more efficiently access resources essential to learning throughout the school day

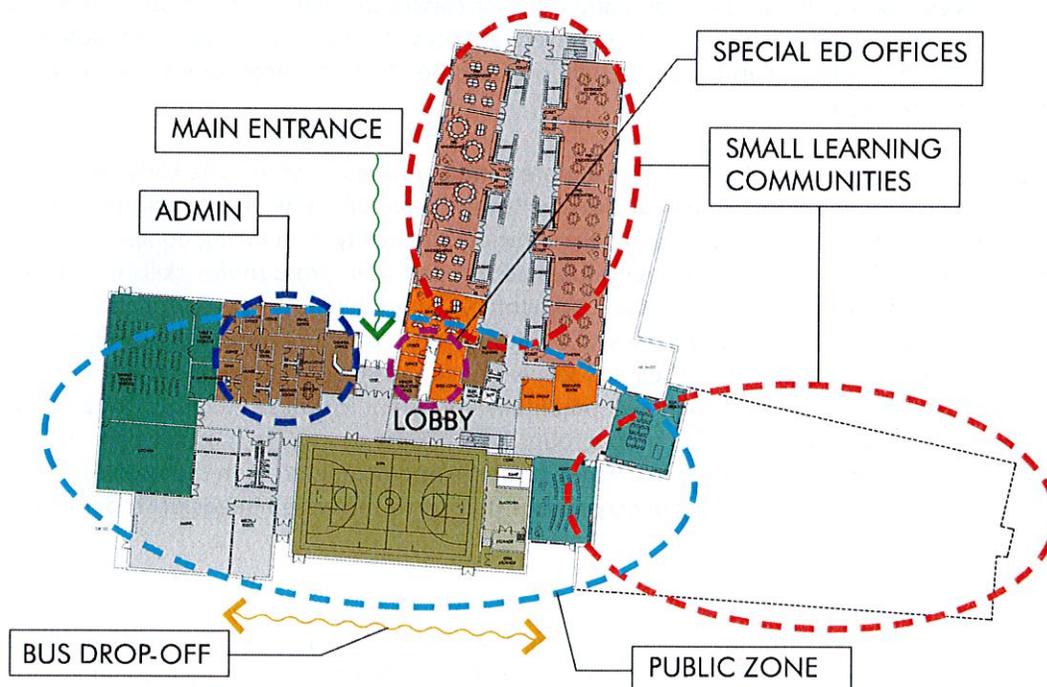
Academic Learning Communities

The academic wings are located around the the commonly shared community areas. There are three academic wings: the Early Learning Community (PreK and Kindergarten), the Primary Learning Community (Grades 1 and 2), and the Upper Elementary Learning Community (Grades 3, 4 and 5). **Special Education classrooms** and **small group learning spaces** are interspersed throughout each of the learning communities, rather than being located apart from instruction areas, in keeping with the spirit of inclusion within the Clyde F. Brown Elementary School.

- The Early Learning Community contains classrooms for PreK and Kindergarten students, as well as small group learning spaces designed for Special Education instruction
- The Primary Learning Community contains classrooms for students in Grades 1 and 2, as well as small group Special Education learning spaces, and a self-contained classroom designed to serve students with substantially separate programming
- The Upper Elementary Learning Community contains classrooms for students in Grades 3, 4 and 5, as well as small group Special Education learning spaces, and a classroom designed to serve students with Social/Emotional/Behavioral needs. Additionally, A STEAM classroom, which serves as a maker space, is located in the Upper Elementary Learning Community

Design Response:

The building is organized into four zones. There are three academic wings and a public zone on the first floor. Administration is directly adjacent to the front door and acts as a control point and is easily accessible to visitors. The gym and café as well as music and art can be accessed by the public while the classroom wings could be zoned off as needed. The second floor STEM classroom can also be accessed by visitors while the classroom wings are zoned off making it a space that could be used by the community.



FUNCTIONAL AND SPACIAL RELATIONSHIPS

Outdoor Learning Spaces

Outdoor learning spaces, like a community garden and outdoor classroom spaces, are to be located near the Early Learning and Primary Learning communities to allow for equal access to these rich spaces. An outdoor classroom, located as part of each Community Learning space, will provide the ability to incorporate the seasonal aspects of nature within the core curriculum.

Additionally, outdoor play spaces are to be located in a more centrally-based context. The Early Learning Community play space should contain equipment for climbing to develop large motor skills, as well as equipment for imaginary role playing. Small house-like spaces, equipment shaped like vehicles, and low-lying climbing equipment allow for young learners to develop their self-regulation skills, their imaginations, and their gross motor skills in a developmentally appropriate context. The Primary Learning and Upper Elementary Community play spaces are also to be located near these academic wings; equipment in these spaces is to be designed to promote balance, locomotion, and evolving collaboration skills. Swings, basketball half courts, and soccer and little league-style fields allow for older students to practice team-based collaboration which is so developmentally important for these students. Additionally, benches and outdoor tables in the play area allow for small groups of students to engage in quiet conversation with one another, or as areas for students to visit when they might need the opportunity to calm themselves. These elements are so important to developmentally appropriate play spaces that serve the varied needs of students in Grades PreK through 5.

Design Response:

The proposed site plan anticipates three outdoor classroom areas and three play areas. The early childhood play area is directly adjacent to their classroom wing. Older students will come down stairs for recess and go outside to use either age appropriate play structures or the fields directly next to the school. The grade 3-5 wing has direct access to the outside and can access an outdoor classroom at the upper level for science classes and outdoor learning and activities.

Q. SECURITY AND VISUAL ACCESS REQUIREMENTS

Clyde F. Brown Elementary School can best continue its legacy as a vibrant, welcoming, community-based school by keeping safety in mind for its students, faculty and visitors. The entrance to the school should be designed to include a vestibule that doubles as a safety check in, where visitors to the school are welcomed, screened and buzzed into the building.

For transportation concerns, separate Bus and Car Drop-Off areas will be provided to maximize student safety. Cross walks will be strategically located to promote safe pedestrian crossing. An emergency access road will circle the perimeter of the building to provide emergency vehicle access to all parts of the building.

Parking lots are monitored by digital cameras for safety; the parking areas are well lit and have well lit pathways from the lots to the main building to provide staff and visitors safe access while on school grounds.

The Main Entrance will contain a camera/monitor and buzzer access to enter the building; visitors will enter a vestibule where they will be greeted through a window where identification can be checked before gaining access into the building near the main office.

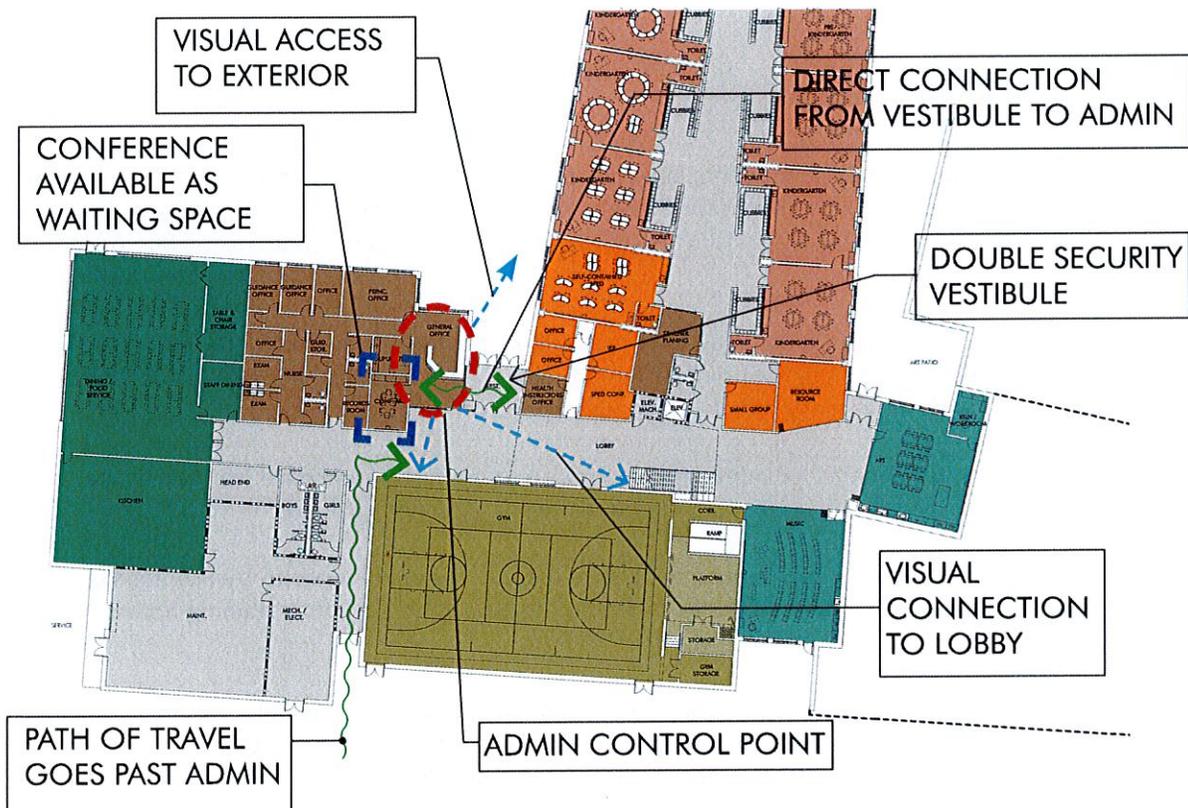
Inside the general office, a bank of monitors provide visual access to all doorways into the building. Inside the building, strategically placed cameras monitor movement and activities in hallways that connect to outside doors, further providing monitoring of building safety. Digital cameras provide 24:7 safety monitoring.

Play areas adjacent to the Early Learning Community are fenced in to keep young children safe and to discourage wandering. The play areas adjacent to the Primary and Upper Elementary Learning Communities are monitored by digital cameras that record activities within the general office.

The Design team anticipates organizing regulatory review meetings during the Schematic Design phase of the project with all Millis Town Agencies having jurisdiction. This typically includes at a minimum police, fire, DPW, Con Com, Planning, building department. During this meeting(s) security for both the exterior site layout and interior building layout will be reviewed and agency requirements integrated into the final design.

Design Response:

The main building vestibule will have a door release system that allows a visitor only as far as the main vestibule where they will be greeted. They can then either enter into the administration waiting area or be buzzed through into the school. It is anticipated that the school will be fully equipped with CTV monitoring as well as locking exterior doors with electronic access by key cards. Administration reception will be designed with transparency into the building lobby and to the exterior so that there are good sight lines to monitor activity outside and within the school.



SECURITY AND VISUAL ACCESS