

School Reopening Update

March 22, 2021

Building improvements scope of work

- ▶ Minimum threshold for occupancy
 - Filtration – increase to MERV-13
 - Ventilation – retro-commission air handling equipment, handle additional pressure from filters
 - CO₂ Monitoring – Ongoing quality control for ventilation
- ▶ Additional work while buildings are occupied
 - Disinfection – UV germicidal irradiation
 - Humidification – lower transmission rates
- ▶ Consistent with Harvard School of Public Health

Building completion update

- ▶ Wellness room exhaust, humidification & UV in process
- ▶ 207 Portable units deployed; 61 units staged
- ▶ All filters & retro-commissioning inspections complete
- ▶ Identified issues
 - ▶ Maintenance items for Honeywell
 - ▶ Capital improvements
 - ▶ Varying percentage of design capacity

Issue resolution

School	Grand Total	Honeywell / Maintenance Items					Potential Capital Improvements	
		In-Scope	Closed	In Progress	On Hold	O&M Progress	Under Investigation	Total Progress
Argenziano	18	12	12			100%	6	67%
Capuano	28	26	26			100%	2	93%
East Somerville	13	13	8		5	62%		62%
Healey	61	58	58			100%	3	95%
Kennedy School	52	52	52			100%		100%
West Somerville	19	18	18			100%	1	95%
Winter Hill School	95	15	14	1		93%	80	15%
Grand Total	286	194	188	1	5	97%	92	66%

Issue resolution

School	Status
Argenziano	F&T and Honeywell determining next steps
Capuano	F&T and Honeywell determining next steps
East Somerville	Honeywell parts on order
Healey	Scope defined, obtaining pricing
Kennedy School	No additional work needed
West Somerville	Scope defined, obtaining pricing
Winter Hill School	Scope defined for passive system, obtaining pricing

- ▶ Once all work is completed, buildings will be re-tested, and final report distributed



Interim occupation – achievement of low-risk

- ▶ Measurable, demonstratable calculations that:
 - ▶ Central systems deliver 4 air changes per hour with a minimum outside air of 20-percent
 - ▶ If not achieved, supplement with portable air filtration units for a total of 6 air changes per hour

Example Capuano calculations

Space	Volume (CU.FT)	Outside Air Volume (CFM)	Minimum Filtered /Recirculating air Volume (CFM)	Outdoor Air changes/ Hour	Total Air Change/Hour
Group 2 - 3.10.21					
Room 121	9255	405	1000	3	6
Room 122	11750	405	1500	2	8
Room 126	12096	405	1500	2	7
Room 133	9255	405	1000	3	6
Room 142	11750	405	1500	2	8
Room 145	11750	405	1500	2	8

- ▶ In general, portable units achieve thresholds for filtered air, building systems providing outside air

Occupancy / Construction schedule

	March					April				May					June				July				August					S
	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14	21	28	5	12	19	26	2	9	16	23	30	6
Argenziano School																												
Brown School																												
Capuano School																												
East Somerville																												
High School Mods																												
New High School																												
Healey School																												
Kennedy School																												
West Somerville																												
Winter Hill																												
	Occupy with Low Risk based upon centralized systems.																											
	Occupy with Low Risk based upon centralized systems (re-testing not complete).																											
	Occupy with Low Risk with portable units supplementing centralized systems.																											
	To be determined.																											
	Construction required; no occupancy allowed.																											



Ongoing plan reevaluation

- ▶ Overall risk profile
 - ▶ Testing program
 - ▶ Physical distancing
 - ▶ PPE availability & compliance
 - ▶ Building systems / air handling
 - ▶ Vaccinations
- ▶ DESE requirements



Questions

Construction schedule risk factors

- ▶ **Supply chain**
 - ▶ Constantly evolves
 - ▶ Actively managing
- ▶ **Labor force**
 - ▶ General availability
 - ▶ C-19 impacts
- ▶ **Schedule estimates**
 - ▶ Accuracy of projections
 - ▶ Quality of details
- ▶ **Design omissions**
 - ▶ Adds work
 - ▶ Higher risk given lack of detailed design
- ▶ **Unforeseen conditions**
 - ▶ Changes/Adds work
 - ▶ Higher risk given lack of detailed design
- ▶ **Complexity/Quantity of work**