HARRIMAN

Presentation for

REGIONAL SCHOOL UNIT NO. 10

Feasibility and Planning Study
Department of Education

Rumford and Mexico, Maine

November 2, 2021

Design Statement: A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow.

1. Programming Meetings Update
2. DOE Comments | Updated SAW
3. Sustainability Update | Next Steps
4. Other Ongoing Topics
5. Community Priorities
6. Next Meetings

A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow.

AGENDA

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

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Programming Meetings Update

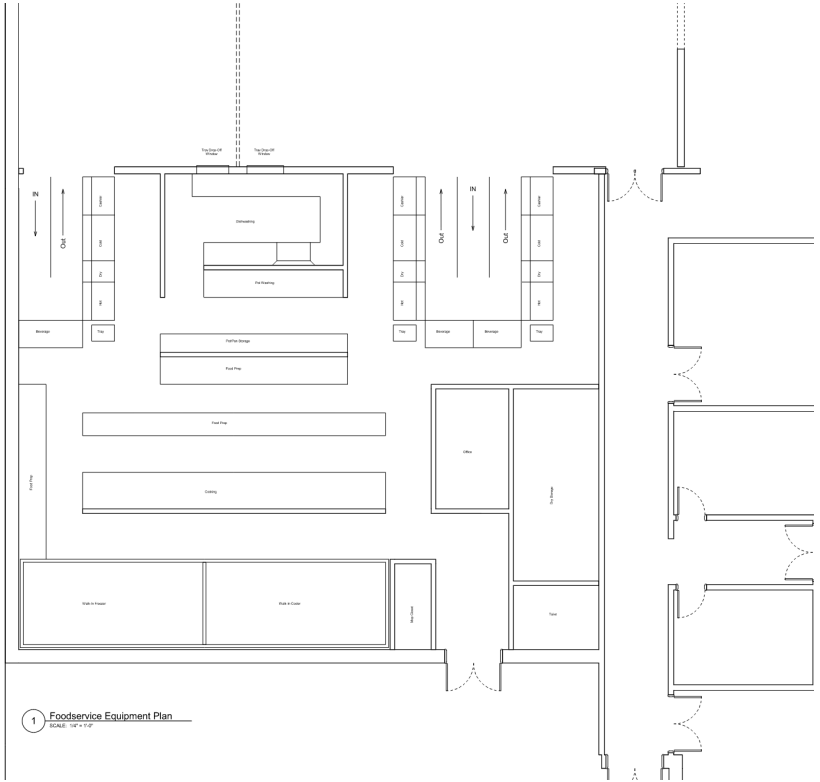
- MS Track and Field Guidelines – Itemize requirements for project
  - Minimum 6 lane track
    - Hurdles for boys and girls will be 80m with 8 hurdles
      - Girls to be 30” height – 12m to first hurdle, 7.5m between hurdles, and 15.5m to finish line
      - Boys to be 33” height – 12m to first hurdle, 8.5m between hurdles, and 8.5m to the finish line
  - Long Jump pit:
    - (1) or (2) Long jump pits for scheduling?
  - Shot put area: 4k for boys, 6 lb. for girls *(Determined separate area needed for shot/discus)*
  - Discus area: 1k for both boys and girls *(Typically run simultaneously with Shot put)*
  - Turbo Javelin area
  - High jump area:
    - girls starting height is 3’4”, in increments of 2”
    - boys starting height is 3’8”, in increments of 2”

PROGRAMMING MEETINGS UPDATE

“A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow.”

Kitchen Design

- HA meet with Kitchen consultant to brainstorm preliminary kitchen layouts. Three options under review.
- Next step:
  - Meet w/ Food Service Director
  - Layout options for Cafeteria.



PROGRAMMING MEETINGS UPDATE

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

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DOE Comments | Updated SAW

DOE QUESTIONS ABOUT SAW	RSU 10/HARRIMAN RESPONSES
Admin: line 20 (SRO), 29 (WFKA) – offices should be smaller	Make each 100sf, (2) Principals 150sf, AP 100sf
Admin: review space for technology (lines 31(workroom), 33 (sever) for efficiencies (<400))	Discuss
Admin: what is technology storage & how are you charging laptops?	Actively being discussed w/ Brian and Edvance
Guidance: reconsider and reduce lines 39 (Psych), 40 (Social)	Change all (5) to 100sf
Clinic: did you reduce size of faculty room to gain more space for clinic?	Yes. 255sf reflected in updated SAW
Classrooms: line 81 – can (7) team rooms/small group at 400sf be reduced?	Reduce in number from (7) to (5). 3 @MS and 2 @ES
Special Svcs: line 88(res.), 89(OT),90 (OT/PT) –800sf could be reduced	reduce rooms to 600sf
Special Svcs: line 87 (functional life skills)– concerns about layout and enough space for program	Discuss
Special Svcs: line 91 (intervent.) – could (10) rooms be reduced in size?	Reduce from 150sf to 100sf

DOE COMMENTS / UPDATED SAW

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

DOE QUESTIONS ABOUT SAW	RSU 10/HARRIMAN RESPONSES
Special Svcs: line 101(GT) – seems like offices can be reduced	Reduce from 150sf to 100sf (Would like to add small 600sf classroom for GT)
Allied Arts: line 109 (ES Music) – should be 1000sf if PK/K aren't using	Change to 1000sf
Allied Arts: line 117 (SEL)– does this space need to be 800sf?	It will be serving a full class of students
Allied Arts: line 111 (practice rm) – if individual use, it seems large	Reduce to 100sf
Allied Arts: line 116 (World Lang)– where do we stand with World Language (grades, utilization, board approval)	Discussed with the Board on 10/25/21 Grades 6-8
Learning Commons: line 127 – do not see the need to double non-student usable space. Think 1150sf will suffice	Change to 1150sf
Food Svcs: line 133, 134 (Café)– 185sf may be added to total cafeteria space, divided as you recommend	185sf added. Would like K-2 separate café space; main café would be for 3-8, with (3) lunch times in each area (main café would not be split)

DOE COMMENTS / UPDATED SAW

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

DOE QUESTIONS ABOUT SAW	RSU 10/HARRIMAN RESPONSES
Food Svcs: line 136 (Kit.) – may increase to total of 3430sf	Adjusted on SAW
Food Svcs: line 135 (Café Storage) – what is this to be used for?	We were told to make sure to have more storage space for the future for produce, etc.
PE: line 140 (ES Gym)– student count of 226 would be consistent with other lines you have broken down	Adjusted on SAW
PE: line 143 (MS Gym) – student count of 178 would be consistent with other lines you have broken down	Adjusted on SAW
PE: line 146(PE office) – all (3) of these offices are listed under MS, is one in ES?	(1) For PK-3 and (2) for 4-8
ECE: line 182 –were under impression this was not needed in last mtg	Discuss

DOE COMMENTS / UPDATED SAW

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

Other DOE Questions:

- Overall concern identified is that all offices are 150sf and all classrooms are 800sf
  - *Many offices reduced to 100sf and some classrooms to 600sf)*
- Floor plans will need to be coordinated with the SAW; total square footage and room sizes need to be accurately confirmed on the floor plans
  - *(Currently being analyzed and updated)*
- We would like to review with you the language in the Space Allocation Guidelines regarding B. Non-Assignable Areas, and then make changes to better represent the intent of the 1.4 mark-up.
  - *(Would like to discuss at today's meeting)*
- Were you able to identify space reductions as we discussed in our last meeting? If so, what are they?
  - *Library reduced by 400sf*
  - *Faculty Room reduced by 250sf due to layout of nurse*
  - *Teacher work rooms reduced from 500 sf to 400 sf – overall 400 sf reduction*

DOE COMMENTS / UPDATED SAW

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10	6/26/2021; 7/20/21; 7/29/21; 9/8/21; 10/12/21; 10/14/21; 11/02/21	PROPOSED FACILITY:												
11		NUMBER OF STUDENTS: 1034												(678 ES, 356 MS)
12		GRADE CONFIGURATION: PreK-5, 6-8												Table 9: Year 29-30 w/ 5% for 5th-8th is 461. Subtract 105 for 5th and that is 356. (see table 13 plus 5%). Table 9 for PK-4 plus 5% =535 plus 4 and 5 year old table 15 plus 5% = 38 plus 5th grade = 678 students
13	PROGRAM OF SPACE NEEDS	PROPOSED FACILITY STATE/LOCAL						PROPOSED FACILITIES LOCAL ONLY						
14	Subject	# of Rooms	@	Room Area (sf)	=	Area (sf)	Student Capacity	# of Rooms	@	Room Area (sf)	=	Area (sf)	Student Capacity	COMMENTS
15	**Administration**													
16	Reception/Waiting	1	@	200	=	200			@		=	0		
17	Secretarial	1	@	300	=	300			@		=	0		
18	Principal	1	@	150	=	150			@		=	0		
19	Asst. Principal	2	@	150	=	300			@		=	0		
20	Student Resource Officer	1	@	100	=	100			@		=	0		
21	Conference Room	1	@	300	=	300			@		=	0		
22	Storage	1	@	200	=	0			@		=	0		Part of Gross Mark-up

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SAW UPDATES

23	Records	1	@	200	=	0			@		=	0	Part of Gross Mark-up
24	Work Room	1	@	300	=	300			@		=	0	
25	Admin Staff Toilets	2	@	50	=	0			@		=	0	Part of Gross Mark-up
26	Faculty Room	1	@	255	=	255			@		=	0	PD area
27	Volunteer/Community Room	1	@	200	=	200			@		=	0	
28	Food Pantry	1	@	200	=	200			@		=	0	
29	After School Coordinator	1	@	150	=	150			@		=	0	WFKA Program. Added 09/09/21
30	Technology Office	1	@	150	=	150			@		=	0	07/29/21 - added per conversation with Tech Director on 07/26/21. 1.5 staff members to serve MS and ES population. Space for office, receiving technology from staff/students, store, and ship out equipment. 1:1 for all students and staff.
31	Technolgy Work Room	1	@	200	=	200			@		=	0	
32	Technology Storage	1	@	200	=	0			@		=	0	Part of .4 mark up
33	Server room	1	@	200	=	0			@		=	0	Part of .4 mark up
34	**Sub-Total**					**2,805**						**0**	
35													
36	**Guidance**												
37	Guidance Counselor	3	@	150	=	450			@		=	0	per 6-7-21 mtg. Adjacent to Social Workers
38	Outside Counselors -Mental Health Services	2	@	150	=	300			@		=	0	per 6-7-21 mtg. (1) PK-2 and (1) 3-8 - outside service provider. In Classroom Wing
39	Psychologist	2	@	100	=	200			@		=	0	Space also used for pshych testing. (1.5 psychologist)
40	Social Workers	3	@	100	=	300			@		=	0	per 6-7-21 mtg. (1) PK-2, (1) 3-5, (1) 5-8 - need SPED / Classroom wing
41	**Sub-Total**					**1,250**						**0**	

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43	**Clinic**													Desire to have MS Nurse separate from ES (due to Age and SPED)
44	Waiting	1	@	150	=	150			@		=	0		Waiting Area for 8-10 Students
45	Nurse's Office	1	@	100	=	100			@		=	0		With Health Partner Deb indicated they space for 1 nurse, 1 outside physician from hospital, 1 med tech (7/9/21). 1 nurse, 1 outside physician from hospital, 1 med tech (7/9/21). Multiple health intervention (Medical/Dental/Childcare). Deb has a meeting with the Hospital on 7/1.
46	Health Partner	0	@	100	=	0			@		=	0		listed below
47	Med Tech	1	@	100	=	100			@		=	0		With Health Partner Deb indicated they space for 1 nurse, 1 outside physician from hospital, 1 med tech (7/9/21)
48	Open Exam Area	1	@	150	=	150			@		=	0		2 Cots w/Privacy Curtains
49	Private Exam Room	2	@	100	=	200			@		=	0		09.21.21- changed to 3 per discussion with health partner. Health parnter listed below.
50	Toilet/Shower	1	@	100	=	100			@		=	0		
51	Laundry	1	@	25	=	0			@		=	0		Part of Gross Mark-up
52	Storage	1	@	50	=	0			@		=	0		Part of Gross Mark-up
53	**Sub-Total**					**800**						**0**		

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SAW UPDATES

55	**Classrooms**													
56	Pre-Kindergarten	5	@	1,000	=	5,000	80		@		=	0		Toilet Rooms within classrooms (69 Enrollment Projection). Loading is 16 kids, 1 teacher, 1 ed tech per classroom
57	Kindergarten	7	@	1,000	=	7,000	112		@		=	0		Toilet Rooms within classrooms (108 Enrollment Projection). Loading is 14-18 kids per class.
58	1st Grade	5	@	800	=	4,000	110		@		=	0		Toilet Rooms within classrooms. Loading for grades 1-3 is 14-20 kids
59	2nd Grade	5	@	800	=	4,000	110		@		=	0		Toilet Rooms within classrooms. Loading for grades 1-3 is 14-20 kids
60	3rd Grade	5	@	800	=	4,000	110		@		=	0		Loading for grades 1-3 is 14-20 kids
61	4th Grade	5	@	800	=	4,000	110		@		=	0		Loading for grades 4-5 is 16-22 kids
62	5th Grade	5	@	800	=	4,000	110		@		=	0		5th Grade currently MS team but will return to single teacher model in new building
63	6th Grade LA	1	@	800	=	800	22		@		=	0		Notes 6th through 8th requires (5) homerooms per grade. Each student recieves a period of Core Subject (Social Studies, Science, Math, Reading and Writing) per day, as well as Allied Arts and PE as scheudle allows)
64	6th Grade Reading	1	@	800	=	800	22		@		=	0		
65	6th Grade Math	1	@	800	=	800	22		@		=	0		
66	6th Grade SS	1	@	800	=	800	22		@		=	0		
67	6th Grade Science	1	@	900	=	900	22		@		=	0		

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68	7th Grade LA	1	@	800	=	800	22		@		=	0		
69	7th Grade Reading	1	@	800	=	800	22		@		=	0		
70	7th Grade Math	1	@	800	=	800	22		@		=	0		
71	7th Grade SS	1	@	800	=	800	22		@		=	0		
72	7th Grade Science	1	@	900	=	900	22		@		=	0		
73	8th Grade LA	1	@	800	=	800	22		@		=	0		
74	8th Grade Reading	1	@	800	=	800	22		@		=	0		
75	8th Grade Math	1	@	800	=	800	22		@		=	0		
76	8th Grade SS	1	@	800	=	800	22		@		=	0		
77	8th Grade Science	1	@	900	=	900	22		@		=	0		
78	Teacher Work Rooms	4	@	400	=	1,600			@		=	0		
79	Book Storage	2	@	200	=	0			@		=	0		Part of Gross Mark-up
80	~~Instructional Coaches~~	3	@	200	=				@		=	0		10-14-21: Removed from SAW per RSU 10.
81	Team Spaces / Small Group Collaboration	5	@	400	=	2,000			@		=	0		Small Group Learning Collaboration Area (1 per grade/team). Provide storage. 1 per classroom wing, K-8. 2021-11-01_Changed to 5. 3 @MS and 1 @ each ES wing
82	**Sub-Total**					**47,900**	1072					**0**		

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SAW UPDATES

84	**Special Services**													
85	3-5 CDS	0	@	2,500	=	0			@		=	0		two rooms and support spaces. Listed below
86	Conference Room	3	@	300	=	900			@		=	0		(1) conference room for each cohort. 256 students with IEPs. Adjacent to admin. Accommodate 8-10 people each.
87	Functional Life Skills Room	3	@	800	=	2,400			@		=	0		Centrally located. 1 per cohort (PK-2/ 3-5/ 6-8). PK-2 more open space for movement and project space. Kitchen / laundry needed at 3-5 and 6-8 life skills. Bathroom needed in all for hygiene. Hoya lift and elec changing tables in lower cohorts. 6-8 adjacent to Nurse for descrete changing and assistance with older kids.
88	Resource Rooms	8	@	600	=	4,800			@		=	0		(1) at K-1 and (1) per grade for 2-8. In resouces room hubs in wings and near one another.
89	OT	1	@	600	=	600			@		=	0		(1) OT space for PK-2 cohort. Swing, mats, teaching area, storage and kidney shape table for (3) kids
90	OT/PT	1	@	800	=	800			@		=	0		(1) OT/PT space for 3-8. Swing, mats, teaching area, storage and kidney shape table for (3) kids
91	Interventionists	10	@	100	=	1,000			@		=	0		~~(06.15.21) Deb confirmed 1 per grade. 7/9/21 not needed at 6-8. Math and reading combined. One intervention per grade level PK-5~~ 10.14.2021- Deb clarified that two for MS and the rest for ES. Total of 10.
92	~~Math Intervention~~		@	150	=				@		=	0		~~(06.15.21) Deb confirmed 1 per grade. 7/9/21 not needed at 6-8. Math and reading combined. One intervention per grade level PK-5 8.4.21 confirmed 10 rooms~~
93	Lit Coach	2	@	150	=	300			@		=	0		(06.15.21) Deb confirmed 2 lit coaches
94	Math Coach	2	@	150	=	300			@		=	0		(06.15.21) Deb confirmed 2 math coaches

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SAW UPDATES

95	Speech/Language	4	@	150	=	600			@		=	0		(4) teletherapy spaces for speech. (2) at PK-2 and (1) each at 3-5 and 6-8
96	Testing	2	@	100	=	200			@		=	0		(1) PK-2 and (1) 3-8. ~~Used by psych for testing and small group work for social workers~~ Used for academic / SPED testing
97	Mental Health Services	2	@	100	=				@		=	0		(1) PK-2 and (1) 3-8 - outside service provider - SF captured under guidance
98	~~Title 1 Math~~	0	@	100	=	0			@		=	0		(06.15.21) Deb confirmed 1 per grade. 7/9/21 one per grade K-5 and one for 6-8
99	~~Title 1 Lit~~	0	@	100	=	0			@		=	0		(06.15.21) Deb confirmed 1 per grade. 7/9/21 one per grade K-5 and one for 6-8
100	~~Title 1 Reading Recovery~~	0	@	100	=	0			@		=	0		(06.15.21) Deb confirmed 1 per grade. 7/9/21 removed
101	Gifted and Talented	2	@	100	=	200			@		=	0		(06.15.21) Deb confirmed 1.5 per building. 07.29.21-Reviewing whether a teaching space is needed in addition to office 08.04.21 Confirmed 2 spaces
102	"Chill Zone" (Break space)	3	@	60		180			@		=	0		1 per cohort (PK-2/ 3-5/ 6-8). Potentially located in the middle of wing so easily accessed.
103	~~SEL / Behavioral~~ Emotional Life Skills	2	@	800	=	1,600			@		=	0		1 per cohort (PK-2/ 3-5 and 6-8). Adjacent to "chill zone". Middle school should have their own SEL program
104	**Sub-Total**					**14,080**						**0**		

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SAW UPDATES

106	**Allied Arts**													
107	Art Classroom	3	@	1,200	=	3,600			@		=	0		09.22.21 changed to 3 due to scheduling
108	Art Storage/Kiln	1	@	200	=	200			@		=	0		
109	ES Music Classroom	1	@	1,000	=	1,000			@		=	0		
110	MS Music Classroom	1	@	1,400	=	1,400			@		=	0		
111	MS Music Practice Room	1	@	100	=	100			@		=	0		10-14-21_Changed from 300sf to 150
112	Music Instruction	1	@	800	=	800			@		=	0		
113	Music Storage	2	@	200	=	400			@		=	0		
114	Stage	1	@	1,500	=	1,500			@		=	0		
115	~~Family and Consumer Science~~		@		=				@		=	0		Removed (1500 sf) for FACS per 7/8 DOE mtg.
116	World Language	1	@	800	=	800								Currenlty do not have World Language but would like to add it. RSU 10 is looking to incorporate in schedule and have separate space.
117	SEL Program ~~Offices~~ Classroom	1	@	800	=	800								Added 09/09/21. Changed from office to classroom 09/21/21
118	Health Classroom	1	@	800	=	800			@		=	0		
119	Tech Ed / STEM Classroom	1	@	1,200	=	1,200			@		=	0		
120	STEAM Classroom (ES)	1	@	800	=	800			@		=	0		
121	~~STEM Classroom (MS)~~		@		=				@		=	0		Combined with Tech Ed above per 7/8 DOE mtg
122	**Sub-Total**					**13,400**						**0**		

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SAW UPDATES

124	**Learning Commons**													
125	Library - ES Student Usable (Maker Space)	1	@	2,000	=	2,000			@		=	0		Based on 718 Elementary Students. 07/29/21 ES students 678.
126	Library - MS Student Usable	1	@	1,125	=	1,125			@		=	0		Based on 315 Middle Students. 07/29/21 MS students 356
127	Library - Non-Student Usable	1	@	1,150	=	1,150			@		=	0		550 + 850
128	~~Lecture Hall (MS)~~ Learning |Community Stair (seating area)	1	@	448	=	448			@		=	0		~~per 7/8 DOE mtg moved lecture hall to local. Currently not in plan.~~ Simplified to Learning | Community stair. Currently in plan. No .4 mark up
129	~~Lecture Hall (MS)~~ Learning |Community Stair (communicating stair)	1	@	140	=									Part of Gross Mark-up
130	**Sub-Total**					**4,723**						**0**		
131														
132	**Food Services**													
133	ES Cafeteria	1	@	3,575	=	3,575			@		=	0		3 Lunches @ 240. Separate Dining areas for ES and MS. 07/29/2021- 3 Lunches @226 x15 = 3390sf
134	MS Cafeteria	1	@	1,785	=	1,785			@		=	0		3 Lunches @ 105. 07/29/2021- 3 Lunches @119 x15 = 1785sf
135	Cafeteria Storage	1	@	200	=	0			@		=	0		Part of Gross Mark-up. 2021-11-01 Deb indicated this was included as they were told to make sure enough space for the future - for produce, etc.
136	Kitchen	1	@	3,430	=	3,430			@		=	0		1033 (80% = 827) Student x 4 SF/Student. 07/29/21 Is there an impact now that lunch is provided free for all students
137	**Sub-Total**					**8,790**						**0**		

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139	**Physical Education**													
140	ES Gymnasium	1	@	3,360	=	3,360			@		=	0		48'x70' plus seating for 1/3 Student body (226 Students)
141	ES Gym Storage	1	@	400	=	400								
142	MS Gymnasium	1	@	5,632	=	5,632			@		=	0		64'x88' plus seating for 1/2 Student body (178 Students). (07/29/21 - As a reference point current MS gym is 8787 sf)
143	MS Gymnasium Seating	1	@	1,975	=	1,975								includes ES and MS bleachers (240 +158 = 398 bleacher seats x 5sf/person)
144	MS Gym Storage	1	@	400	=	400			@		=	0		
145	Toilet/Showers/Lockers	2	@	600	=	1,200			@		=	0		
146	PE Office/Toilet	3	@	150	=	450			@		=	0		07/28/21- Deb clarified there will be 3 in new school. 2021-11-01 (1) for PK-3 and 2 for 4-8
147	Fitness Room		@		=	0		1	@	2,000	=	2,000		per 7/8 DOE mtg moved to local. Discuss on 7/20. Currently not in plan. Increased to 2,000 SF per 8/26
148	**Sub-Total**					**13,417**						**2,000**		

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149	**Misc**												
150	Custodial Work Room	1	@	300	=	300			@		=	0	Includes Toilet/Shower Room
151	Building Storage	1	@	500	=	500			@		=	0	
152	Equipment Storage	1	@	300	=	300			@		=	0	
153	Recycling Room/AS Storage	1	@	200	=	200			@		=	0	WFKA Program
154	Building Services	1	@	1,662	=	0							07/29/21 moved to .4 markup
155	Air Handling Rooms	1	@	3,460	=	0							Spaces for Air Handlers. One space for multiple AHUs that serve one or two floor of a wing. 07/29/21 moved to .4 markup
156	~~Playground Toilet Room~~	2	@	50	=				@		=	0	07/20/21- removed
157	~~Playground Storage Room~~	2	@	100	=				@		=	0	07/20/21 - removed
158	**Sub-Total**					**1,300**						**0**	

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				Total Proposed
162	TOTAL PROGRAM AND SUPPORT SPACE AREA	108,265	2000	110,265
164	Gross Mark-up @ 1.4	43,127	800	43,927
166	TOTAL GROSS AREA	151,392	2800	154,192
168	GROSS AREA PER STUDENT	146.41	3	149.12
170		98.18%	1.82%	100.00%

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SAW UPDATES

174	Career Technical Education												
175	**Early Childhood Education**												
176	Daycare Room / PreK Classroom	1	@	1,715	=	1,715		@		=	0		with kitchen area (sink, stove, oven, fridge). Making /Preparing lunch is part of the curriculm
177	Classroom	1	@	650	=	650		@		=	0		
178	~~Observation~~	1	@	160	=	0		@		=	0		
179	~~Conference Room~~	1	@	90	=	0		@		=	0		
180	Office	1	@	75	=	75		@		=	0		
181	Storage	1	@	180	=	180		@		=	0		
182	Secure Entry	1	@	70	=	70		@		=	0		
183	Toilets	1	@	210	=	210		@		=	0		
184													
185	**Sub-Total**					**2,900**							
186													
187	Other Programs												
188	**Child Development Serivces (CDS)**												
189	Classrooms	2	@	1,000	=	2,000							With restrooms
190	Offices	2	@	100	=	200							
191	Workspace for Guest Case Manager	1	@	100	=	100							
192	Small reception area	1	@	100	=	100							
193	Storage	1	@	100	=	100							

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195	**Health Partner**												
196	Health Partner Office	1	@	100	=	100			@		=	0	1 nurse, 1 outside physician from hospital, 1 med tech (7/9/21). Multiple health intervention (Medical/Dental/Childcare). Deb has a meeting with the Hospital on 7/1.
197	Private Exam Room	1	@	100	=	100			@		=	0	
198	**Sub-Total**					**2,700**							
199													
200	**Career Tech | CDS |Health Partner Totals**												
201	TOTAL NET SQUARE FOOTAGE					5,600							
202													
203	Gross Mark-up					2,240							
204													
205	TOTAL Gross Square Footage					7,840							
206													
207	**Combined Totals**												
208		**STATE**					**LOCAL**					**Total Proposed**	
209	**TOTAL STUDENT COUNT**	1,034										1034	
210													
211	TOTAL NET SQUARE FOOTAGE	113,865					2,000					115,865	
212													
213	Gross Mark-up	45,367					800					46,167	
214													
215	TOTAL Gross Square Footage	159,232					2,800					162,032	
216													
217	GROSS SF PER STUDENT	154										157	

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			Total Proposed
TOTAL PROGRAM AND SUPPORT SPACE AREA	113,305	4300	117,605
Gross Mark-up @ 1.4	45,322	1720	47,042
TOTAL GROSS AREA	158,627	6020	164,647
GROSS AREA PER STUDENT	153.41	6	159.23
	96.34%	3.66%	100.00%

161				Total Proposed
162	TOTAL PROGRAM AND SUPPORT SPACE AREA	108,265	2000	110,265
163				
164	Gross Mark-up @ 1.4	43,127	800	43,927
165				
166	TOTAL GROSS AREA	151,392	2800	154,192
167				
168	GROSS AREA PER STUDENT	146.41	3	149.12
169				
170		98.18%	1.82%	100.00%
171				

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SAW Compaision TOTAL

Combined Totals			
	STATE	LOCAL	Total Proposed
TOTAL STUDENT COUNT	1,034		1034
TOTAL NET SQUARE FOOTAGE	119,484	4,300	123,784
Gross Mark-up	47,794	1,720	49,514
TOTAL Gross Square Footage	167,278	6,020	173,298
GROSS SF PER STUDENT	162		168

	Combined Totals			
208		STATE	LOCAL	Total Proposed
209	**TOTAL STUDENT COUNT**	1,034		1034
210				
211	TOTAL NET SQUARE FOOTAGE	113,865	2,000	115,865
212				
213	Gross Mark-up	45,367	800	46,167
214				
215	TOTAL Gross Square Footage	159,232	2,800	162,032
216				
217	GROSS SF PER STUDENT	154		157

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SAW Comparision TOTAL

HARRIMAN

Sustainability Update

Conversation with Efficiency Maine

- Reviewed Draft HVAC comparison Matrix with Rick Meinking, Senior Program Manager at Efficiency Maine.
- Rick's Actions:
  - Review spreadsheet with his team
  - Provide industry standard for annual operational cost of VRF system
  - Provide pros and cons for Ground Source (Geothermal) and Air Source heat pumps.
  - Provided Harriman with VRF Report – Clarify if Water to Water or Water to Air Geothermal used in analysis. HA Geothermal is water to water heat pump plant – not individual fan coils in every room.
- Harriman's Actions:
  - Review and provide comments on VRF report
  - Add 2021 compliant envelope and super insulated envelope to matrix

	Traditional System	Biomass	Ground Source Heat Pumps	Air Source Heat pumps
System Description	Propane fired boilers provide heating hot water. Water to water chillers generate chilled water. Heat from the chillers is rejected to a cooling tower located outside the building. There will be separate hot water and chilled water piping systems to distribute water through the building. Air handlers located through out the building will provide cool and heated air to rooms. Air handlers also provide a mixture of fresh air and recirculated air. With the exception of large volume spaces, air will be supplied low to the floor which increases ventilation effectiveness.	Wood pellet boilers provide heating hot water. Water to water chillers generate chilled water. Heat from the chillers is rejected to a cooling tower located outside the building. There will be separate hot water and chilled water piping systems to distrubute water through the building. Air handlers located through out the bulding will provide cool and heated air to rooms. Air handlers also provide a mixture of fresh air and recirculated air. With the excpetion of large volume spaces, air will be supplied low to the floor which increases ventilation effectiveness.	A cluster of water source heat pumps shall be located in a central mechanical room. Heat pumps provide hot and chilled water which is circulated through the building. Boilers provide additional heat during peak heating periods and to provide thermal balance in the ground. The the heat pumps interface with a closed loop water system to wells in the ground. They utilize the constant temperature of the ground to reject and absorb heat. There will be separate hot water and chilled water piping systems to distrubute water through the building. Air handlers located through out the bulding will provide cool and heated air to rooms. With the excpetion of large volume spaces, air will be supplied low to the floor which increases ventilation effectiveness.	Outdoor heat rejection units with refrigerant piping to individual indoor units that provide cooling and heating. Energy recovery units provide 100 percent fresh air to rooms. Large volumes spaces such as the gymnasiums shall be heated and cooled with packaged heat pump units.
Anticipated EUI (from early energy modeling)	39.7	40.1	27.3	25.8
Annual Energy cost	$254,000	$234,000	$194,000	$187,000
Annual Operational Cost	$8,000	$16,000	$10,000	$35,000
Estimated Replacement Cost (in future dollars)	Year 20 $960,000 Year 25 $340,000	Year 20 $960,000 Year 25 $800,000	Year 20 $820,000 Year 25 $260,000	$2,600,000
Anticipated system life	20 years (Chiller, Pumps, Cooling Tower) 25 years (Boilers)	20 years (Chiller, Pumps, Cooling Tower) 25 years (Boilers)	20 years (Water Source Heat Pumps, Pumps) 25 years (Boilers)	15 years (Air Source Heat Pumps, Indoor Fan Coils)
50 Year Life Cycle Cost	$31,800,000	$31,900,000	$30,400,000 $29,500,000 (if State funds 50% geothermal premium cost)	$33,000,000
Annual GHG Emissions	455,884	462,705	312,947	295,044 (note: this number does not include impact from refridgerants)
kWh	1,084,462	1,094,564	1,057,923	978,000
Therms	31,953	11,399 (gas) 20,924 (wood pellet)	11,399	11,399
Additional GHG Considerations				System includes significant refrigerant runs in the building. As refridgerants have global warming potential thousands of times that of carbon dioxde even small leaks in these systems have the potential to quickly outweigh operational carbon savings.
Maintenance Considerations	Centralized maintenance	Centralized maintenance	Centralized maintenance	Distibuted systems require additional filter changes and checks. Annual cleaning indoor & outdoor coils. Distributed condensate drains & pumps for each indoor heat unit
Space considerations			Need well field location Space for indoor chiller/heater & potential peaking boiler	Space will need to be identified for a significant number of small condering units, typically on the roof of the building. There is a likely hood that a backup heat system would be needed. This is often in the form of a boiler, which will need to be located.
Thermal Comfort considerations	Displacement ventilation provides signficant thermal comfort benefits by supplying room nuetral air, the sense of drafts is reduced. Radiant floors, especially in PK-3 classrooms.			
Indoor Air Quality	Displacement supply airflow mixes with the air in the breathing zone more effectively. 16%-33% lower outdoor air volume for compliant ventilation design. 65% reduction in asthma for children (Smedje and Norback, 2000)			Indoor units can not operate with high efficiency filters.
Accoustic Considerations	Displacement ventilation is very quiet and supports high levels of accoustic quality in classrooms.			Depending on design distributed systems bring the noise level closer to the students
Resilience Considerations			Lower electric draw if using for winter shelter space in power outage	Distributed systems less likely to fail simultaneously Higher electric draw if using for winter shelter space in power outage Larger generator for operation during outage at winter/summer extremes
Additional considerations	Displacement ventilation provides a high level of indoor air quailty.			Depending on final system design, achieving the same level of filtration can be challenging on outside air. Condensate drains need to be added at each unit and have the potential to clog creating potential moisture issues. Large spaces like gymnasiums and cafeterias may not be good candidates for VRF and may require additional equipment to support these spaces.

DRAFT

SUSTAINABILITY MEETINGS UPDATE

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

HARRIMAN

Other Ongoing Topics

- Traffic Movement Permit Application
  - Completed preliminary capacity analysis of the study area intersections and they appear to work at acceptable levels of service in the post development condition.
  - Mitigation expected as a result of the capacity analysis is to retime the traffic signals once the school is occupied.
  - Requested and reviewed additional safety information from MaineDOT for the expanded study area as identified during the MaineDOT Scoping Meeting, and there does not appear to be high crash locations in the area.

Therefore, the only mitigation we have identified for the school consists of:

- Possible retiming of the signalized Route 17 / Route 2 intersection
- Contribution toward pedestrian improvements in the form of upgrades to existing crosswalks, sidewalks, pedestrian ramps

Next step: Clarify town and MDOT requirements to avoid conflicting requirements

OTHER ONGOING TOPICS

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

HARRIMAN

Community Priorities Update

1. Community Stair in place of Lecture Hall
2. Fitness Center (2500 sf | No Equipment Needed)
    - Raising Funds
3. Passive Energy Savings systems (Walls, Windows, Roof, etc.)
4. Full-size gymnasium
5. Additional Parking

Parking:
190 + 38 overflow + 24 spaces in parent drop off = 252
(Additional overflow may be accommodated near ballfield, as needed)
Previous = 164

6. Full track (2 to 4 more lanes)
7. Air Conditioning
8. Other (CDS, Health Partner, ECE CTE)

COMMUNITY PRIORITIES

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

Fitness Center:

1. Size: 2,000 sf
2. Gross mark up (.4): 2,800sf
3. Approximate Cost*: $1.4 to $1.6M

*includes FFE, bid and construction contingency, AE fee, Construction Testing, Project Coordinator, Clerk of the Works, Commissioning

GLENBROOK SOUTH HS FITNESS CENTER | GLENVIEW, IL

UNIVERSITY OF MAINE AT MACHIAS FITNESS CENTER | MACHIAS, ME

- *DISCUSS FUNDRAISING*

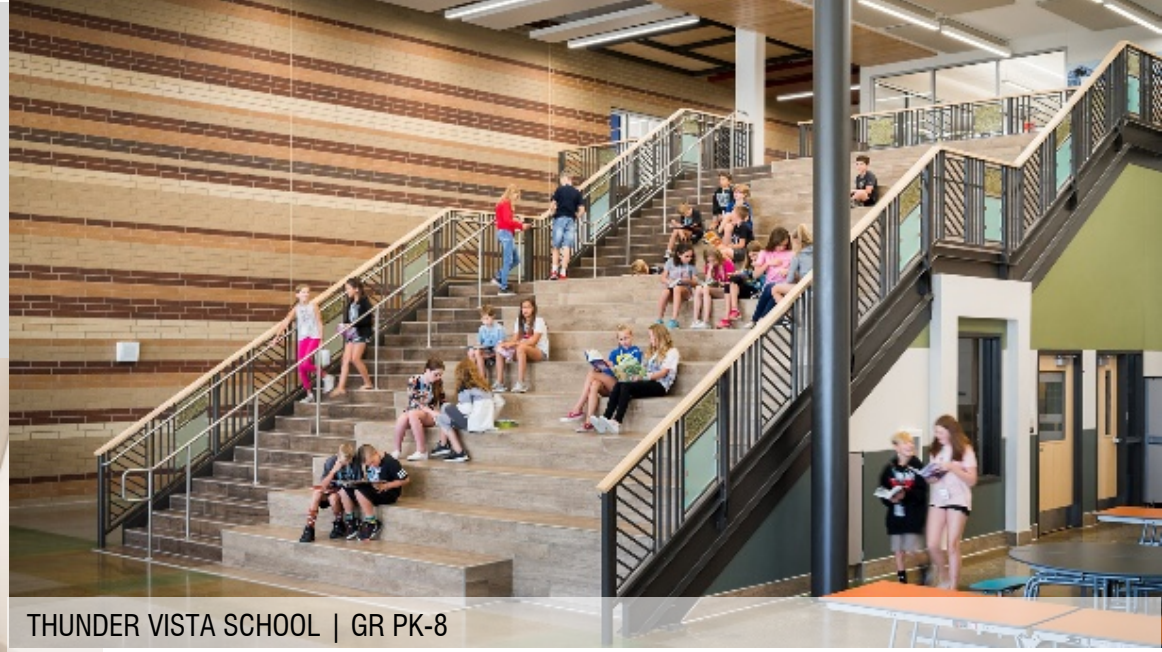
FITNESS CENTER

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

Benefits of a Community | Learning Stair:

1. Community and Collaboration
2. Playfulness and Creativity
3. Flexibility and Efficiency
4. Circulation and Wellness

HILDRETH ELEMENTARY SCHOOL | GR PK-5



THUNDER VISTA SCHOOL | GR PK-8

- *Capacity:* 100 students | Whole grade level | 3rd-8th
- *Uses (to replace existing Auditorium):* Presentations | Book shares | Skits | Socialization | Group collaboration

COMMUNITY STAIR

"A welcoming and collaborative learning environment where we plant the seeds and nurture the roots for a strong tomorrow."

Benefits of a Community | Learning Stair:

1. Community and Collaboration
2. Playfulness and Creativity
3. Flexibility and Efficiency
4. Circulation and Wellness

HONEYGO ELEMENTARY SCHOOL | GR PK-5

LAKE ELEMENTARY SCHOOL| GR 2-6

- *Capacity:* 100 students | Whole grade level | 3rd-8th
- *Uses (to replace existing Auditorium):* Presentations | Book shares | Skits| Socialization | Group collaboration

COMMUNITY STAIR

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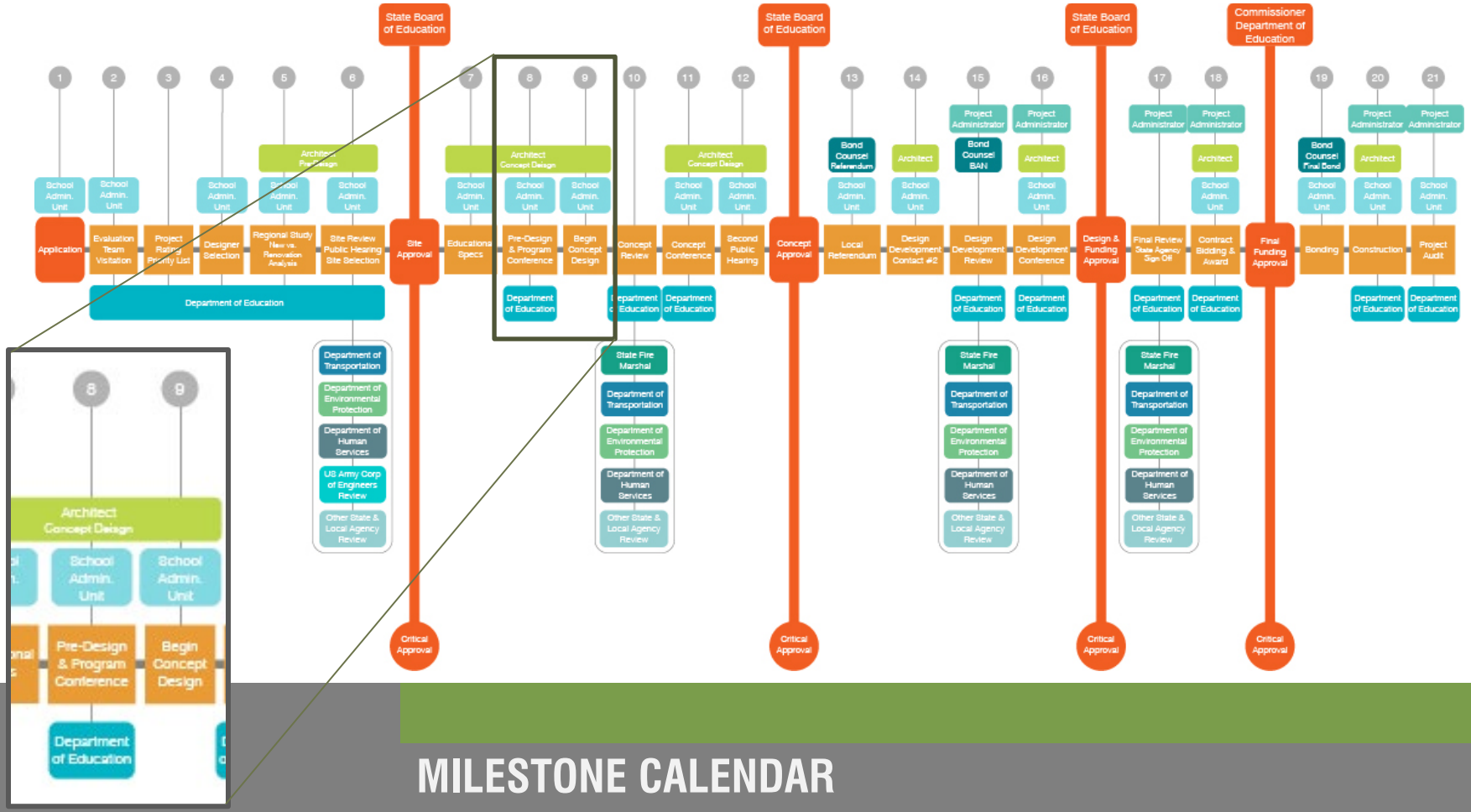
Next Meetings



MILESTONE CALENDAR

NEXT MEETING DATES:

- DOE Meeting: Suggest **Thursday, November 18, 2021, 10am -12pm (Zoom)**
- Building Advisory Committee Meeting: **TBD**

NEXT DOE MEETING TOPICS:

- Space Adjacency and Building Layout Discussion
- Energy / Sustainability Discussion
- Building Massing / Materials
- Estimate / Budget

NEXT MEETINGS/MILESTONES

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Questions?