

3.1.3 Initial Space Summary

- A. MSBA SPACE SUMMARY
- B. EXISTING FLOOR PLAN
- C. NARRATIVE FOR VARIANCE
- D. PROGRAM DIAGRAMS

APPENDICES	LOCAL ACTIONS AND APPROVALS	3.1.7
	PRELIMINARY EVALUATION OF ALTERNATIVES	3.1.6
	SITE DEVELOPMENT REQUIREMENTS	3.1.5
	EVALUATION OF EXISTING CONDITIONS	3.1.4
INITIAL SPACE	SUMMARY	3.1.3
EDUCATIONAL PROGRAM		3.1.2
INTRODUCTION		3.1.1
TABLE OF CONTENTS		

A. MSBA SPACE SUMMARY

Perkins&Will along with the OPM, and the Stoneham High School stakeholders, worked in compliance with the MSBA Guidelines as indicated in Module 3 of the Feasibility Study. In collaboration with Stoneham Public Schools, the Team developed three space summaries for Renovation Only, Renovation/Addition, and New Construction Options. All of the space summaries were for 695 High School students and the Pre-K program for the district. The specific educational spaces, quantity of spaces and square footages represented the program of need outlined in Section 3.1.2 of this PDP report. The enrollment was provided by the MSBA and submitted to the Town of Stoneham in advance of this Feasibility Study.

The development of these programs included input from the Superintendent, Principal, Staff, Stoneham Building Committee, the High School Vision Committee (comprised of students, administration and staff), and the Educational Mission Subcommittee (members of the Building Committee), as well as other key personal. Visioning sessions and subsequent weekly programming meetings were held virtually in the Summer of 2020. These discussions helped to establish the relationship of spaces, adjacencies, shared spaces and key programmatic space needs (see Section 3.1.2 for additional information on Visioning). In addition to weekly programming meetings, feedback was solicited from the Stoneham Building Committee, the Stoneham Website and from the two televised Community Forums.

A net square footage of each space was determined after the space need was discussed and carefully documented. After an agreement was reached the programs were integrated into the MSBA Space Template in order to calculate the total net square footage and quantity of individual spaces. The results of the iterative process can be found in the PDP Section 3.1.6.

9-12 HIGH SCHOOL FOR 695 STUDENTS/ Renovation Only

The Renovation Only Space Summary was developed with the understanding of the educational goals noted by all of the constituents. The space needs, quantity of spaces and square footages are noted with greater clarity in the New Construction Template because the definition of need is not impacted by the necessity to repurpose or

reuse existing space. Some of the existing spaces such as the gymnasium, auditorium, stage, cafeteria, art room, vocational spaces, media center, are larger due to the current existing conditions in the Stoneham High School facility. These spaces are noted in the space Summary to remain as is without extensive renovations to either increase square footage (like the general classrooms) or reduce the square footages of the spaces as noted in the spaces listed above. The specific rational for these variances are found in this Section 3.1.3 Part C below. The Town of Stoneham outlined the specific space needs for Pre-K and School Store in the OTHER category and is also noted on the Space Summary Educational template. The rational for deviations from space template for these OTHER programs are also noted in this section.

9- 12 HIGH SCHOOL FOR 695 STUDENTS/ Renovation/Addition

The High School educational program for the Renovation/ Addition options took into consideration the reuse of the west side of the existing facility, which includes three floors of the existing SHS structure which currently houses the large gymnasium and associated athletic spaces on the main level of the facility. The proposed renovated areas of the building above the gymnasium/athletic spaces on the second floor and the area below the gymnasium were considered for repurposing and defined the renovation portion and programs found in the Space Summary Template. The areas of the existing building slated for renovation, on the west side of the current facility, are proposed to accommodate the future full athletic programs on the main level; health, art, music areas on the second floor; and vocational spaces and custodial and maintenance areas on the partial lower level of the existing facility. The space summary does not reflect whether the adjacency, educational vision and the future 21st century needs for teaching and learning are realized.

The spaces summary defines which areas are proposed to be renovated for future educational use and further defines the specific educational spaces that are proposed to be new construction. The specific rational for these variances are found in this Section 3.1.3 Part C below. The Town of Stoneham outlined the specific space needs for

Stoneham High School

Pre-K and School Store in the OTHER category and is also noted on the Space Summary Educational template. The rational for deviations from space template for these OTHER programs are also noted in this section.

9- 12 HIGH SCHOOL FOR 695 STUDENTS/ New Construction

The High School educational program was first developed for the new school construction option with a lens on an understanding the current and future educational needs for students in Grades 9-12 and the Pre-K population. The educational program for the new construction puts forward an ideal space summary without the impact of having to reuse the full or a portion of the existing Stoneham High School Faculty. All of the major areas defined in the Space Summary Template are over the MSBA allowable space standard guidelines except Art & Music. The specific rational for these variances are found in this Section 3.1.3 Part C below. The Town of Stoneham outlined the specific space needs for Pre-K and School Store in the OTHER category and is also noted on the Space Summary Educational template. The rational for deviations from space template for these OTHER programs are also noted in this section.



APPENDICES		
LOCAL ACTIONS AND APPROVALS	3.1.7	
PRELIMINARY EVALUATION OF ALTERNATIVES	3.1.6	
SITE DEVELOPMENT REQUIREMENTS	3.1.5	
EVALUATION OF EXISTING CONDITIONS	3.1.4	
INITIAL SPACE SUMMARY	3.1.3	
EDUCATIONAL PROGRAM	3.1.2	
INTRODUCTION	3.1.1	
TABLE OF CONTENTS		

Rev. April 2019

Stoneham High School		Existing Conditions		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	
DINING & FOOD SERVICE			12,530	
Cafeteria / Student Lounge / Break-out	8,000	1	8,000	
Chair / Table Storage	220	1	220	
Scramble Serving Area			0	
Kitchen: 394 Robin Hood/ 355 South/ 264 Colonial Park (1,013)	3,040	1	3,040	
Staff Lunch Room	990	1	990	
District External Freezer (28Lx10Wx9H)	280	1	280	
MEDICAL			800	
Medical Suite Toilet				
Nurses' Office / Waiting Room	400	1	400	
Interview Room				
Examination Room / Resting	400	1	400	
Mother's Room				
ADMINISTRATION & GUIDANCE			5,910	
General Office / Waiting Room / Toilet	855	1	855	
Teachers' Mail and Time Room	140	1	140	
Duplicating Room	400	1	400	
Records Room				
Principal's Office w/ Conference Area	290	1	290	
Principal's Secretary / Waiting				
Assistant Principal's Office - AP1	385	1	385	
Assistant Principal's Office - AP2				
Supervisory / Spare Office				
Conference Room	250	3	750	
Guidance Office	96	5	480	
Guidance Waiting Room	910	1	910	
Guidance Storeroom	90	1	90	
Career Center				
Records Room				
Teachers' Work Room	360	1	360	
Business Office	790	1	790	
Counselor Office	160	2	320	
Kitchenette	140	1	140	
CUSTODIAL & MAINTENANCE			1,632	
Custodian's Office	120	1	120	
Custodian's Workshop				
Custodian's Storage	55	3		
Recycling Room / Trash				
Receiving and General Supply Storeroom	612	1	612	
Network / Telecom Room	180	1	180	
Exterior general Storage	720	1	720	

PROPOSED								
Existing to Remain/Renovated			New			Total		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		11,124			0			11,124
6,560	1	6,560				6,560	1	6,560
220	1	220				220	1	220
600	1	600				600	1	600
3,040	1	3,040				3,040	1	3,040
424	1	424				424	1	424
280	1	280				280	1	280
		890			0			890
60	2	120				60	2	120
250	1	250				250	1	250
100	1	100				100	1	100
100	3	300				100	3	300
60	2	120				60	2	120
		3,652			0			3,652
348	1	348				348	1	348
100	1	100				100	1	100
200	1	200				200	1	200
200	1	200				200	1	200
375	1	375				375	1	375
125	1	125				125	1	125
150	1	150				150	1	150
120	1	120				120	1	120
450	1	450				450	1	450
150	4	600				150	4	600
100	1	100				100	1	100
100	1	100				100	1	100
324	1	324				324	1	324
112	1	112				112	1	112
348	1	348				348	1	348
		2,647			0			2,647
150	1	150				150	1	150
250	1	250				250	1	250
375	1	375				375	1	375
400	1	400				400	1	400
324	1	324				324	1	324
448	1	448				448	1	448
200	1	200				200	1	200
500	1	500				500	1	500

MSBA Guidelines (refer to MSBA Educational Program & Space Standard Guidelines)		
ROOM NFA ¹	# OF RMS	area totals
		6,818
3,475	1	3,475
324	1	324
600	1	600
1,995	1	1,995
424	1	424
		710
60	1	60
250	1	250
100	1	100
100	3	300
		3,651
348	1	348
100	1	100
200	1	200
200	1	200
375	1	375
125	1	125
150	1	150
150	0	-
120	1	120
450	1	450
150	4	600
100	1	100
100	1	100
324	1	324
112	1	112
348	1	348
		2,148
150	1	150
250	1	250
375	1	375
400	1	400
324	1	324
448	1	448
200	1	200
500	1	500

Stoneham High School		Existing Conditions		
ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	
OTHER			8,850	
District Offices- Superintendent/PPS	8,300	1	8,300	
Pre School Classrooms w/ toilets changing (15 students)				
Observation Areas: Childcare Development Pathway				
Pre School OT/PT				
Pre School Director Office				
Pre School Speech/ Language				
Pre School Conference Room				
Reception Area with Secretary				
Teacher Work Room/Collaboration				
Student Lunch Room				
Indoor Play area				
Social Worker Office				
BCBA Office				
Nurse				
Conference Room				
Sensory Room				
School Store	550	1	550	
Total Building Net Floor Area (NFA)			144,247	
Proposed Student Capacity / Enrollment				
NON-PROGRAMMED SPACES				
Other Occupied Rooms (list separately)				
Unoccupied Closets, Supply Rooms & Storage Rooms				
Toilet Rooms				
Circulation (corridors, stairs, ramps & elevators)				
Remaining ³				
Total Building Gross Floor Area (GFA) ²			208,113	
Grossing factor (GFA/NFA)			1.44	

¹ Individual Room Net Floor Area (NFA) Includes the net square footage measured from the inside face of the perimeter walls and includes all specific spaces assigned to a particular program area including such spaces as non-communal toilets and storage rooms.

² Total Building Gross Floor Area (GFA) Footage measured from the outside face of exterior walls

³ Remaining Area, it is assumed to equal the difference between the Total Building Gross Floor Area and area not accounted for above.

Architect Certification

I hereby certify that all of the information provided in this "Proposed Space Summary" is true, complete and accurate and, except as agreed to in writing by the Massachusetts School Building Authority, in accordance with the guidelines, rules, regulations and policies of the Massachusetts School Building Authority to the best of my knowledge and belief. A true statement, made under the penalties of perjury.

Name of Architect Firm: Perkins&Will

Name of Principal Architect: Robert A Brown, Principal

Signature of Principal Architect: *[Signature]*

Date: 10/6/2020

LEVEL 02



APPENDICES	LOCAL ACTIONS AND APPROVALS	3.1.7
	PRELIMINARY EVALUATION OF ALTERNATIVES	3.1.6
	SITE DEVELOPMENT REQUIREMENTS	3.1.5
	EVALUATION OF EXISTING CONDITIONS	3.1.4
	INITIAL SPACE SUMMARY	3.1.3
	EDUCATIONAL PROGRAM	3.1.2
	INTRODUCTION	3.1.1
	TABLE OF CONTENTS	

C. NARRATIVE FOR VARIANCES

INTRODUCTION

Perkins&Will worked in compliance with the MSBA Guidelines as indicated in Module 3 of the Feasibility Study. In collaboration with the Stoneham Public Schools, Perkins&Will developed three Initial Space Summaries for a 9- 12 population of 695 students. The enrollments were provided by MSBA and submitted to the Town of Stoneham in advance of this Feasibility Study. The development of these programs included input from the Superintendent, Principals, Department Heads, Staff and other key personnel. Visioning sessions held in the summer of 2020 helped to establish the relationship of spaces, adjacencies, shared spaces and key programmatic space needs.

The program was developed with an understanding of the current and future educational needs for students in Grades 9-12. There are some areas in which the template falls outside of the MSBA guidelines. These areas outside the space template include: Core Academic Spaces, Special Education, Art and Music, Vocation & Technology, Health and Physical Education, Media Center, Auditorium / Drama, Dining & Food Service, and Medical. The specific rationale for these overages is noted in the summary below.

CORE ACADEMIC SPACES / 8,810 SF OVER

The district's proposal exceeds MSBA guidelines for core academic spaces due to the goal of providing appropriate physical spaces within the building for students to come together to work on interdisciplinary projects and presentations.

Students are provided a wide and diverse course selection supporting individual learning needs and student interests and passions that support their acceptance into postsecondary plans of education or career. However, the current facility significantly inhibits our capacity to broaden our courses of study to include courses and programs that allow for project-based learning and career exploration.

Stoneham is currently involved in Project Lead the Way (PLTW) grants in attempt to provide continuity with the

Stoneham Central Middle School PLTW and to enhance and support development of educational and career pathways. Though the school has added and is in the first stages of establishing PTLW Computer Science, Engineering and Bio-Engineering pathways, the current facility, classroom use and structure inhibits the students learning experience and the full potential of these programs. Classrooms are limited in size for hands on and problem-based learning. Building and classroom layout do not allow cohesion as a program or integration with other disciplines.

CLASSROOMS

1,150 sf over

We are in the process of revising our curriculum for more enhanced implementation of UDL practices. In the future, we would like to have more project-based learning, self-directed learning, and collaborative learning experiences in order to develop twenty-first century skills. In our current building we are limited with how we can collaborate and utilize technology and classes often have to spill out into hallways and other makeshift spaces. We need more open spaces that include flexible furniture and technology as well as spaces that support interdisciplinary learning opportunities. We also need to continue our independent reading program by providing shelves to display and store classroom libraries in addition to curriculum texts.

Last school year, we had 8 ELA teachers utilizing 7 ELA classrooms. The utilization rate of these classes was 81% over blocks A, B, C, D, E, F, G, and the flex block. We need to maintain these 7 classrooms in the new building. As we prepare for the future in education at Stoneham High School, we envision these 7 ELA classrooms to be inclusive, flexible, and collaborative. We had 8.2 math teachers utilizing 8 math classrooms. The utilization rate of these classes was 81.25% over blocks A, B, C, D, E, F, G, and the flex block. We need to maintain these 8 classrooms in the new building.

COLLABORATION SPACE

3,000 sf over

Teachers seek to provide students opportunities to engage in authentic learning experiences and student collaboration. Our history department has developed

a history lab that provides students with hands-on and first-person historical artifacts to assist with historical research. The department also engages in National History Day which promotes historical investigation, student collaboration and culminates with a final project. Our current facilities do not provide activities such as these with adequate space that utilizes technology as a means of presentation, space for collaboration and sharing of ideas and to effectively present and showcase work through a variety of mediums. Large interdisciplinary project-based learning rooms would provide the flexible spaces needed for students to develop and present their projects.

DEPARTMENT HEAD PLANNING AREA / 700 sf over

At Stoneham High School, all 5 directors have an office space. Previous storage rooms and classrooms have been converted to offices. All offices (except one) do not have a meeting space to conference with teachers, students, and/or parents/guardians. The offices are distributed throughout the facility.

The school's vision for the future is to have one central Department Head Planning Area of 700 sf to promote interdisciplinary collaboration between department heads. This would also eliminate the needs for any Department Offices.

BOOK STORAGE

500 sf over

A book storage area is needed near the Department Head Planning Area

SCIENCE CLASSROOMS WITH PREP ROOMS

1,140 sf under

In an effort to grow our program to meet current and future applications, the science department is requesting a total of eleven classrooms in the new building. Accessory spaces such as prep rooms, storage areas and educator collaboration areas should be programmed into the design as well. Each of the classroom's requirements will depend upon the type of science that is happening in that space and we have broken it down below:

Life Sciences and Chemistry: The six life science

classrooms will need to be fitted with the following laboratory utilities: a dedicated laboratory space around the perimeter of each classroom complete with laboratory grade benches, sinks, plumbed for gas and electricity. Each bench will need to seat at least four students and should have its own local equipment storage area. To support the laboratory activities, the building will need associated prep rooms with fume hoods, a dishwasher for glassware as well as space for a specimen/reagent refrigerator and microwave. Prep space can be shared between 2 or more classrooms. All requisite safety equipment (shower, eye wash, fire blanket, proper ventilation, goggle UV cabinet, etc.) should be in each individual classroom/laboratory space. Note that the Chemistry laboratories may require additional design features.

Storage: flammable storage cabinet and chemical storage area. Glass disposal area,

The classroom portion of the room will have flexible seating - tables and chairs that can be moved and full technology set-ups including charging stations. The separation of laboratory benches from classroom activities is a safety and efficiency design feature that does not currently exist.

Physics and Engineering: These two classrooms work spaces should be designed with ample bench and storage space to accommodate large pieces of equipment. In addition, the layout should be flexible and allow for wide access to technology and electricity throughout the room.

Earth Sciences and Health: The remaining three classrooms will be designed with flexibility in mind. Movable tables for reconfiguration and full technology access are necessary.

INTERDISCIPLINARY PROJECT AND PERFORMANCE ROOM
2,000 sf over

The district's proposal Interdisciplinary Project and Performance Room to support student performance, guest speakers, seminars, interdisciplinary collaborative activities and presentation and showcasing of student work.

TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

HEALTH CLASSROOM

850 sf over

At Stoneham High School, Students are required to take health education class in tenth grade, which is heterogeneously grouped. This classroom will support the spatial needs for health education.

HUDDLE ROOMS /QUIET ROOM

300 sf over

The district identified need for teachers to have an opportunity to have an heads-down space, outside of the common planning area which tend to be noisy due to collaborative discussions. These huddle rooms/quiet rooms will satisfy the important need to ensure there diverse types of spaces for all personal.

SPECIAL EDUCATION / 700 SF OVER

Special Education services at Stoneham High School are delivered in a multitude of ways through various programs designed to meet the needs of our diverse student population. These programs include Resource, STRIDE, RISE, Language Based, and ESL services (ESL is not special education). In addition to these programs, the areas of speech and language pathology, transition planning, counseling, occupational therapy, physical therapy, and adaptive P.E. all fall within this discipline. The district is committed to ensuring that students with disabilities receive a quality education in the least restrictive environment. The spaces designated for special education programs in the new building should maintain the current space allocations for all classrooms currently in existence at a minimum. The spaces, while located amongst the school and academic areas, should also consider the students' auditory, visual, and other related sensitivities. The spaces for future special education students should also ensure easy access to service providers and instructional areas.

In an effort to meet student special needs and to provide services at Stoneham High School, the district proposes following spaces for Special Education Program:

RESOURCE PROGRAM:

- A learning suite (1 large common mutual space for large-group lessons with adjoining offices)
- (4) Offices for educators; utilized for prep, testing students, utilization by other practitioners as needed
- (4) Classrooms for educational instruction, location TBD
- (8) Small designated quiet spaces for students receiving small-group instruction or utilizing their separate setting accommodation for assessments that does not take away from students receiving Resource instruction/teachers utilizing their prep time

STRIDE PROGRAM:

- (2) Classrooms in close proximity to support staff/guidance/practitioners
- Private Bathroom
- (4) Offices for clinicians/educators to provide services with confidentiality
- (1) Large meeting room/mutual space/suite
- RISE Program:
- (2) Classrooms for educational instruction; students with severe needs
- Private Jack & Jill bathroom/changing area/grooming station shared between the severe classrooms
- Studio apartment to include kitchenette (stove, sink, dishwasher, refrigerator), bed, dining, storage, stackable washer & dryer
- Vocational space; shared with others such as culinary cafe
- Therapeutic de-escalation room similar to sensory room

LANGUAGE BASED PROGRAM:

- (2) Classrooms for educational instruction, ideally connected/adjoining; equipped with features that benefit students acoustically
- (2) Offices for educators; utilized for prep, testing

students, utilization by other practitioners as needed

ESL PROGRAM:

- (1) Classroom for educational instruction; equipped with features that benefit students acoustically
- (1) Office for educators; utilized for prep, testing students, utilization by other practitioners as needed
- Language lab with technology (e.g., green screen, projector, etc.) that allows for seamless integration of lessons to student activity

SPEECH AND LANGUAGE:

- (1) Half-sized classroom for educational instruction; equipped with features that benefit students acoustically
- (1) Office for educators; utilized for prep, testing students, utilization by other practitioners as needed
- Reading Services:
- (1) Half-sized classroom for educational instruction; equipped with features that benefit students acoustically
- (1) Office for educators; utilized for prep, testing students, utilization by other practitioners as needed

OT/PT:

- (1) Room specifically designed for OT/PT needs to maintain confidentiality and instruction without distracting peers

ART AND MUSIC / 1,275 UNDER

ART CLASSROOM / 300 sf over

The district determines that one of the two art classrooms having a divider is important to accommodate the needs of different activities in the classroom. This classroom needs to be larger than standard regular art classroom size to make room for the operable partitions and have enough space for activities.

CHORUS / 1,500 sf under

The district decides that the Choral activities can share

one single space with Band, Jazz Band and elective activities (Theater Arts, Music Appreciation, and/or 20th Century Pop). In addition, some of the functions could take place in the Interdisciplinary project and Performance Room.

MUSIC PRACTICE / 75 sf under

The district determines that two Practice Rooms are needed for music.

VOCATIONAL AND TECHNOLOGY / 1,920 SF OVER

During the previous comprehensive facilities study, one of the identified goals of design was to increase the quantity and quality of hands-on opportunities available to students at Stoneham High School. Although Stoneham High School does not currently offer any Chapter 74 vocational programs, an area of opportunity exists to create a Chapter 74 program in Early Education and Care, by creating greater coordination between our high school and the two elementary school preschool programs and merge them with the Child Development and Internship program already at the high school level.

CULINARY/FACS

Family and consumer sciences, like other elective departments, allow students to apply academic skills, use creative thinking, practice problem solving, increase fine motor skills by working with their hands and develop communication tools which could lead to a future career, personal achievement and home and family enrichment. Currently in the program we offer to 9th thru 12th graders: Food and Nutrition, Sports Nutrition, International Foods, Fundamentals of Baking, Culinary 1 & 2, Adult skills, Fashion/Sewing 1,2,3 and Child Development 1 and 2. Class size in the Food and Fashion Labs are capped at 18 due to Safety and OSHA guidelines. The food lab individual kitchens are equipped for 3 people. We have a waitlist consistently for all food classes, with as many as 350 students signing up for Food and Nutrition alone. The kitchen labs are available for all seven periods of the day and can easily be filled to the maxim for both semesters. Locating the food lab part of the FACS department near the Cafeteria would assist with a possible "Sparty's

TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

Cafe” (that we currently run out of our classroom space) that is accessible to teachers during the day and events during the evening/weekends. It is the vision that the cafeteria kitchen be on one side of the open designed cafeteria and the Sparty’s Cafe be on the other side with not only an open space to the cafeteria but a small teacher/administration dining area adjacent, so that students can have more real world experience in the restaurant industry.

Currently, there are 7 home kitchens within the lab space, 6 for students and one for teacher/student demonstrations. The ideal program would have commercial restaurant equipment in the 7th kitchen space as not only a part of the demonstration area but as part of the culinary students workspace for the dining room/cafe, with room for a commercial dishwasher. The 6th student kitchen space should be handicap accessible and adaptable to those with special needs.

The kitchen space lacks storage as current storage is located in another classroom down the hall with the washer and dryer. The ideal plan would be that they are both located within the Food lab space in some capacity, especially the laundry area which is used several times within the day. This food lab space going forward could be used for Community Adult Education in the evening when possible for cooking classes. Going forward the space would need to be bigger than the 1400 sq ft suggested, as we need storage space, laundry, cafe, and special needs accommodations.

- Large kitchen space with 6 residential style kitchens
- One commercial demonstration kitchen towards the front of the room that has access to the cafe
- Laundry and storage area (add 150 sq ft)
- Student storage space for uniforms/bags
- Faculty Sparty’s Cafe (add 800 sq ft) Ideally this space would be very similar to the project room space on the 2nd floor of the SPS middle school, a space that has room to accommodate guest for lunch, a copy room area, and be utilized for smaller district events
- Close proximity to the cafe and access to outside

door or elevator

CHILD DEVELOPMENT

Currently both Child development classes, 1 and 2, are located in the FCS department right next to the food labs. They run 3 periods during a semester as it is a shared space with fashion/sewing and adult skills. The classroom has adequate space for supplies, and it would be ideal if that continues. The classes themselves are maxed out at 24, with most classes being filled each semester.

The ideal location would be closer to the new Pre-K space being suggested as it would be nice for high school students to have an observational lab within their room, and to bring back the Child Development 3 Internship program, which had an average number of ten students going out to the Pre-K classes throughout the district for work experience. Having work experience within the building would be ideal because of transportation issues in the past, getting students to their “job” if they did not drive and their classroom teacher being able to easily observe them without leaving the building. Many students throughout the years have shown an interest in post-secondary education, majoring in early childhood or elementary education and child psychology. This would give them a great opportunity to experience real-life scenarios. Having the classroom intermingled within the several early childhood classrooms planned would be a benefit, along with those teachers being used as mentors in the 3rd year program.

- Large classroom space adjacent to the Pre-K Program
- Ability to split the classroom into different areas
- Sink area for project production
- Storage space
- 2-way glass mirror for observation of students

SCHOOL STORE

In the past, our school store was a vibrant opportunity for the DECA program’s entrepreneurial class, when curriculum and funding changed it left a hole which was filled recently with our RISE program within our special

education department, using it as a vocational job training space. Now that the business department has merged with the economics classes there is a need for a robust store that can not only help to train those in the RISE program but also help students wishing to go into some type of business. It will act as an opportunity to learn more about product sales, accounting, purchasing, and marketing, along with a great collaboration with the special education students.

The store is currently open 2 to 3 days a week and staffed by the RISE students only with very selective hours. In the past it was a store run by at least 30 or more students rotating in, consecutively each day before school and during lunch. The space allotment it has now is adequate for what is being taught, however it does not have storage space for items such as overflow merchandise. Preferably it would be adjacent to the Economic/business classroom which could be near the library or some other populated area giving access to all students throughout the day. However there needs to be added space allocated to storage for merchandise/products, as there is currently no storage at all and housed throughout our current building in various locations.

- 600 sq ft store
- Storage area needs to be added (150 sq ft)
- Near library or cafe for student access

SCENE / WOOD SHOP

Currently there is no woodworking class of this kind, however, there was once a woodworking shop in the basement of our current building, where if classes were run, were easily filled. The need for a real life skill such as woodworking is not only evident now with homeowners doing their own DIY, but it is an opportune time for students to show their creative thinking, problem solving, and fine motor skills by working with their hands and also using engineering skills. Not only would there need to be room for actual equipment, there would need to be a designated space for CAD and printer to print plans.

The ideal location would be between the engineering program for project based learning, and the auditorium as the class could be used for set design for the award

winning drama department which used to use the woodworking space that was once located in the current basement of the building and has since been disassembled. The drama department now uses the parking lot, hallways, and student homes to build the items needed for their productions.

The recommended class size for students would be to use OSHA guidelines for safety. This space could also be utilized for Adult education because so many people are DIYers now and looking for opportunities to learn within the community.

- Large space that allows for dual access
- Access to the auditorium
- Access to the outside with garage door for deliveries/project pick-up
- Dust machine will need a higher ceiling

FILM EDITING / PRODUCTION

The film editing classroom currently utilizes a computer lab which is a shared space with art. This lab is actually only utilized 2 to 3 periods a day but in the past was used 4 to 5 times throughout the day. Stoneham has seen in the past decade many students go into film/video production along with electronic music production. The ideal opportunity would be to combine the classroom theory into the lab space in computer science and use the space allocated in the plan to a small soundproof studio that could be used for video production, tv/news studio, or recording studio for the music department. With the excellent opportunities in the Boston area to further their education in film, video, or music production it would be a great training opportunity. We would also like to expand our existing partnership with the local television station that was once housed in our building, to include more student produced material, such as sporting events and productions. Again, this would be utilizing the student’s creativity, management, and business skills.

- Large space divided into film editing, green room area
- Small lockable storage area
- Part of this large area should have space for small

TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

studio for filming Stoneham TV

MAKER SPACE / ROBOTICS

This space better known as an Innovation Lab would be an open space wired for technology around the room so that it could serve multiple uses and be accessed by all departments for groups and large projects. This lab could also house robotics courses in the future as the school does not currently offer robotics but would like to add it into the PLTW program. We currently do not have an innovation lab but looking to the future and wanting to expand the Project Lead the Way (PLTW) program this would create a great opportunity and best use of shared space. PLTW is currently a very robust class within the 7th and 8th grade curriculum in the Middle School, and as a feeder school to the high school it is important to keep the momentum going in such a sought after career field. This space could also house the tech leader program that has in their curriculum computer repair services. We see this as being utilized all periods of the day with the space having a sign-up sheet for open use areas with a possible waiting list to get in. The space will also be available for the open periods the students will have such as the FLEX period. Students will have the opportunity to sign up for a spot in the lab during the FLEX period. We

ENGINEERING LAB

Currently our district is in the second year of implementing the PLTW program of Engineering, by offering 2 periods per semester. The space is located in a computer lab without adequate ventilation and no space for collaboration or possible assembly of project ideas. To accommodate our future expansion goals, a proposed CAD/engineering lab would be wired for various technologies including laptops with ethernet access points throughout the room and possibly a bank of 3D printers. The CAD lab would also have space with open counters and floor space so that students can assemble products and test design solutions. This space would be ideally located between the computer labs and the woodworking area, so that engineering students would be able to make some of their designs come to life in wood or 3-D. With many students going on to further their education in many different engineering programs, this opportunity

has been long awaited. We need to advance ourselves into the 21st century and give students opportunities to participate in STEAM programs more. CAD lends itself to future landscape/home architects, innovators, product engineers, and urban planning.

- Expand one 1440 sq ft space to allow for all 3 labs to be merged together (possible 2000+)
- Divide the space into:
- Computer CAD space (Engineering PLTW)
- Work table space
- Robotic space w/storage
- Maker Space with access from hall area

COMPUTER SCIENCE

Through the courses offered in our Technology Department, students have an opportunity to discover the vast career opportunities in the technology field, advance their knowledge of general productivity tools and how these tools may be used for collaboration, creativity, communication and problem solving. The current graduation requirements for all SHS students is one semester of Computer Applications.

For those students who are interested in a deeper understanding of how coding is used in the world around them, our Cybersecurity and Computer Science Essentials will provide them with hands-on development opportunities. Other vocation opportunities include the student Tech Leaders program for those students who want to explore help desk and support roles.

The rooms are adequate, but the technology is aging, and the ventilation is a problem because of the heat the computers give off with only one window air conditioner. It is not currently conducive to simulating a software programmer's project-based work environment, as there is a need for collaboration space. In planning for space for computer science, there needs to be a large, flexible space that can function as a computer lab but can also accommodate collaborative work among students. This would require large/multiscreen workstations throughout the room. As the computer science program continues to

evolve in time it would be nice to have it adjacent to the Innovation Lab and Bio-medical rooms as part of Project Lead the Way.

HEALTH AND PHYSICAL EDUCATION / 8,008 SF OVER

GYMNASIUM / 4,000 sf over

At present, the gymnasium is used for multiple sports programs. In the fall season it is the home to 3 levels of volleyball. We currently are able to have our varsity court align within the varsity basketball court, providing a great varsity court with bleachers for spectators. We set up two side courts, one for JV and the other for freshman. During inclement weather the gym will then host every fall teams' practice from football to soccer, field hockey and cross country.

Winter is when our gymnasium is at its largest use and capacity. The gym hosts practices for our boys and girls Indoor track teams which run between both teams approximately 120 athletes. We currently have athletes running and training up and down our hallways in the main building, doing whatever they can to find space. If you are familiar with indoor track then you know there are many events and quite a bit of equipment needed to store and use on a daily basis, such as large high jump mats, hurdles, area to safely throw shot puts. This is then followed up with space for boys and girls basketball programs and gymnastics. Gymnastics is our biggest argument for why we need a larger than 12,000 sq ft gym. Our gymnastics program has been around for over 50 years, so not offering gymnastics should not be an option. We do not feel it is a good use of space to provide our gymnastics team with their own room. We would use it for 3-4 months and then the space becomes unused or we then have to create new programs to find ways to use this space in the off season. As we have it now. The gymnastics space is part of the last gymnasium. It has a 42' x 42' spring floor that goes down and it becomes strictly the gymnastics space. When the season is over we now have great extra space in our gymnasium for the other 8-9 months of the year that houses so many other programs that our PE class uses, our athletic teams use and our community and youth programs use. The

challenge is to be able to have a varsity basketball court set up for games with bleaches for spectators, and also have the gymnastics room set up. They are both winter sports and as mentioned above breaking down and resetting the gymnastics floor is not an option. Once it goes down for the season, it stays down until the season ends. Currently the one issue we have in our current gym is that our gymnastics floor extends very close to our varsity basketball court. It lies about 4-5 feet from out of bounds, but it is a trip hazard for not only players but the official whom I have witnessed trip and fall over many times. We need about 3 more feet on the other side to push it over, but as it lies now, it is flush against the wall and cannot move any further.

In the spring the gym becomes an indoor practice facility for boys and girls lacrosse, outdoor track, baseball softball and boys and girls tennis. Until sometime in April when we can then go outside. We set up an indoor batting cage for basketball and softball in the gymnasium where gymnastics used to be. This cage is hung on cables that are attached from one end wall to the other. And slides in and out when used.

GYM STOREROOM / 300 sf over

The current space is utilized for large equipment storage for Physical Education and Athletic Equipment. Anything less would result in items being left out in the gym which would compromise teaching space and pose a liability issue. This space also houses extensive electronic connections & equipment for gyms sound system and contains one of the major electrical panels for the school.

FITNESS/STRENGTH AND CONDITIONING ROOM x 1

Large enough to service a team of about 60 kids at once

MALE PE LOCKER ROOM WITH BATHROOMS x 1

Accommodate approx. 50-60 boys

FEMALE PE LOCKER ROOM WITH BATHROOMS x 1

Accommodate approx 50-60 girls. Small lockers as it is just to change for the class. Would like to have changing stalls in both locker rooms. Do not need showers unless it is mandatory. Kids do not shower in P.E.

TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

MALE PE INSTRUCTOR OFFICE WITH BATHROOM x 1

Shared with 2 teachers

FEMALE PE INSTRUCTOR OFFICE WITH BATHROOM x 1

Share with 2 teachers

LARGE PE STORAGE x 1

EXTRA-LARGE ATHLETIC STORAGE x 1

For all indoor track equipment (hurdles, high jump matts, shot put, etc. basketball scorer’s table along with team chairs approx. 40 chairs. Basketball equipment, volleyball nets and poles as well as referee stand etc.)

MALE ATHLETIC LOCKER ROOM x 1

Enough to accommodate large lockers for individual sports equipment like shoulder pads and helmets. Large enough for during 1 season we have about 170 male athletes participating and needing a locker. Maybe we have 2 rooms. With showers, athletes tend to shower after practice

FEMALE ATHLETIC LOCKER ROOM x 1

Enough to accommodate avg size lockers, not very big equipment mostly sticks such as lax and or field hockey. Large enough for approx. 180 female athletes during 1 season needing a locker again maybe 2 locker rooms to accommodate this large number. Need showers as well

MALE ATHLETIC COACHES’ OFFICES - WITH BATHROOM AND SHOWER x 2

1 office needs to accommodate 3 coaches at once, and the other needs to accommodate 8 at one time

FEMALE ATHLETIC COACHES OFFICES - WITH BATHROOM AND SHOWER x 2

Both offices need to accommodate 3 coaches at once

OFFICIALS’ ROOM - WITH BATHROOM AND SHOWER x 2

Large enough to accommodate 5-6 refs at once

TEAM MEETING ROOMS x 2

Large enough to accommodate, teams of 60 kids at once to meet as a team or watch films (this is a very important part for some sports)

ATHLETIC TRAINING ROOM WITH STORAGE x 1

ATHLETIC DIRECTORS OFFICE x 1

Shared with a secretary (2 rooms or 1) would like to have a conference table as I do now.

EQUIPMENT ROOM WITH LAUNDRY SERVICE x 1

Need to store all sports equipment during their off season which is ¾ of a year.

MEDIA CENTER / 400 SF OVER

The library is the space where the majority of National History Day work and exhibits are displayed for the week, Shakespeare day takes place in the library, the art department uses the library for displaying students’ work and for art night. Once a month we hold “open mike in the morning” and students can come in in the AM and perform under the direction of the music department. We also have “Teacher Tuesday” once a month and the library is closed at lunch to students so teachers can gather and enjoy the space.

We have created a “history learning lab” in one of the rooms off of the library that is an artifact museum filled with objects that are relevant to the curriculum. These objects are on display and are used in classes and by students in independent study projects

AUDITORIUM / DRAMA / 2,393 SF OVER

The physical space inhabited by both the music and theater departments is severely outdated and in dire need of attention. These areas simply do not support the needs of either program adequately. Both programs continue to grow in numbers and enthusiasm, but are capable of much more than the physical space allows for. Currently the theater arts courses are held in the band room, which due to the tiered nature of the room offers no ability for movement, scene work, or performances. The auditorium is an important part of the work that is done by the theater department, but the space and technology are highly outdated. Lighting and sound equipment are extremely outdated and need to be improved in

order to function for a 2020 space safety. The stages lighting electric lines and lighting fixtures are all stage pin extensions, which is outdated and does not offer the appropriate amount of yield or performance necessary for an impressive production. The present stage offers only three electric lines, however none of them work properly and lighting is often spotty and lacks color and form. Our current sound system is currently analog and is outdated compared to most digital systems. Currently anyone who needs to focus or work on lights would need to climb a 20-foot completely vertical metal ladder to access the lighting loft. The other option is to access a cherry picker from another part of the building that is shared with the janitorial staff. The sound and light board is currently located in one singular space, rather than two separate areas of the auditorium. This booth includes little room for the massive amount of technology necessary for both departments. The lighting/sound boards placement at the far back of the auditorium and its open construction often makes for some distraction during performances. Acoustics within the auditorium and band room are not conducive to quality performances/rehearsals and the current heating system (when it functions) drowns out the performers. Due to the current placement of the Theater Departments construction workshop in the mostly inaccessible basement, production crews must take place on the stage which could become a safety and cleanliness concern. The current workshop space is only for heavy construction and therefore there is no adequate space for other crew departments such as the costumes department or hair and make-up to conduct their work effectively. An increase in space is necessary for the lights, sound, and hair and make-up departments to succeed and thrive. A further struggle felt by the theater department is that there is not adequate storage space for technical theater technology and building materials. The program seeks to conduct its technical work in a safe environment. Presently not having a separate space to build sets and run rehearsals makes it impossible to hold both at the same time. Performers run the risk of stepping on a left behind nail or bumping into a partially built set piece. Currently students have no safe or secure place to change their costumes before, during, and after performances. Make-shift dressing rooms have been made available and this

space is often difficult to come by. The current space does not offer students a restroom that is within close proximity. In order to move from stage right to stage left (which is often necessary during a performance) students must pass behind a crowded, dark, one-foot channel between the cyc curtain and the auditorium wall. Despite glow tape this is unsafe. Many of the seats in the auditorium are broken and unable to be used for the public. The incline of the seating does not allow for adequate views of the stage, there is also a lack of handicap seating as well as an area for our pit band to play during performances without completely blocking the view of the audience and drowning out much of the action onstage.

The new auditorium should have 3 to 4 dmx theater electric lines with a total of 30 channels. It is important that these electric lines be able to be manually dropped down to the floor using a fly system, allowing for students to work on lights rather than using a ladder or cherry picker. A set construction and storage room that is close to the auditorium as well as a loading dock for easy transportation of sets and materials. All theater riggings (curtains legs, Cyc, etc.) should be able to fly in and out using a fly system accessible from both backstage and in the back of house lighting board. Auditorium theater should be raised seating with entrances and exits on the first and second floor. Separate sound and lighting booths with up to date board technology should be located at the back of the house in a boxed in setting. The Band should have a lowered pit at the very front of the house in front of the stage for musical performances. The black box, band room, hair and make-up rooms, and dressing rooms should be located close to one another so that they can be used as green rooms for performances. Stage should include two stage right and stage left leg curtains as well as a mid-stage full traveler and front proscenium curtain with a proper cyc curtain. A projector at the back of the auditorium should cover the whole cyc for visual effects.

DINING AND FOOD SERVICE / 285 SF OVER

The Stoneham High School is accommodating a district external freezer at the facility for the distribution of food for the Stoneham Elementary Schools.

TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

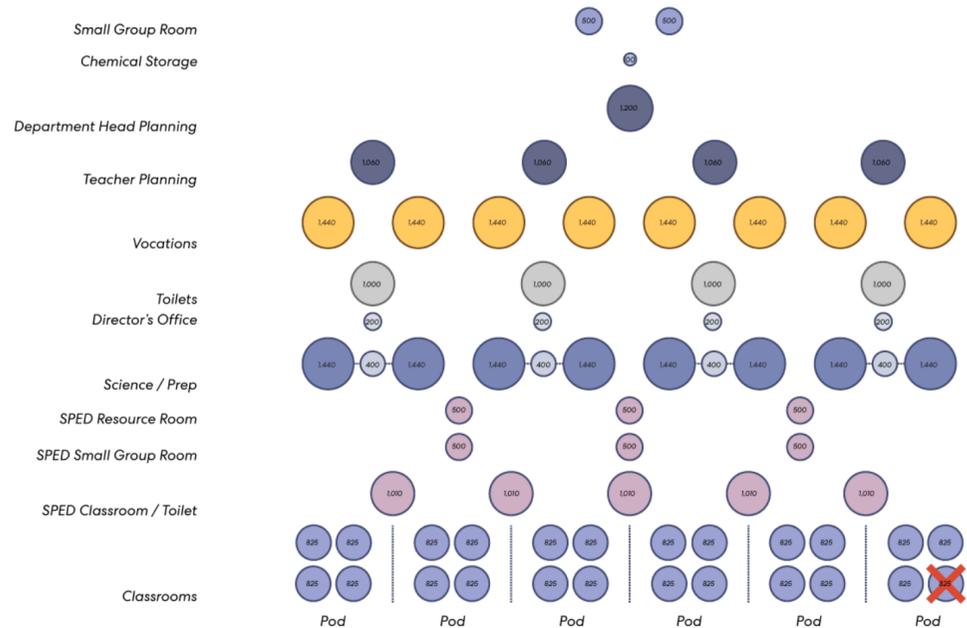
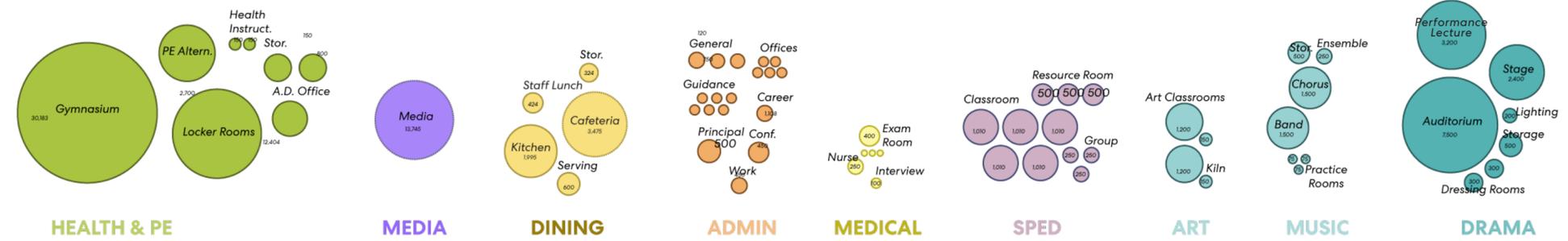
SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

C. PROGRAM DIAGRAMS / PROGRAM GROUPING



C. PROGRAM DIAGRAMS / PROGRAM TREE

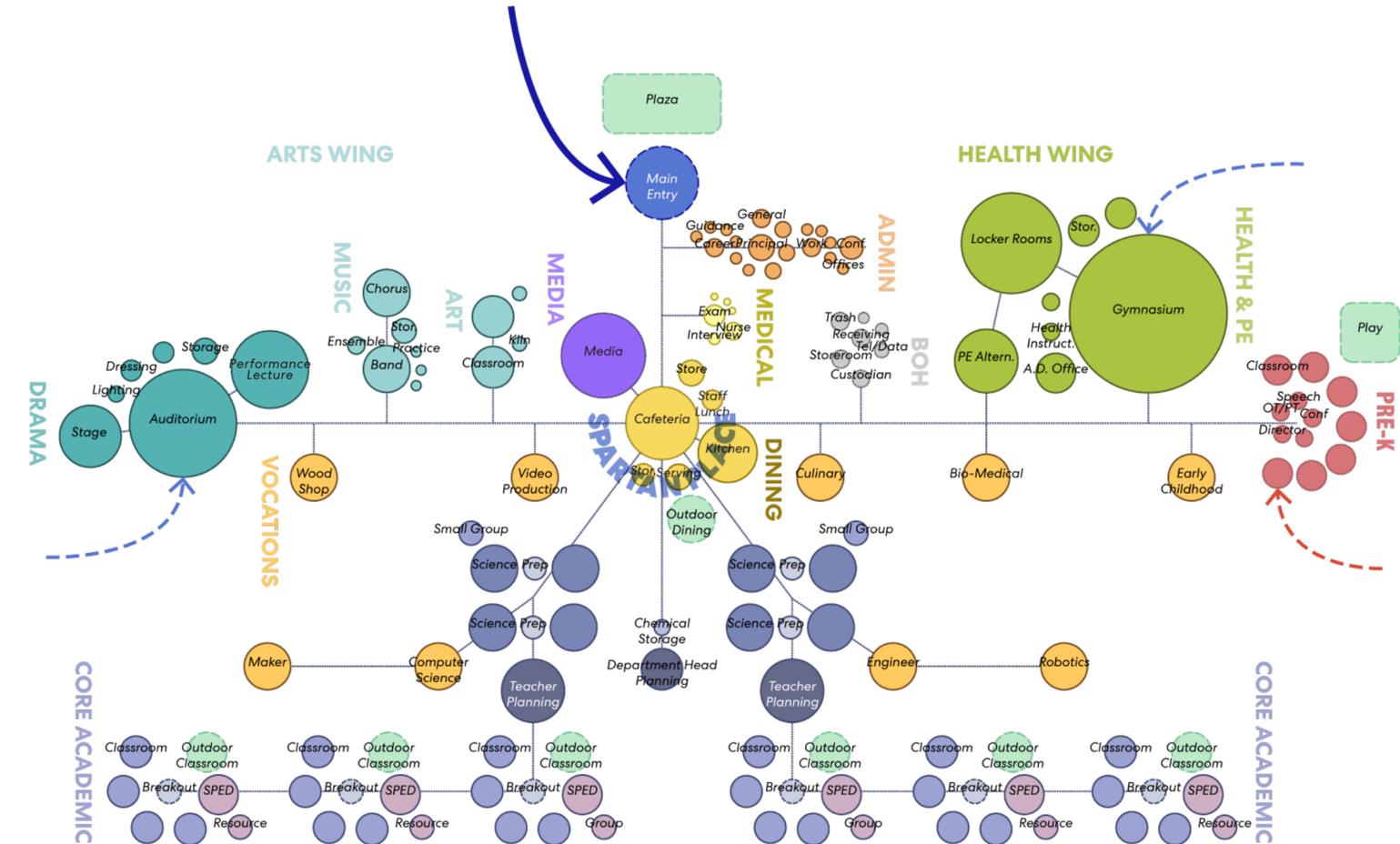


TABLE OF CONTENTS

INTRODUCTION 3.1.1

EDUCATIONAL PROGRAM 3.1.2

INITIAL SPACE SUMMARY 3.1.3

EVALUATION OF EXISTING CONDITIONS 3.1.4

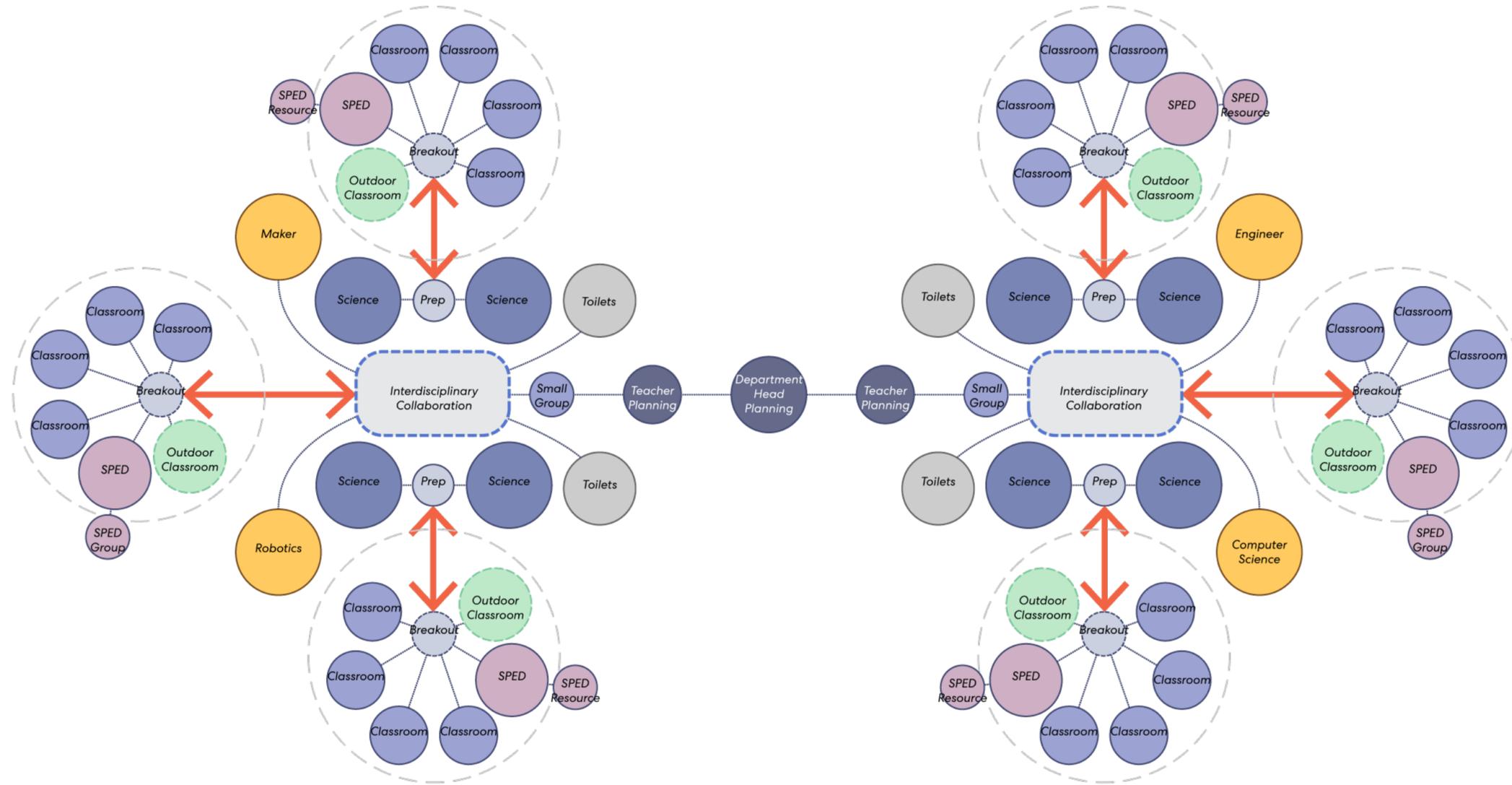
SITE DEVELOPMENT REQUIREMENTS 3.1.5

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

LOCAL ACTIONS AND APPROVALS 3.1.7

APPENDICES

C. PROGRAM DIAGRAMS / POD STRUCTURE



APPENDICES

LOCAL ACTIONS AND APPROVALS 3.1.7

PRELIMINARY EVALUATION OF ALTERNATIVES 3.1.6

SITE DEVELOPMENT REQUIREMENTS 3.1.5

EVALUATION OF EXISTING CONDITIONS 3.1.4

INITIAL SPACE SUMMARY 3.1.3

EDUCATIONAL PROGRAM 3.1.2

INTRODUCTION 3.1.1

TABLE OF CONTENTS