

Lincoln-Eliot Elementary School and Newton Early Childhood Program

City Council Presentation | November 26, 2018



ARROWSTREET



Agenda

- » 150 Jackson Road existing building and site observations
- » Lincoln-Eliot Educational Programming
 - Visioning workshop summary
 - Space summary template
- » NECP Educational Programming
 - Visioning workshop summary
 - Programming summary
- » Benefits and disadvantages of co-locating Lincoln-Eliot and NECP programs
- » 687 Watertown Street existing building and site observations
- » Sequence of program movement
- » Feasibility guiding questions and next steps

150 Jackson Road / Newton, MA



150 Jackson Road / Initial Building Observations



- » Good educational spaces
- » Newer windows
- » Gymnasium needed for Elementary use
- » Accessible upgrades required
- » System upgrades or replacement required
- » Finish upgrades needed



150 Jackson Road / Site Opportunities and Challenges



- » Large site
- » Front entrance presence
- » Play spaces and activity areas



- » Traffic and parking
- » Neighborhood concerns



150 Jackson Road / Building Observation Summary

- » *Site/ Civil* - Anticipate overall improvements to support the project
- » *Exterior* - Generally in good condition; miscellaneous repairs as required
- » *Interiors* - Renovation to support the Educational program, upgrade finishes, add gymnasium, and address ADA accessibility
- » *Plumbing* - Replace plumbing system and address bathroom fixture quality, quantity, and distribution
- » *Fire Protection* - Incorporate needed fire protection/ suppression system
- » *HVAC* - System is functional, but has reached its life expectancy and should be replaced to improve building performance, thermal comfort, energy efficiency, and indoor air quality
- » *Electrical* - System is functional, but needs to be upgraded to accommodate additional electric loads. Tel/com and IT needs upgrade/ replacement.

Lincoln-Eliot / Educational Planning Workshop Summary



ORGANIZATION 50 years

	WILLIAM	PAUL	UPDENE
A GRADE LEVEL	5	5	5
B MULTIGRADE GROUPS	3	3	4
C THEMED MULTIGRADE	2	2	3
D MULTIGRADE CES	2	1	1
E W/ OPENLY CHOICED	2 1/2	1	1
F TEACHER LOOPING	2	3	3
G HOURS FROM TEACHER	3	4	4
H STAFFING FOR TEACHER	5	4	5
OTHER	-	-	-



JPS ES MODEL
 LATITUDE FOR INNOVATION
 EQUITY IS IMPORTANT
 ≠ CODE IS CUTTER
 LE TENS
 STABLE - DOES NOT MOVE
 - SINKS
 - NEEDS SOUND CONTROL
 - TEACHERS NEED TO BE IN CASE PROBLEM CITY
 - GRAB BAR
 - MANY OTHER SHAPING
 CROSS GRADE

- » Half day session with Lincoln-Eliot team
- » Design for flexibility and inclusiveness
- » Develop small learning communities, learning spaces arranged in clusters
- » Maximize teacher planning space to foster collaboration, interdisciplinary teaching
- » Maximize circulation spaces that offer opportunities for breakout spaces and group learning
- » Improve pick-up/ drop off and entry to provide better access and security for families and caregivers

Lincoln-Eliot / Programming and Enrollment

- » Enrollment = 465 Students / Grades K - 5
- » 20 - 23 Students per classroom
- » 24 Classrooms (22 Typical + 2 Special Education)

	K	1	2	3	4	5	Total
Number of Students	80	77	77	77	77	77	465
Average Number of students/CR	20	21	21	21	21	21	
Number of Classrooms per Grade	4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	22 - 24

DATE: 11/14/18

Yellow highlight indicates L-E specific program

Blue highlight indicates difference than other Newton Schools

DRAFT REVIEWED BY D. MORRISSEY 11/13/18

Lincoln-Eliot Preliminary Design Program

ROOM TYPE
CORE ACADEMIC SPACES
<i>(List classrooms of different sizes separately)</i>
Pre-Kindergarten w/ toilet
Kindergarten w/ toilet
General Classrooms - Grade 1-5
ELL Program
SPECIAL EDUCATION
<i>(List rooms of different sizes separately)</i>
Self-Contained SPED
Self-Contained SPED - toilet
Resource Room
Substantially Separate Classroom
Learning Centers (K-2; 3-5)
Breakout Rooms (small group/ individual instruction) 1/grade average. Extended Learning Areas
OT/PT
Sensory Room/ additional OT/PT
Safe Room/ Mindful Room 1/ academic floor
Speech + Language
Reading Program/ Literacy Room
Inclusion Facilitators (office for 6 adults; 150SF per person)
Literacy Specialist (Office + teaching area for 6 students)
Math Coach
Team Specialist + IEP Conf Room (12 adults)
Psychologist (Office, testing, therapy, storage)
Social Worker (Office, testing, conferences)
ART & MUSIC
Art Classroom - 25 seats
Art Workroom w/ Storage & kiln
Music Classroom / Large Group - 25-50 seats
Music Practice / Ensemble (Groups 4-10 students)
Music Practice / Ensemble (Groups 4-10 students)
HEALTH & PHYSICAL EDUCATION
Gymnasium
Gym Storeroom
Health Instructor's Office w/ Shower & Toilet

* Where discrepancy between Angier, Zervas, and Cabot, Lincoln-Eliot Target Program used Cabot

Lincoln-Eliot (Target Program) 465 Students			
ROOM NFA ¹	# OF RMS	area totals	Comments
	22 + 2 (SpEd)	20,700	
	1,200	4,800	
850	18	15,300	18 CRs in existing L-E school. Smaller SF classroom size due to potential existing conditions.
300	2	600	Due to larger ELL population
		10,775	
850	2	1,700	Difference due to higher needs and Title 1 school. Potential for District wide SpEd program
		0	
		0	
450	2	900	Currently 1 Learning Center in existing L-E
125	8	1,000	Currently 1 Small Group Instruction in existing L-E. Difference due to high needs, assume 1 shared breakout space per 2 classrooms
475	1	475	
450	1	450	
100	3	300	
150	2	300	
850	3	2,550	Currently 1 Reading Program in existing L-E. Difference due to higher needs and Title 1 school
450	2	900	Difference due to higher needs and Title 1 school
250	3	750	Difference due to higher needs and Title 1 school
250	3	750	Difference due to higher needs and Title 1 school
400	1	400	
150	1	150	
150	1	150	
		2,650	
1,000	1	1,000	1 Art Classroom currently in existing L-E
150	1	150	
1,200	1	1,200	1 Music Classroom currently in existing L-E
150	2	300	
		6,300	
6,000	1	6,000	
175	1	175	
125	1	125	

EXISTING NEWTON PUBLIC SCHOOLS								
Angier 465 Students			Zervas 490 Students			Cabot 480 Students		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		21,472			23,450			22,690
1,131	4	4,524	1,200	4	4,800	1,170	4	4,680
925	18	16,650	925	20	18,500	888	20	17,760
		0			0	General CR Room NFA is average		
298	1	298	150	1	150	250	1	250
		5,965			5,500			6,900
925	1	925	900	1	900	925	2	1,850
470	2	940	450	2	900	475	2	950
121	7	845	125	6	750	125	6	750
511	1	511	450	1	450	475	1	475
							1	
106	2	212	100	2	200	100	3	300
298	1	298	150	2	300	250	1	250
925	1	925	900	1	900	925	1	925
238	1	238	150	1	150	300	1	300
176	1	176	125	1	125	250	1	250
161	1	161	125	1	125	150	1	150
428	1	428	400	1	400	400	1	400
155	1	155	150	1	150	150	1	150
151	1	151	150	1	150	150	1	150
		2,608			2,725			2,575
1,000	1	1,000	1,000	1	1,000	1,000	1	1,000
178	1	178	150	1	150	150	1	150
1,168	1	1,168	1,200	1	1,200	1,200	1	1,200
162	1	162	150	2	300	150	1	150
100	1	100	75	1	75	75	1	75
		6,105			6,300			6,300
5,809	1	5,809	6,000	1	6,000	6,000	1	6,000
176	1	176	200	1	200	175	1	175
120	1	120	100	1	100	125	1	125

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Lincoln-Eliot Preliminary Design Program

ROOM TYPE	ROOM NFA ¹	# OF RMS	area totals	Comments
MEDIA CENTER			2,800	
Media Center / Reading Room	2,800	1	2,800	
DINING & FOOD SERVICE			6,960	
Cafeteria / Dining	3,400	1	3,400	
Stage	1,000	1	1,000	
Chair / Table / Equipment Storage	360	1	360	
Kitchen	1,700	1	1,700	
Staff Lunch Room (1/3 of staff = 60 staff/3)	250	2	500	
MEDICAL			510	
Medical Suite Toilet	60	1	60	
Nurses' Office / Waiting Room	250	1	250	
Examination Room / Resting	100	2	200	
ADMINISTRATION & GUIDANCE			3,225	
General Office / Waiting Room / Toilet	700	1	700	
Teachers' Mail and Time Room	Included in General Office			
Duplicating Room	Included in General Office			
Records Room	100	1	100	
Principal's Office w/ Conference Area	300	1	300	
Principal's Secretary / Waiting	Included in General Office			
Assistant Principal's Office	125	1	125	
Supervisory/ Intinerant teachers/ Extended Program	750	1	750	
Conference Room	250	1	250	
Guidance Office/ Storeroom				
SPED/ Specialist Work Room	400	1	400	Difference due to higher needs and Title 1 school
Teachers' Work Room	250	2	500	
Lactation Room	100	1	100	Difference due to needs of the population
CUSTODIAL & MAINTENANCE			2,080	
Custodian's Office	150	1	150	
Custodian's Workshop	375	1	375	
Custodian's Storage	375	1	375	
Recycling Room / Trash	400	1	400	
Receiving and General Supply	260	1	260	
Storeroom	320	1	320	
Network / Telecom Room	200	1	200	
Total Building Net Floor Area (NFA)			56,000	
Proposed Student Capacity / Enrollment			465	
Total Building Gross Floor Area (GFA) ²			84,225	
Grossing factor (GFA/NFA)			1.50	

Multi-Grade Gathering Space

* Where discrepancy between Angier, Zervas, and Cabot, Lincoln-Eliot Target Program used Cabot

Lincoln-Eliot (Target Program) 465 Students				
ROOM NFA ¹	# OF RMS	area totals	Comments	
		2,800		
2,800	1	2,800		
		6,960		
3,400	1	3,400		
1,000	1	1,000		
360	1	360		
1,700	1	1,700		
250	2	500		
		510		
60	1	60		
250	1	250		
100	2	200		
		3,225		
700	1	700		
Included in General Office				
Included in General Office				
100	1	100		
300	1	300		
Included in General Office				
125	1	125		
750	1	750		
250	1	250		
400	1	400		Difference due to higher needs and Title 1 school
250	2	500		
100	1	100		Difference due to needs of the population
		2,080		
150	1	150		
375	1	375		
375	1	375		
400	1	400		
260	1	260		
320	1	320		
200	1	200		
		56,000		
		465		
		84,225		
		1.50		
1,500	1	1,500	100 students at 15 SF per student	

EXISTING NEWTON PUBLIC SCHOOLS								
Angier 465 Students			Zervas 490 Students			Cabot 480 Students		
ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals	ROOM NFA ¹	# OF RMS	area totals
		2,770			2,875			2,830
2,770	1	2,770	2,875	1	2,875	2,830	1	2,830
		6,321			6,663			6,960
3,035	1	3,035	3,200	1	3,200	3,400	1	3,400
950	1	950	1,000	1	1,000	1,000	1	1,000
408	1	408	363	1	363	360	1	360
1,460	1	1,460	1,600	1	1,600	1,700	1	1,700
234	2	468	250	2	500	250	2	500
		569			510			510
73	1	73	60	1	60	60	1	60
306	1	306	250	1	250	250	1	250
95	2	190	100	2	200	100	2	200
		2,305			2,515			2,595
750	1	750	680	1	680	650	1	650
Included in General Office			Included in General Office			Included in General Office		
Included in General Office			Included in General Office			Included in General Office		
79	1	79	60	1	60	100	1	100
301	1	301	300	1	300	300	1	300
Included in General Office			Included in General Office			Included in General Office		
117	1	117	125	1	125	125	1	125
428	1	428	650	1	650	750	1	750
218	1	218	200	1	200	250	1	250
		1,785			1,865			2,080
102	1	102	125	1	125	150	1	150
0	0	0	0	0	0	375	1	375
583	1	583	147	3	440	375	1	375
712	1	712	650	1	650	400	1	400
Included above			Included above			260	1	260
78	2	156	200	2	400	320	1	320
232	1	232	250	1	250	200	1	200
		49,900			52,403			53,440
		465			490			480
		74,960			78,800			80,160
		1.50			1.50			1.50

Newton Early Childhood Program/ Programming and Enrollment

- » Enrollment = 305 students maximum/ Pre-Kindergarten (as of June 2018)
 - 104 students with special needs
 - 90 students who are typically developing
 - 111 students receiving related services
- » 16 students maximum per integrated classroom
- » 9 students maximum per STRIDE classroom
- » 14 - 17 classrooms total

	Integrated Classroom	STRIDE Classroom	Total
Number of Enrolled Students	192 - 224	18 - 27	210 - 251
Maximum Number of students/CR	16	9	
Number of Classrooms	12 - 14	2 -3	14 - 17

Newton Early Childhood Program/ Program Summary

Program Needs:

(based on NECP Ed Program August 2018):

- Maintain classroom student to teacher ratios
- Small group OT/PT and Speech spaces
- Dedicated spaces for screening and testing
- Workspace for OT/PT and Speech Therapists
- Administration and Guidance with several multi-sized conference rooms and specialist spaces
- Gross motor space

Program Wishes:

- Toilet rooms directly adjacent to classrooms
- Dedicated PE space
- All school/ large group gathering multi-purpose space/ indoor play area

Shared NECP and Lincoln-Eliot Site / Programmatic Synergies

Potential *benefits* of Lincoln-Eliot and NECP located on the same site:

- Shared learning opportunities
- Collaboration between Pre-K and Kindergarten teachers to facilitate student transition
- Shared administrative support, however will not reduce key personnel such as nurses guidance
- Some families may benefit when Pre-K students continue to Lincoln-Eliot Elementary School, however not all NECP students are in the L-E school district

Shared NECP and Lincoln-Eliot Site / Programmatic Synergies

Potential *disadvantages* of Lincoln-Eliot and NECP located on the same site:

- Educational spaces should be sized for each student cohort (for example, an elementary school sized gym may be too large/loud for Pre-K)
- Minimal program overlap (for example, Pre-K students eat in the classrooms so would not benefit from a shared cafeteria)
- Minimal benefit from age group interaction as Pre-K age students benefits more from interaction with High School age students
- Need separate entrances to avoid overwhelming Pre-K students. May be difficult to co-locate front offices activities with separate entries
- Minimal staffing overlap

Shared NECP and Lincoln-Eliot Site / Programmatic Synergies

Potential *constraints* of Lincoln-Eliot and NECP located on the same site:

- Significant traffic for pick-up and drop-off times
 - Need to separate pick-up/ drop-off activities due to age and program differences
 - Need to separate yellow bus and private vehicles
- Significant parking demand
 - High staff ratio for NECP
- Goal to target separate entrances for Lincoln-Eliot and NECP students due to age and size concerns of each population
- Additional building area to support both programs will limit site development opportunities for traffic/ parking
- Potential to increase project cost beyond budget

687 Watertown Street / Newton, MA



687 Watertown Street / Initial Building Observations



- » Large classroom spaces
- » Accessible upgrades required
- » System upgrades or replacement required



- » Finish upgrades needed
- » Aged modular classrooms



687 Watertown Street / Site Opportunities and Challenges



- » Small site
- » Traffic, parking and pedestrian circulation
- » Drop-off and pick-up



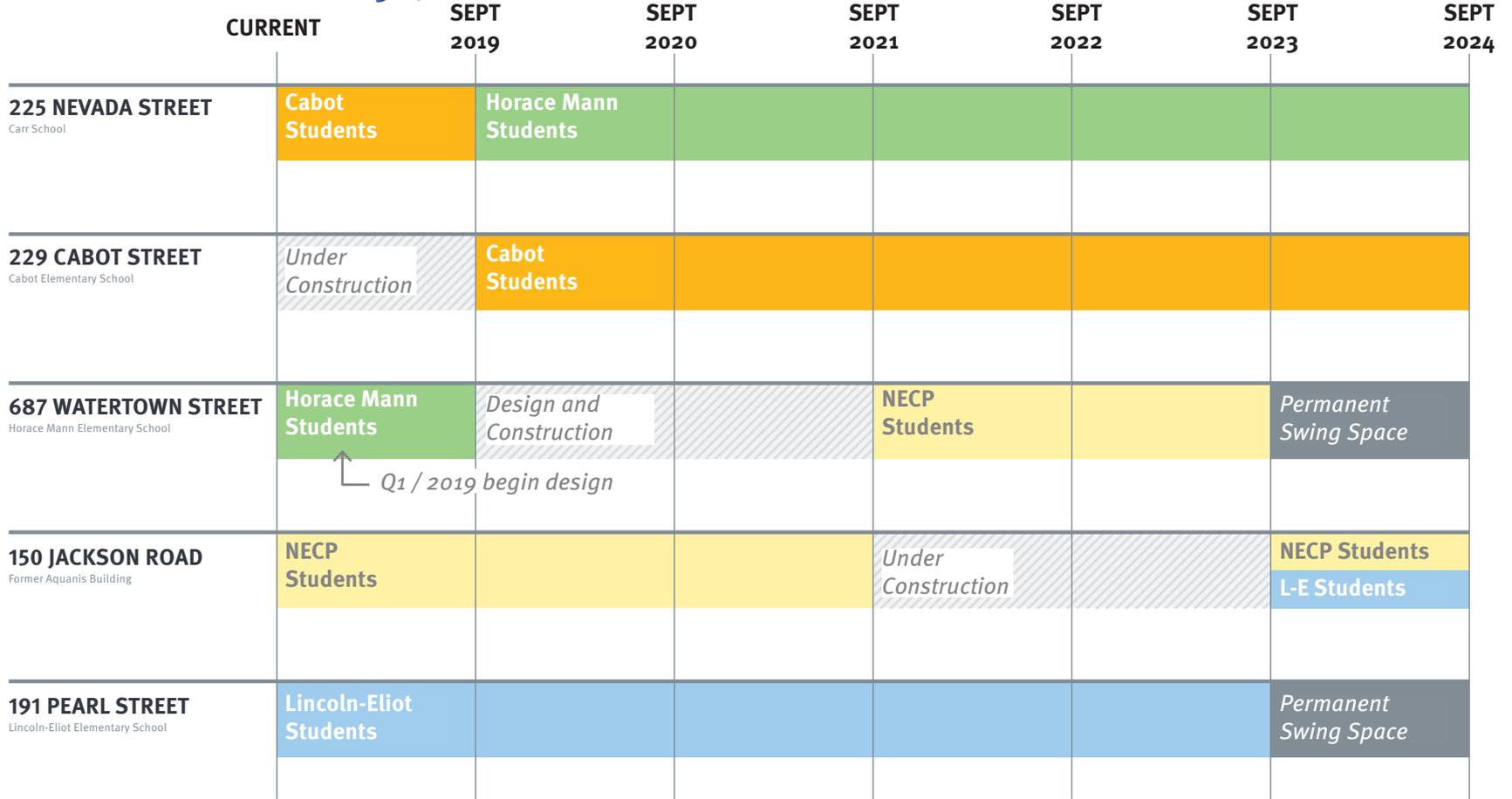
- » Front entrance presence
- » Play spaces and activity areas



687 Watertown Street / Building Observation Summary

- » *Site/ Civil* - Anticipate overall improvements to support the project and anticipated programming
- » *Exterior* - Structurally performing adequately with some noticeable floor deflection and spalling concrete
- » *Interiors* - Renovation to upgrade finishes, support the Educational program, and address ADA accessibility, including adding an elevator
- » *Plumbing* - Replace plumbing system and address bathroom fixture quality, quantity, and distribution
- » *HVAC* - System is functional, but has reached its useful life expectancy and should be replaced to improve building performance, energy efficiency, and indoor air quality
- » *Electrical* - System is functional, but needs to be upgraded to accommodate additional electric loads. Tel/com and IT systems need upgrade/ replacement.

Sequence of Program Movement / Co-located option Lincoln-Eliot and NECP at 150 Jackson Road



Sequence of Program Movement / Split program option Lincoln-Eliot at Jackson Road, NECP at Watertown Street

	CURRENT	SEPT 2019	SEPT 2020	SEPT 2021	SEPT 2022	SEPT 2023	SEPT 2024
225 NEVADA STREET <small>Carr School</small>	Cabot Students	Horace Mann Students					
229 CABOT STREET <small>Cabot Elementary School</small>	Under Construction	Cabot Students					
687 WATERTOWN STREET <small>Horace Mann Elementary School</small>	Horace Mann Students ↑ Q1 / 2019 begin design	Design and Construction		NECP Students			
150 JACKSON ROAD <small>Former Aquanis Building</small>	NECP Students			Under Construction		Lincoln-Eliot Students	
191 PEARL STREET <small>Lincoln-Eliot Elementary School</small>	Lincoln-Eliot Students					Permanent Swing Space	

Feasibility Study: Guiding Questions for Further Investigations

- » What improvements are necessary to accommodate the Lincoln-Eliot space needs at 150 Jackson Road for 465 students and 24 core classrooms?
- » Should Lincoln-Eliot and NECP co-locate at Jackson Road, or separate?
- » Is the use of 687 Watertown Street for NECP a temporary use or permanent location?
- » What are the traffic and parking impacts to both 150 Jackson and 687 Watertown?
- » What is the best use of the existing auditorium at 150 Jackson Road? Can it become a shared community resource in addition to serving the school's program needs?
- » What use, if any, can be located in the former Convent portion of the building? What building and system improvements are necessary to support the re-use?
- » What are projected scope and schedule for the proposed project?

Lincoln-Eliot Elementary School and Newton Early Childhood Program

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- » Discussion
- » For further information:

www.newtonma.gov/gov/building/capital_projects

www.lincolneliot-necp-projects.com



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