



City of Newton
Lincoln Eliot – NECP Project
Project Monthly Report

April 2019

The Global Leader in Managing Construction Risk

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1. Executive Summary

Executive Summary

This Project Manager's Report for the City of Newton's Lincoln Eliot-NECP (LE-NECP) Project submitted by **Hill International (Hill)**, covers activities for the month of April 2019.

During the month of April 2019, Hill provided the City with work plan and feasibility study progress updates, updated budget for feasibility study, schematic design and site plan approvals, budgetary cost analysis for site improvements and building repair costs, updated work plan and progress reports for expedited NECP at 687 Watertown Street site approval, progress update for the NECP at 687 Watertown Street preferred option selection, and notification of start of feasibility study for Lincoln Eliot (LE) at 150 Jackson Road.

On April 4, 2019, the LE-NECP School Building Committee convened to review: NECP at 687 Watertown Street Site Approvals progress, results of traffic study for NECP and Horace Mann School located at 687 Watertown Street, review feasibility study advancement including site and building plans, and discuss next steps in the project work plan. The Committee considered a vote to approve and authorize submission of NECP at 687 Watertown Street design for 5-58 Site Plan Approval and deliberated on aspects of the project designs including: traffic and parking needs/impacts, pedestrian circulation, F.A. Day Middle School impacts, student pick up/drop off practices and considerations, parent/student access to building, classroom layout and classroom toilet rooms, building plans and re-purposing interior spaces, and building security. Following deliberations, the Committee voted unanimously to submit the NECP at 687 Watertown Street Project for 5-58 Site Plan Approval. Input received during the meeting will be included in design for the project.

On April 10, 2019, representatives of Newton Public Buildings, Hill International Inc. (Hill), OPM, and Arrowstreet, designer, met with Newton's Design Review Committee and provided a feasibility study progress presentation for NECP at 687 Watertown St. The meeting included an overview of the NECP program, operations, and practices, results of traffic study for NECP and for the Horace Mann School located at 687 Watertown St., parking plan for NECP at 687 Watertown St. and current Horace Mann School parking counts and practices, review of feasibility study advancement including site and building plans, site/building circulation for the preferred scheme, HVAC system narrative, costs and life cycle payback, and options, cost, and life cycle payback for insulating the building envelop. Input received during the meeting will be considered in the advancement of design for the project and 5-58 Site Plan Approval.



On April 15, 2019, three borings were performed at 687 Watertown St. to obtain soil data and determine elevation of refusal.

On April 17, 2019, Public Buildings Department provided a project progress update to Public Facilities. No concerns were reported.

On April 19, 2019, 5-58 Site Plan Approval documentation for NECP at 687 Watertown St. was transmitted to the Design Review Committee for its May 1, 2019 meeting and consideration of Site Plan Approval vote.

On April 23, 2019, site design information was forwarded to Newton's Conservation Commission in advance of a project feasibility study report scheduled May 9, 2019.

On April 29, 2019, Public Buildings Department, Hill and Arrowstreet met to review a feasibility study cost estimate produced for NECP at 687 Watertown Street. The meeting served to align feasibility study proposed re-purposing scope and costs to the scope for repairs and budget included in Newton's 2019 Capital Improvement Plan (CIP).

During the month of April, Arrowstreet started work on feasibility study of Lincoln Eliot Elementary School at 150 Jackson Road.

Hill Invoice #PBO-02339.00-0000006 and Arrowstreet Invoice #725570 were approved and processed for payment.

Progress and Milestones Achieved

The following milestones were achieved over the month of April 2019:

- Complete traffic study and analysis for existing NECP at 150 Jackson Rd, proposed NECP program at 687 Watertown St., existing Horace Mann School at 687 Watertown St, existing Lincoln Eliot School at 191 Pearl St, and proposed Lincoln Eliot program at 150 Jackson Rd.
- Complete borings at 687 Watertown St.
- Design Review Team recommendation of 5-58 Site Plan Approval for NECP at 687 Watertown St.
- Lincoln Eliot-NECP School Building Committee unanimous vote to approve feasibility documentation and authorize submission to the Design Review Committee for NECP at 687 Watertown St 5-58 Site Plan Approval.
- Start feasibility study for Lincoln Eliot at 150 Jackson Rd.

Key Objectives

The key objectives and dates for the coming month are:

- Present feasibility documentation to the Design Review Committee for NECP at 687 Watertown St 5-58 Site Plan Approval.
- Conduct a Public Forum for abutter of the 687 Watertown St. property.
- Provide the Newton Conservation Commission a project introduction presentation and review basis of design for storm water management and understanding of River Protections Act and Wetland Protection Act impact and constraints.
- Meet with Newton Park and Recreation Department to review future Albemarle Park play area changes/improvements needed for NECP at 687 Watertown St.
- Perform test fit study for Lincoln Eliot at 150 Jackson Rd.

Financials

The LE-NECP budget includes multiple appropriations that total \$1,570,000. Contracts commitments include: Hill International for Owner Project Management services totaling of \$213,970, Other Feasibility Study Cost totaling \$2,000 for legal notices, etc., and Arrowstreet for Designer Services totaling \$1,197,930. Total commitments to date equal \$1,470,157. Based on the \$1,570,000 total appropriation, the project is under budget.

Schedule

The next milestone for the project is continuing the Site Plan Approval process with Design Review Committee presentation and vote May 1, 2019 for NECP at 687 Watertown Street.

Upcoming tasks include:

May 2019:

- Continue the 5-58 Site Plan Approval process for NECP at 687 Watertown Street Schedule by scheduling a public hearing with the City Clerk's Office.
- Establish a Total Project Budget for NECP at 687 Watertown Street
- Continue Feasibility Study for Lincoln Eliot School at 150 Jackson Rd.
- Confirm site drainage basis of design based on percolation test for NECP at 687 Watertown Street.

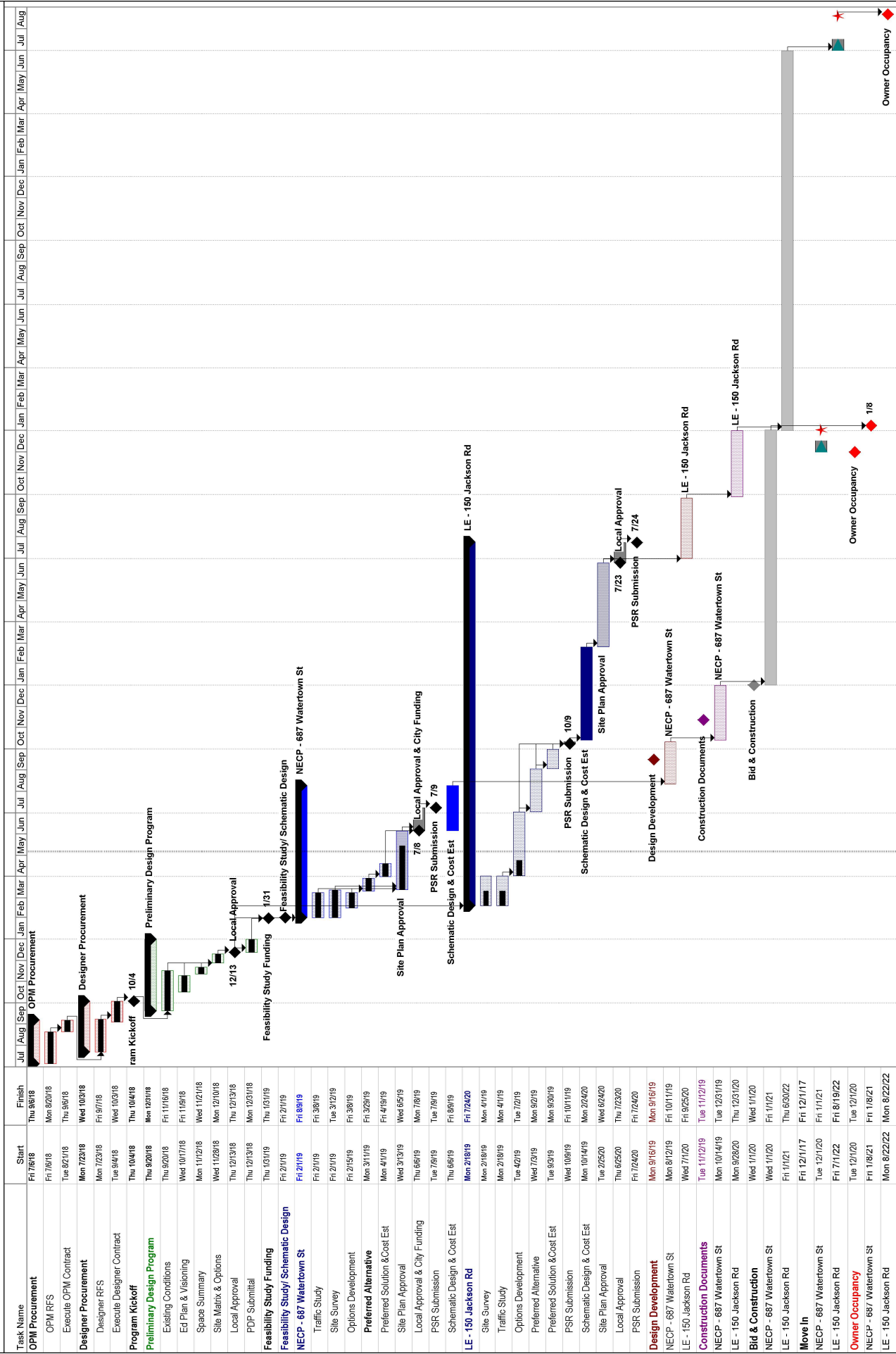


- Conduct a public forum, May 9, 2019 with abutters of the 687 Watertown St. property to report on proposed building re-purposing, NECP site/building designs and answer questions regarding NECP at 687 Watertown St.



2. Schedule

PROJECT WORK PLAN SCHEDULE





Site Plan Approvals Schedule

NECP at 687 Watertown Street Property



January 31, 2019, Amended 5/1/2019

Task:

Meeting Date:

Design Review Committee (DRC) Meeting

February 13, 2019

- Building Test Fit
- Preliminary Site Concept Options Plan

Development Review Team (DRT) Meeting

February 27, 2019

- Professional Team Introduction
- Review DRT Site Review Process/Criteria
- Preliminary Site Concept Options Plan

DPW - Transportation Division Meeting

March 13, 2019

- Preliminary Site Concept Options Plan
- Report -Traffic Study

Design Review Committee (DRC) Meeting

March 13, 2019

- Study Progress Report
- Site Plan Development and Preferred Option Evaluation

LE-NECP School Building Committee Meeting

March 14, 2019

- Study Progress Report
- Site Plan Development and Preferred Option Evaluation

Development Review Team (DRT) Meeting

March 27, 2019

- Progress Report, Site Plan Development and Preferred Option Evaluation

LE-NECP School Building Committee Meeting

April 4, 2019

- Progress Report, Site Plan Development and Preferred Option Evaluation
- **Vote** - authorize submission of documents to DRC for 5-58 Ordinance Site Plan Approval

Design Review Committee (DRC) Meeting

April 10, 2019

- Schematic Floor Plans and Preferred Site Plan

Public Facilities Committee Meeting

April 17, 2019

- Building Test Fit
- Progress Report, Site Plan Development and Preferred Option Evaluation

Design Review Committee (DRC) Meeting

May 1, 2019

- Schematic Floor Plans and Preferred Site Plan
- **Vote** - **5-58 Ordinance Site Plan Approval**

LE-NECP School Building Committee - COMMUNITY MEETING

May 9, 2019

- Study Progress Report - Floor Plans and 5-58 Ordinance Site Plan
- Public Comment

Conservation Commission Meeting

May 9, 2019

- Site Plan Review
- Basis of Design and Regulation Compliance

PUBLIC HEARING DOCKET & PUBLIC NOTICES ISSUED – City Council Clerk by

May 15, 2019

Public Facilities Committee Hearing

June 5, 2019

- Public Hearing on Proposed Site Development/Plan

Public Facilities Committee Meeting

June 19, 2019

- **Vote** - **5-58 Ordinance Site Plan Approval**

Finance Committee Meeting

June 24, 2019

- Preferred Schematic Report and Total Project Budget Request
- **Vote** – **Total Project Budget Appropriation**

City Council/School Committee Meeting

July 8, 2019

- Preferred Schematic Report Presentation
- **Vote** - **5-58 Ordinance Site Plan Approval**
- Total Project Budget Request
- **Vote** – **Total Project Budget Appropriation**



3. Financials

Project Budget and Cost Summary

Description	Total Budget	BUDGET			COST			CASH FLOW	
		Baseline Budget	Authorized Changes	Current Budget	Committed Costs	Uncommitted Costs	Total Project	Expenditures to Date	Balance To Spend
20 Construction									
PreConstruction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Escalation Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Estimating Contingency	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Alternates	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30 Architectural & Engineering									
Designer - Ed. Program Services	\$64,200	\$64,200	\$0	\$64,200	\$64,200	\$0	\$64,200	\$64,200	\$0
Designer - Ex. Conditions	\$96,000	\$96,000	\$0	\$96,000	\$96,000	\$0	\$96,000	\$96,000	\$0
A&E Feasibility Study	\$264,900	\$264,900	\$0	\$264,900	\$264,900	\$0	\$264,900	\$94,425	\$170,475
5-58 Site Plan Approval	\$121,320	\$121,320	\$0	\$121,320	\$121,320	\$0	\$121,320	\$14,110	\$107,210
Schematic Design	\$535,900	\$535,900	\$0	\$535,900	\$535,900	\$0	\$535,900	\$0	\$535,900
Design Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Documents	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Bidding / Negotiations	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Administration/Closeout	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Geotechnical Engineering	\$21,010	\$21,010	\$0	\$21,010	\$21,010	\$0	\$21,010	\$0	\$21,010
Geoenvironmental Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Site Survey	\$37,950	\$37,950	\$0	\$37,950	\$37,950	\$0	\$37,950	\$0	\$37,950
Site Approval	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hazardous Materials Sampling	\$8,960	\$8,960	\$0	\$8,960	\$3,960	\$5,000	\$8,960	\$3,960	\$5,000
LSP Services	\$57,500	\$57,500	\$0	\$57,500	\$57,500	\$0	\$57,500	\$0	\$57,500
Traffic Studies	\$67,690	\$67,690	\$0	\$67,690	\$52,690	\$15,000	\$67,690	\$0	\$67,690
OtherCosts (Convent Reuse Eval)	\$28,500	\$28,500	\$0	\$28,500	\$0	\$28,500	\$28,500	\$0	\$28,500
Printing (Over the Minimum)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Testing & Inspections	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Reimbursable Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,303,930	\$1,303,930	\$0	\$1,303,930	\$1,255,430	\$48,500	\$1,303,930	\$272,695	\$1,031,235
40 Administrative Costs									
OPM -Ed. Program Services	\$43,140	\$43,140	\$0	\$43,140	\$43,140	\$0	\$43,140	\$43,140	\$0
OPM Feasibility Study/Schematic Design	\$155,830	\$155,830	\$0	\$155,830	\$155,830	\$0	\$155,830	\$1,693	\$154,138
OPM Design Development	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Construction Documents	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Bidding	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Construction Adm/Closeout	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM: Cost Estimates	\$15,000	\$15,000	\$0	\$15,000	\$15,000	\$0	\$15,000	\$0	\$15,000
OPM Reimbursables & Site Approval Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commissioning	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Admin Costs	\$2,000	\$2,000	\$0	\$2,000	\$757	\$1,243	\$2,000	\$757	\$1,243
Utility Fees	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Legal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Testing & Inspections	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$215,970	\$215,970	\$0	\$215,970	\$214,727	\$1,243	\$215,970	\$45,589	\$170,381
50 Furniture, Fixtures and Equipment									
Furniture, Fixtures and Equipment	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Technology	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Sub-Total	\$1,519,900	\$1,519,900	\$0	\$1,519,900	\$1,470,157	\$49,743	\$1,519,900	\$318,284	\$1,201,616
70 Project Contingency							Remaining		
Construct Contingency (Hard Cost) (5%)	\$0	\$0	\$0	\$0		\$0	\$0		\$0
Owner's Contingency (Soft Cost) (5%)	\$50,100	\$50,100	\$0	\$50,100		\$50,100	\$50,100		\$50,100
Subtotal	\$50,100	\$50,100	\$0	\$50,100		\$50,100	\$50,100		\$50,100
Project Total	\$1,570,000	\$1,570,000	\$0	\$1,570,000	\$1,470,157	\$99,843	\$1,570,000	\$318,284	\$1,251,716



4. Meeting Minutes

Lincoln Eliot School - NECP School Building Committee

Meeting: March 14, 2019, 6PM

Location: Room 210, Education Center, 100 Walnut St, Newton

Attendees: Jonathan Yeo*, Rebecca Grossman*, Liam Hurley*, Margaret Albright*, Kathy Shields*, Chris Lessard*, Josh Morse*, Nancy Ferrari*, Alison Leary*, Diana Fisher Gomborg*, Kathleen Browning*, Peter Barrer, Alex Valcarce

** - Denotes Voting Member*

Professional Team: Meryl Nistler, Jessica Bessette – Arrowstreet (AST)
Mary Mahoney – Hill International (Hill)

Guests:

The meeting was called to order at 6:10PM.

1. Feasibility Study – NECP at 687 Watertown Street 5-58 Site Plan Approvals:
 - a. Alex Valcarce reported on NECP at 687 Watertown Street 5-58 Site Approval meetings with the Development Review Team (DRT) on February 27, 2019 and Design Review Committee (DRC) on March 13, 2019. Both meetings provided a design progress presentation that included site plan advancement, traffic and parking considerations, and conceptual floor plans. The DRC meeting included a tour of the 687 Watertown Street site and building and discussions regarding heating system options and building envelope insulation considerations. The DRT and DRC progress presentations were well received and provided excellent input and considerations for design advancement.
 - b. Alex Valcarce reported on a transportation meeting held with representatives of the Development Review Team, Department of Public Works, School Department Transportation, Public Buildings Department, Hill, and Arrowstreet (AST) and its traffic consultant MDM to review data gathered during project traffic study and methods to address traffic, site circulation, and parking for NECP at 687 Watertown Street.
 - c. Alex Valcarce reported on preliminary discussions with Parks and Recreation regarding NECP at 687 Watertown Street and options for NECP play structure locations within Albemarle Park.
2. Feasibility Study – NECP at 687 Watertown Street Progress Report
 - a. AST reported that traffic field observations were performed for Lincoln Eliot School at 191 Pearl Street, NECP at 150 Jackson Road, and Horace Mann School at 687 Watertown Street and preliminary report issued.
 - b. Topographic Survey was performed at 687 Watertown Street and 150 Jackson Road.
 - c. The NECP program and practices were briefly reviewed noting the difference in operations as compared to Elementary Schools based on student age, limited independence, educational needs, support services, and other services offered to the community throughout the day and how the operations impact site and building development needs.
3. Feasibility Study – NECP at 687 Watertown Street Site/Building Plan Development
 - a. Site survey and topography data was reviewed, including plans to maintain the existing parking lot area for staff parking, need to address steep topography transitions across the site, environmental impacts due to the proximity of Cheese Cake Brook. Pedestrian and



vehicular access to and around the site was reviewed and safety considerations for school department transportation and guardian student drop-off/pick-up.

- b. Development Option –
 - i. AST reviewed the development and evolution of site plan options for NECP at 687 Watertown St. The site plan has evolved through five layout options with adjustment and refinement to the existing preferred options based on site constraints, operational needs, educational program, and safety considerations. The current preferred site plan option fits all NECP program needs on site and includes the operation for pedestrian access between the Barry Boys and Girls Club and 687 Watertown Street to provide additional site synergies for each program and Albemarle Park.
 - ii. The proposed concept for the building and site includes moving the main building entry to face Albemarle Rd with an outdoor entry plaza to provide grade access into the lower level of the building. Removing the existing modulars attached to the building and constructing a one way van only drop-off/pick-up lane around the back of the building. Vans would entry on Albemarle Rd. and exit on Watertown St. NECP play area would be located in the existing Horace Mann play area and existing park play structures that are not age appropriate or accessible for NECP students would be located to an adjacent Albemarle park area. The existing parking lot would remain and be designated staff only with cars allowed to enter before school and depart after school to maintain safety for school transport vans and student access to the outdoor plat area. The existing single handicap parking space and blue zone along Albemarle Rd would be changed to (7) parallel parking spaces with certain spaces with accessible designation. An added on-site parking area alternate is being considered within the existing lawn area along Watertown St. and the option to convert this alternate lot to a future building addition if expansion is needed.
 - iii. Site Impacts and Required Improvements were reviewed including but not limited to: drainage system improvements with treatment/retention components, re-paving site and adjusting sidewalks, new dumpster pad, new transformer, adjusting and flattening site grades at multiple locations for site/building accessibility and for van discharge/loading.

Committee discussion ensued regarding the need to consider the NECP summer program and impacts of Parks and Recreation summer programs at Albemarle Park in the traffic study and site plan. Providing a pedestrian connection and safe walking route between the 687 Watertown St. property and Boy's and Girls' Club having opportunities for both sites and option for providing a safe walking path to the school, school parking lot and Albemarle Park were discussed.

Current use of 687 Watertown Street for polling and whether polling use can work within the NECP program use.

Use of the south bound drive of Albemarle Rd. for parking, access from the sound bound Albemarle Rd. drive to 687 Watertown St. and the park and general consensus that pedestrian bridge(s) over Cheese Cake Brook should be constructed. Day Middle School students who traverse Albemarle Rd and 687 Watertown St. site walking to and from school and park user impacts to NECP site use and whether a bicycles path along Albemarle Rd. should be considered.

Alternate parking proposed on site along Watertown St. and whether the added (12) parking spaces is worth the capital costs and environmental impacts with a general consensus that the parking alternate lot should be included for evaluation and 5-58 Site Plan Approvals documentation.



Committee discussions continued noting concern with school transportation vans existing the site directly onto Watertown St., the heavy traffic on Watertown St. and safety with vans exiting left and crossing traffic lanes, proximity to lighted intersections on Watertown Street and possible van back-up, and hours for van arrival/departure avoiding peak commuting times.

iv. Building Plans

1. Floors plans were reviewed, noting that NECP's Educational Program was used as the basis for space needs and building layout.
2. Main entry and main office will be at the lower level in the space that currently is the gymnasium. Entry will face Albemarle Rd. and will include and outdoor patio and glass wall assemblies to bring natural light into the space and create prominence for the entry. A new stair to the second floor to improve interior circulation options to all three floors. Centrally located elevator servicing all three floors positioned midway between the main office and van drop/pick-up door.
3. Mid-level (second floor) including van drop/pick up entry and exit with Nurse's Suite adjacent for ease of access in an emergency and supervisory presence on the second floor. Second floor also provides access to the outdoor NECP play area.
4. Each floor plan was reviewed noting the classroom locations, access to toilet facilities), educational support spaces, circulation paths, and access to the outdoor play area.
5. Classroom layout and shared support space concepts on the third floor were reviewed, including interconnecting student toilet training rooms and classroom connected support breakout spaces, and classroom features such as sinks and furnishings.

Committee discussion ensued regarding classroom layouts and direct access to student toilet rooms, classroom configurations and wall height/assemblies for student toilet rooms, and location of staff toilets with a general consensus that student toilet wall height/assemblies require further evaluation.

i. HVAC Systems – two options considered based on the system requirements previously provided by DRC and Public Buildings Dept.

1. Variable Refrigerant Flow (VRF) – providing VRF units in every room, (6) on grade condensing units for air conditioning needs, (4) rooftop outdoor air supply units, and duct system for supply and return.
 - a. Impacts and costs – new roof dunnage required to support fresh air units, duct penetrations throughout, on grade area for condensers, zero combustion from source equipment. = \$48/sf
2. Hot/Chilled water fan coil system – providing fan coil units in every room, single chiller, (2) new low pressure hot water boilers, hot/chilled water circulation pumps, (4) rooftop outdoor air supply units, and duct system for supply and return.
 - a. Impacts and costs - new roof dunnage required to support fresh air units, duct penetrations throughout, on grade area for condensers, indoor mechanical space for boilers, uses fossil fuels for boilers. = \$51/sf

ii. Building Insulation System and various approaches to exterior applied insulation/finish systems. Options for assemblies and exterior finish and associated



s.f. costs were discussed. Cost/benefit analysis will be included for insulation system options.

4. Feasibility Study – NECP at 687 Watertown Street Site Plan Approvals Schedule
 - a. NECP at 687 Watertown Street Site Plan Approvals Schedule was reviewed with Hill noting the addition of a Public Facilities presentation on April 3, 2019.
 - b. The next LE-NECP School Building Committee (SBC) scheduled April 4, 2019. SBC members requested that documents to be considered at the April 4, 2019 meeting should be forwarded to the Committee a few days prior to the meeting.
5. Minutes for the School Building Committee meetings conducted January 31, 2019 were considered.

Motion: On a motion by Kathy Shields, seconded by Chris Lessard, the members of the Committee voted unanimously to approve the meeting minutes for January 31, 2019.

The School Building Committee adjourned the meeting at 8:26 PM.

Next meeting of the School Building Committee will be held Thursday, April 4, 2019, 6PM, in room 210 at the Education Center, 100 Walnut Street, Newton.

To the best of my knowledge, these notes are a fair representation of the items discussed at the meeting. Additional items or corrections should be brought to the attention of the writer. Submitted by: Mary Mahoney 3/15/19

Handouts:

- SBC Meeting Agenda for March 14, 2019
- SBC draft meeting minutes for January 31, 2019
- NECP Site Plan Approval Schedule, amended March 1, 2019

Newton Lincoln Eliot School - NECP Project

**Design Review Committee (DRC) – NECP at 687 Watertown Street
April 10, 2019, 6:00pm, Newton Public Library, 3rd floor meeting area**

Attendees: Amy MacKrell*, Jonathan Kantar*, Marc Resnick*, Peter Barrer*, Carol Schein*, Ambrose Donovan*, Thomas Gloria*, Ellen Light*, Anne Cedrone*, Tom Enselek*, Andrea Kelley, Steven Siegel, Joshua Morse, Robert Hnasko

* - Denotes Voting Member

Professional Team:	Meryl Nistler, Jessica Bessette	-	Arrowstreet (AST)
	David Perreira, Keith Lane	-	Garcia, Galuska &
	DeSousa (GGD)		
	Mary Mahoney	-	Hill International, Inc.
	(Hill)		

Guests: Alejandro Valcarce, City of Newton, Public Buildings
Diana Fisher Gomberg, Newton School Committee
Julie Kirrane, Kathleen Browning, Newton Public Schools

Action Items are denoted in bold/italic font.

Meeting opened at 6:05pm with introduction of attendees for the Design Review Committee (DRC), Lincoln Eliot-NECP (LE-NECP) Project Professional Team, and guests.

Items:

2. Arrowstreet (AST) reviewed an agenda for the NECP at 687 Watertown project update and Site Plan Approvals report with a list of meetings held with City Departments, working groups, and School Building Committee since the last DRC meeting held March 13, 2019.
3. NECP at 687 Watertown St. program summary and design guidelines were reviewed including:
 - a. Program is District-wide and includes a half day program, full day program and separate intervention and therapy program times.
 - b. Student age and abilities result in a car-centric drop-off and pick-up for full day, half day and therapy programs. Most students are transported by private vehicle or school van. Van transport is provided by the School Dept. based on a child's IEP.
 - c. The program needs a contained outdoor play area with age and access appropriate configuration that is close to the building.
 - d. Private drop/pick up includes parent escorting children to and from the building at arrival and dismissal and for therapy programs that occur throughout the day.
 - e. Drop/pick up vehicle counts: school vans 12-15 and private vehicles 45-65.
 - f. Staff vehicles: 85-100 with various arrival and departures based on the half day, full day and therapy only schedules.
 - g. Occupancy: 305 total students at ages 2.9yrs to under 6yrs and 85-105 staff.
 - h. Program arrival time is 8:30am-9:00am, dismissal times are 12:00pm-12:30pm, 1:30pm, and 2:30pm, and therapy only occurs intermittently throughout the day.
 - i. Building Size: 38,000 SF on three levels. Grade entry is available at the lower and mid-levels of the building.
 - j. Plan calls for the removal of all attached modular classrooms.



- k. Goal is to create 14-18 classrooms for current and future enrollment.
 - l. Design for flexibility, inclusiveness, and with an understanding of mobility and sensory needs of the population.
 - m. Re-purposing need include designing NECP based pick-up/drop off, access to building entries, access throughout the building and safe environments for families and caregivers
 - 4. Traffic – a full traffic study/report was performed that examined the activities of NECP at 150 Jackson Rd, Horace Mann Elementary School at 687 Watertown St, and projections for NECP at 687 Watertown St.
 - a. Trip Generation projections for future NECP program at 687 Watertown St were reviewed:
 - i. Morning drop off period from 8:15am – 9:15am will experience the highest vehicle count/activity with a total of 151 vehicles entering the site/surrounding area between staff, student auto, and school vans, and 99 vehicles departing.
 - ii. Dismissal experiences lower trip generation due to the multiple release times, 12:00pm, 1:30pm, and 2:30pm, related to school programs.
 - iii. Existing Horace Mann Elementary School and proposed NECP at 67 Watertown St. trip generation/activities were compared, with Horace Mann having markedly higher and more concentrated trips during the morning arrival and afternoon departure.
- 5. Parking Plan:
 - a. Projected NECP parking space demand: 85-100 staff and 45-65 Parent/Guardians. School transportation does not require parking as the vans depart upon student discharge.
 - b. Onsite parking, existing and proposed add, provides an opportunity for 30 spaces.
 - c. Local public parking includes 93 angled spaces on Albemarle Rd, and public parking on Watertown St and neighboring side streets that can provide up to 265 spaces.
 - d. Horace Mann staff parking practices were reviewed including limited onsite parking (20 spaces) and use of street parking surrounding the site.
 - e. NECP parking management plan will ensure public parking closest to the building is available for parents/guardians.
- 6. Site and Circulation for the Preferred Scheme:
 - a. The scheme includes maintaining the existing Albemarle Rd vehicle entry drive and onsite parking area and adds a Van drop/pick up zone within a vehicle departure lane around the back of the building exiting on Watertown Street.
 - b. Controls will be in place to limit vehicle site access to staff prior to student arrival and to vans during arrival and departure during school operations. The entry drive will be restricted to vehicles by physical barrier during the school day to ensure safe travel for student to the outdoor play area.
 - c. Building Entries – (4) on grade access points will be provided
 - i. The building main entry will be moved to face Albemarle Rd, with grade level entry via an outdoor plaza to the lower level of the building.
 - ii. Public access throughout the day will be at the new main entry at the lower level on Albemarle Rd.
 - iii. During arrival and dismissal, entries to the mid-level floor are provided on the north, south, and east sides of the building.
 - 1. The Park side (north) entry to the mid-level floor will include an adjacent exterior ramp and sidewalk to provide a fully accessible entry route from Albemarle Rd. and Albemarle Park.



2. Van entry/exit is provided at the back of the building on grade to the mid-level of the building.
 3. Watertown St. exterior door provides sidewalk entry to the mid-level of the building.
 - d. A preliminary landscape plan was presented that included saving numerous mature trees along Albemarle Rd., Albemarle Park, and the existing parking lot. Additional landscape features will be provided to create natural buffers.
 - e. Scope for site improvements were reviewed including site grade adjustments, accessibility improvements at sidewalks and by adding an exterior ramp at the Park side school entry, access improvement to the outdoor play area, and adjustment to the Albemarle Rd. exterior patio to allow on grade access from the sidewalk to the main entry.
 - f. Flood Considerations:
 - i. The City Flood Plain District shows the limits of impact to be the banks of Cheese Cake Brook. Albemarle Rd and the 687 Watertown Street site/building are outside the flood plain.
 - ii. FEMA National Flood Hazard Layer FIRMette identifies the site as within an area of minimal flood hazard which means it is outside of the 100-year flood plain.
 - iii. J. Morse reported that the building has never experienced flooding in the past.
 - g. Site Topography and Civil Engineering considerations were reviewed including steep grade change along the Albemarle Rd boundary, 200 ft. Riverfront Area and DEP Storm Water Management requirements including limiting disturbance, minimizing increase to impervious cover, and installing storm water management, treatment, and infiltration systems. A meeting is schedule with the Conservation Commission on April 18th to review site plan schemes and site requirements.
7. Floor Plans – NECP Fit Plan
 - a. Each floor plan was reviewed including floor layout, space use designations, circulation, and accessibility improvements proposed.
 - b. At the lower level a new main entry/main office area will be created to provide a grade entry to the main office. The lower level also includes therapy/OT/PT areas, meeting space and a street presence on Albemarle Rd. The lower level will have a centrally located stair to the mid-level and elevator to all floors.
 - c. The mid-level features (3) grade level entry points, (2) stairs to the upper level, and infill at the existing gymnasium area to create (2) new classrooms. Younger students and students with mobility/medical needs will be placed on the mid-level with multiple grade level entries, proximity to the van drop/pick up area and proximity to the Nurse Area. Kathleen Browning reported that currently there are no children in the program that require a wheel chair but that from year to year children's needs change and the program adapts to all student service needs.
 - d. The upper level features (13) classrooms with shared toilet training rooms, program support spaces and small group instruction areas. A stair at each end of the floor provides pathway to grade level egress doors on the mid-level floor below.
 - e. Accessible public/staff toilet rooms on each floor.
8. Egress and Emergency Response Plans
 - a. Proposed emergency egress paths, length of travel and exit door locations with NECP projected floor occupancy was presented for each of the three building floors at 687 Watertown St.
 - i. Upper level floor includes 187 students with a single corridor to (2) stairs at each end of the classrooms that lead directly to exterior doors and grade level discharge from the mid-level floor below.



- ii. Mid-level floor includes 64 students with (3) exterior doors at each end of the main corridors with on grade exit.
 - iii. Lower level includes student therapy and testing spaces so no full time student occupancy. Accessible egress is available at the main entry.
 - b. Existing emergency egress paths, length of travel, exit doors and emergency response plan for NECP at 150 Jackson Rd was reviewed.
 - i. The primary egress point for both the lower level and upper level is from a back stair to a Jackson Rd exit door with lengthy exterior ramp that discharges to the parking lot. Both occupied levels egress to the same door/ramp location as the Fire Department prohibits use of the Walnut Park exit at the upper level due to it being the department's primary emergency response location to the Fire Alarm Control Panel.
 - ii. Upper level floor includes 96+ students to a single stair down one floor to the Jackson Rd exit door and ramp.
 - iii. Lower level floor includes 88 students to the same stair area to the Jackson Rd exit door and ramp.
 - iv. Upper level corridor length to the stair is up to 224ft and requires additional egress length down one floor and out the exterior ramp.
 - v. Kathleen Browning, NECP Director, review current emergency procedures at 150 Jackson Rd that include student assistance by all staff, educational, administration, and support to ensure the quick and safe evacuation of all occupants. Parents are also consulted regarding where children should be placed and what means will be used to evacuate. Emergency procedures are checked and reviewed at the start of each school year and drills conducted throughout the year to ensure performance and safety.
9. Entry Plans for 687 Watertown Street were reviewed including (4) grade level accessible entries: (1) on the lower level and (3) on the mid-level. Morning arrival and afternoon dismissal will continue the practices used at 150 Jackson Rd.
 - a. Entry doors at the main office, park side entry, Watertown St. entry and van drop will be automatically unlocked at morning arrival time and students are escorted to classrooms by parent/guardians or staff from the van drop.
 - b. At start of school all doors are locked and public enter at the main office following request to enter by air-phone camera/speaker and door unlock by the main office.
 - c. Afternoon dismissal will work similar to the morning arrival.
 - d. Kathleen Browning noted that staff monitor building activities during arrival and dismissal and that CCTV cameras will also provide oversight of the open door periods. Ms. Browning also noted that only a small number of parents/students arrive with strollers and that typically stroller are left outside the building.
10. Options for supplying natural light to subgrade areas within the lower level were reviewed including addition of light wells at multiple locations and adding glass to space partitions to provide borrowed light within interior spaces. Lower level perimeter subgrade elevation at the north and south building section were reviewed. These areas would require substantial earthwork and retaining walls to expose wall area for windows. The center section does provide an opportunity for window/clerestory elements and the design will maximize this option and utilize borrowed light elements for the subgrade areas.
11. HVAC Systems – two options were considered based on the system requirements previously provided by DRC and Public Buildings Dept.
 - a. Variable Refrigerant Flow (VRF) – providing VRF units in every room supported by outdoor condensing units. System is low energy use, provides best local control, and is all electric providing zero combustion from source equipment.
 - i. Mechanical System Payback Summary: System results in low life cycle cost. Savings over a 30-year period compared to the baseline system is \$524,600



- ii. Baseline System: hot water/dx cooling VAV-RTU systems with boiler
 - b. Hot/Chilled water fan coil system – providing fan coil units in every room, single chiller, (2) new low pressure hot water boilers. System uses fossil fuel for boilers and is not as efficient as the VRF system.
 - i. System has an initial added cost of \$163,354 above the VRF system.
 - ii. Mechanical System Payback Summary: System has initial higher costs and is not as efficient as VRF, so savings over a 30-year period compared to the baseline system is \$110,787.
 - iii. Fan coil units will increase ceiling height constraints/issues for lower level spaces with existing exposed concrete ceiling.
 - c. Mechanical system payback summary was presented that included gross capital investment, annual gas and electric use and costs, annual utility usage and cost/s.f., maintenance costs, annual savings from the baseline system, total life-cycle savings, and discounted payback in years.
 - i. Variable Refrigerant Flow (VRF) = \$524,606 Total Life-Cycle Savings with 2yr Discounted Payback.
 - ii. Hot/Chilled water fan coil system = \$110,787 Total Life-Cycle Savings with 18yr Discounted Payback.
- 12. Building envelop and energy efficiency upgrades:
 - a. Windows were replaced somewhat recently with efficient window systems so existing to remain.
 - b. Roof will be replaced and insulation increased to meet building code requirements.
 - c. Exterior Wall Insulation - two approaches to exterior applied insulation/finish systems were presented:
 - i. Exterior Insulation Finish System (EIFS): Examples provided and analysis based for existing brick exterior walls at the upper level.
 - 1. Energy efficiency: System assembly components and related R-Values were presented with in a Total Assembly R-Valued = 12.18.
 - 2. Estimated Construction Costs = \$819,294.
 - 3. Payback 48 years
 - 4. System will reduce size and energy usage of mechanical systems which was included in the payback analysis.
 - ii. Insulated Rain Screen System: Examples provided and analysis based on a metal clad system for existing brick exterior walls at the upper level.
 - 1. Energy efficiency: System assembly components and related R-Values were presented with in a Total Assembly R-Valued = 12.53.
 - 2. Estimated Construction Costs = \$1,513,736.
 - 3. Payback extends well beyond 48years based on high initial costs.
 - d. Building envelope system payback summary was presented that included envelope system R-Value and U-Values, capital investment, annual electric use and costs, annual utility cost/s.f., annual savings from the baseline system, total life-cycle savings, and discounted payback in years.
 - i. Baseline System – Existing to Remain
 - ii. EIFS System combined utility savings = \$5,325
 - iii. EIFS System Total Life-Cycle Savings = <\$131,503> for a 30-year study period (<\$> equals a negative number).

Committee discussion ensued regarding the Insulated Rain Screen system assemblies used in the costs and payback analysis. Metal panel assemblies are an option but costs are higher than other rain screen options. Other less expensive but project appropriate screen material options should be

considered and associated cost/payback analysis provided. Life span of EIFS and rain screen systems is a consideration when payback extends past 30 years as system warranty is typically 25 years. EIFS system is the least expensive initial cost assembly and payback is 48 years so insulation system consideration is not just an economic decision but a global/long term impact decision.

Committee discussion continued regarding rain screen assembly insulation thickness and method of application. Additional investigation and analysis is needed with consideration of 4" of continuous insulation applied over the entire exterior wall surface. This application could double the R-value being used in the analysis. Methods of assembly for installing continuous insulation were discussed.

AST will review the Rain Screen finish material options and assemblies to decrease initial costs, increase efficiency, and maximize payback. Cost/payback analysis to be provided for a range of finishes.

13. Conceptual Design – Repair/Re-Purpose Options

- a. Option 1 – Meets all codes and budget
 - i. VRF System, DDC controls, lighting controls
 - ii. Minimize Site impacts
- b. Option 2 – Reduces energy use 30% below code but exceeds budget
 - i. Option 1 scope included
 - ii. Adds exterior wall insulation assembly
 - iii. Requires purchase of renewable energy
- c. Option 3 – Reduces energy use to net zero
 - i. Based on Options above and budget impact, net zero energy is not practical or affordable.

14. NECP at 687 Watertown Street 5-58 Site Plan Approvals schedule was reviewed while noting:

- a. Building Committee approval to authorize Site Plan Approval process, April 4, 2019.
- b. Public Facilities meeting and progress report scheduled April 17, 2019.
- c. Conservation Commission meeting and progress report scheduled April 18, 2019 and May 9, 2019.
- d. Design Review Committee Site Plan Approval presentation scheduled April 24, 2019.

15. NECP at 687 Watertown St. 5-58 Conditions of Approval

- a. Refine and address all parking, traffic, and site circulation challenges.
- b. Develop site drainage and storm water management system to meet Riverfront Protection and Wetland Protection and local Conservation Commission requirements.
- c. Develop the landscaping plans to minimize impact to the abutters and neighborhood.
- d. Work with Parks and Recreation to facilitate the installation of the playground equipment.
- e. Pursue Sustainability initiatives, reduce project energy consumption and embodied carbon, and eliminate and/or reduce our fossil fuel consumption.

Committee discussion ensued that included a questions and answers session:

- *Is there an opportunity for photovoltaic (PV) panels on the existing roof?*

The structural engineer reports that following roof replacement with supplemental insulation the roof will only carry an added load of 3lbs/s.f., so a rooftop ballasted PV system is not an option. Roof dunnage is required to support the roof top ventilating equipment directly on the

structure not the roof. Additionally it was noted that roof top equipment including air handling equipment and exhaust fans will use up a portion of the available roof area and cause shading at adjacent PV panels area. The project will include electric infrastructure to support future PV systems as required by the electric code.

Committee discussion ensued regarding options for supporting the PV system off the building structure and canopy systems to carry the PV system over the ventilating equipment. Consideration of lateral forces due to increased rooftop structure was discussed.

The Committee requested that Public Buildings contact PPA vendors who have worked or are currently working with the City to review the roof and proposed rooftop equipment proposed in the NECP project and provide an assessment of future PV system opportunity.

- *How will pedestrians access the exterior door on the south side of the building from the sidewalk on Watertown Street?*

AST reviewed a sidewalk connection along the alternate parking lot at Watertown St. that provides a direct connection from the exterior door to the Watertown St. sidewalk.

- *What is the plan for NECP playground equipment?*

The existing NECP play structure at 150 Jackson Rd is planned to be relocated to the adjacent playground area in Albemarle Park. Meeting with Parks and Recreation is planned to review existing conditions, NECP program needs, and park work to create the NECP play space. **Future site plans shall include placement of the NECP play structure.**

- *How will vehicles be restricted from entering the site during school hours?*

Included in the site plan is a restraint assembly planned just past the Albemarle Rd. sidewalk on the site access drive. The component will serve to restrict vehicle access and control student movement to the playground.

- *Can you walk from the park side of the building to the main office?*

AST reviewed the ramp and adjoining sidewalk on the park side of the building that connects to the Albemarle Rd sidewalk for access to the main office.

It was recommended that the new sidewalk at the park side of the building be made wide enough to support two strollers passing.

- *Where and how will deliveries be received?*

Major deliveries for the school will be received in August when school is not in session and access point to be determined on item, storage location, and minimizing impacts to Albemarle Rd. During the school year deliveries will be received at the main entrance. There is not food service/cafeteria with the NECP program so daily deliveries can be managed at the main office.

- *What features are planned to ensure pedestrian safety on the Watertown St. sidewalk when vans are departing?*

Options for vehicle controls were reviewed including early stop on the van exit drive to ensure driver's check for pedestrians and pedestrians are warned of oncoming vehicles, sound or visual alerts and signage.

- *With NECP at 687 Watertown St will there be an increase in foot traffic and less dependence on car transport?*

Kathleen Browning note the program is car centric as a District wide program serving students age 2yr 9mo through 5yrs. Foot traffic did change when the program moved from the Education Center to 150 Jackson Rd. Some neighbor families walk children to school in good weather but because the program is district wide and serves young age students often with younger siblings, it is a small number who choose to walk. It would be expected that the 687 Watertown St. site will have a similar transition with some local walkers and transition in 150 Jackson Rd neighbors now needing to drive.

- *Did the traffic study review the impact of F. A. Day Middle School (Day MS) dismissal based on the correlating full day afternoon dismissal for NECP?*

Afternoon dismissal for NECP happens at 12:00pm, 1:30pm, and 2:30pm, so the number of students released at afternoon dismissal is a much lower number than at morning arrival.

Public Buildings noted that staff at Day MS currently park along Albemarle Rd and reported on plans to relocate Day MS parking to the Education Center to help alleviate parking/traffic issues on Albemarle Rd prior to NECP relocation. Also the City is looking at options for re-routing bus entry/exit for Day MS to further calm traffic impacts.

- *What are the expected ceiling heights for the infill classroom areas?*

Due to the existing gymnasium ceiling height the infill areas will provide code compliant ceiling height of 7ft-6in at the newly created lower level main office and admin spaces and ceiling height of approximately 8ft in the new classrooms on the mid-level.

- *What is the planned domestic hot water system?*

Options being considered include point of use and service off the VRF hot water system.

- *What are the reasons for placing the Director's Office at the lower level and Nurse at the mid-level and would swapping locations benefit the program?*

Kathleen Browning discussed her daily activities which include moving about the building throughout the day to monitor instructional activities and evaluate student needs. Having a Director's office in the lower level provides an important separation for administrative meetings and activities away from student areas. The Director's Office in the lower level near the main office also provides direct access to support students who may come in needing special services. Nurse's area on the mid-level provides adjacency to classrooms having medical and mobility challenged students and adjacency to the van drop off to address child issues during van transport.

- *What is the project budget?*

The total project budget is \$10mil which includes construction costs and soft costs (professional services, utility upgrades, technology, and furniture).

16. DCR – Site Plan Approval documentation requirements

- a. Budget
- b. Site Plan – plan should be more developed and include site investigations documentation
- c. Floor Plans
- d. HVAC System description and energy efficiency information
- e. MEPFP – Scope Narratives
- f. Elevations and Typical Details
- g. Sustainable features of design

Next DRC meeting for NECP at 687 Watertown St. Site Plan Approval is scheduled April 24, 2019.

To the best of my knowledge, these notes are a fair representation of the items discussed at the meeting. Additional items or corrections should be brought to the attention of the writer. Submitted by: Mary Mahoney 4/12/19



5. Supplemental Documentation

Design Review Team – 5-58 Site Plan Review Recommendation



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Ruthanne Fuller
Mayor

Barney S. Heath
Director

INTER-OFFICE MEMORANDUM

DATE: April 19, 2019

TO: City Council

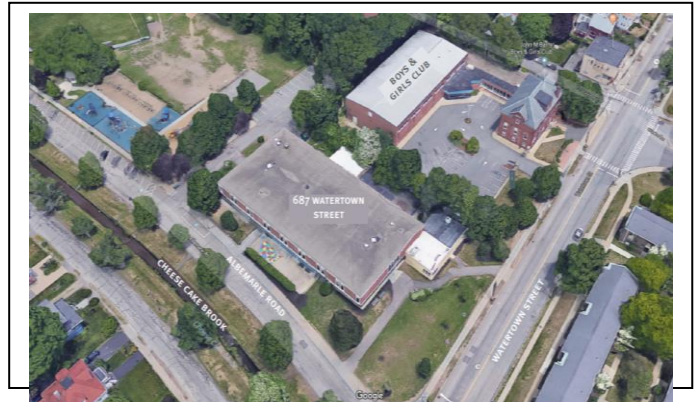
FROM: Barney B. Heath, Director of Planning and Development
Jennifer Caira, Chief Planner for Current Planning
Katy Hax Holmes, Chief of Preservation Planning

SUBJECT: §5-58 of the City of Newton Ordinances, request for site plan approval to renovate and adapt former Horace Mann Elementary School for use as Early Childhood Education Program

CC: Alejandro Valcarce, Public Buildings Department
Design Review Committee
Law Department

EXECUTIVE SUMMARY

The Planning and Development Department conducted a Section 5-58 review for the reuse of the Horace Mann Elementary School building at **687 Watertown Street**. This work was proposed by the City to create new space for the Newton Early Childhood Program (NECP) for pre-school age children of all abilities. This program is currently housed at 150 Jackson Road. The Jackson Road location is slated to become the new Lincoln-Eliot Elementary School, and the current Lincoln Eliot School will become the new swing-space building for future school rehabilitation projects in Newton.



An option that reuses an existing public building was selected because it appeared to successfully meet the needs of NECP students and teachers. The project design phase culminated in adoption of the Schematic Design dated March 13, 2019, as the preferred plan for renovation and additions to the Horace Mann School site. The total enrollment at the school is projected to be in the range of 305 pupils. Proposed site improvements include all-access entrances on the west, north and east sides of the building.

The Horace Mann Elementary School building was constructed in 1965 and is over 50 years old. No partial or full demolition is proposed for the structure. The school building is not listed on or eligible for listing on the National Register of Historic Places. Therefore, the Newton Historical Commission has no jurisdiction over the proposed project. The modular classrooms will be removed as part of this

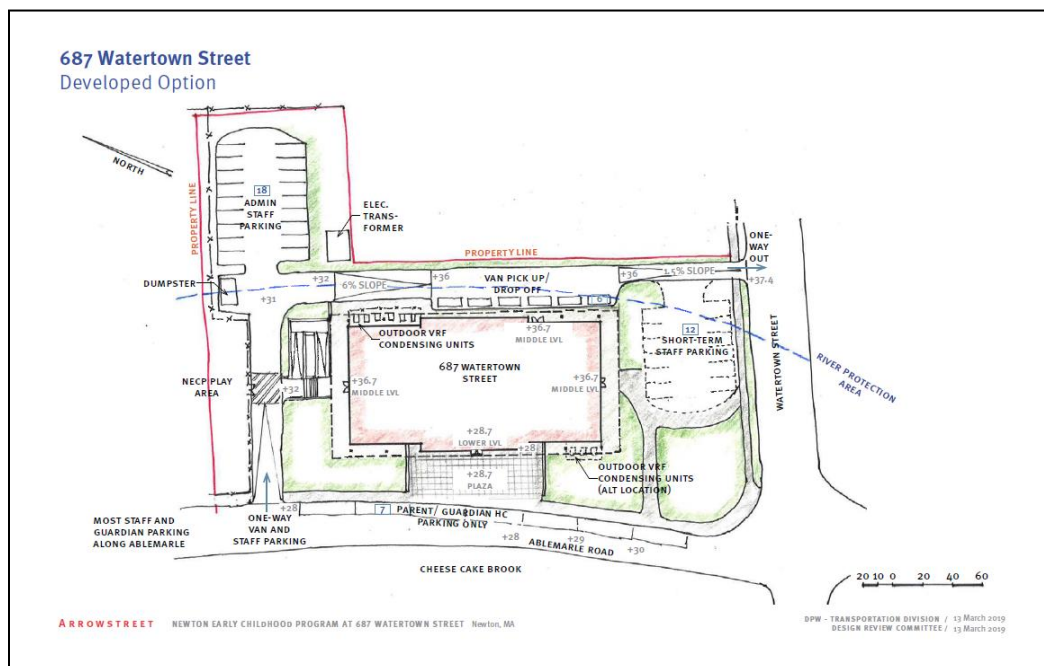
project. No yellow school bus-access is anticipated, but use of vans and cars driven by educators and parents is. Approximately one third of the students will arrive by van and will enter the school from a new east entrance. Staff and students may also enter the building from the existing entrance on the west side and a newly accessible entrance on the north side. A total of 17 classrooms will be located on the second and third floors, in addition to other specialized spaces in the school. The gymnasium will be converted to classroom space, and all food will be consumed in the classrooms.

Eighteen (18) spaces of staff parking will be in a designated lot to the northeast of the school. Seven on-street ADA parking spaces will be located at the front west entrance to the school on the Albemarle Road side. Currently staff and parents at the Horace Mann School park on all streets in the vicinity of the school, including across Watertown Street to the south. The number of staff parking stalls on site will not increase, as the staffing needs of the NECP program are estimated to be comparable to those of the former school. Additional staff parking will be accommodated on nearby streets as is the current practice at 687 Watertown Street.

Vans will enter a dedicated drop-off and pick-up zone from Albemarle Road at the west end of the site and loop north around the building to the east side entrance. The proposed parking and circulation plan will allow safe van access, access for students of all abilities, deliveries, emergency vehicles, and trash pick-up. Though it is noted on the Developed Option plan (below) as a possibility, there are currently no plans to add parking on the south side of the school property. No blue zones will be created. The improved parking, on-site circulation, and safety in and around the school property will enhance pedestrian and vehicular movement at the site and in this Newtonville neighborhood.

Other site improvements, such as sidewalks and wayfinding signage, will enhance the safety of pedestrian circulation. New crosswalks at anticipated high-pedestrian-traffic locations will be installed at the north side of the site between the building and the accessible playground to the north. Amenities will include a relocated play structure and improved access to Albemarle Park. Benches are proposed at the north and south sides of the school property.

The project as proposed will preserve the existing school building.



SITE PLAN APPROVAL PROCESS

Prior to the construction of any municipal building, Section 5-58 of the Newton City Code requires reviews of associated plans by the following:

- The Director of Planning and Development for consistency and compatibility with the *Newton Comprehensive Plan* and other applicable planning and analytical studies;
- The Design Review Committee for layout, construction, and relationship to surroundings;
- The Public Facilities Committee to provide a forum for public comments and discussion about proposed buildings and their locations, followed by City Council action.

Once the site plans are formally approved by these bodies, they become the schematic design upon which the final set of project plans and construction drawings are based. Significant changes to the schematic design or to the structural and programmatic plans of the new building must be resubmitted to the Design Review Committee and to the City Council. After the requirements of §5-58(a)(1) through (a)(6) have been satisfied, the City Council can appropriate funds for preparation of detailed construction drawings.

Work on the school is scheduled to begin in January 2020 and will continue until completion, which is projected to be by January 2021. All work, including the interior utility work, will be addressed in one phase. Plans submitted by the Public Buildings Department were prepared by Arrowstreet of Boston, and Hill International of Needham dated March 13, 2019. These are the plans that have been reviewed by Planning Department staff.

I. PROPOSED SCHOOL IMPROVEMENTS

Site work will be completed around the existing school building. The building exterior will be re-sheathed, and an increase in impervious surface is anticipated. Entrances on the west, north and east sides will be improved to allow access for all mobility levels. The west side entrance will also have an improved patio as a potential gathering place.

Vehicular access and parking for approximately 165 cars will be provided in on- and off-street parking stalls located west and northeast of the site. Parking spaces located on Albemarle Road will be shared with the Parks and Recreation Department to ensure that no public open space will be lost to the creation of additional parking for the school. Vehicular circulation on the site will be limited to north of the lot, with parent vehicular access to the school restricted to the east side of Albemarle Road heading north.



II. TECHNICAL REVIEW OF SITE PLANS UNDER SECTION 5-58

1. Location and Existing Site Conditions

The Horace Mann Elementary School Building is in Newtonville on a parcel bordered to the south by Watertown Street; to the north by Albemarle Park; to the west by Albemarle Road, and immediately to the east by the Boys and Girls Club. This Public Use site is adjoined by Public Use zoning on the north, Single Residence 3 zoning on the west, Multi-Residence 2 to the south, and Multi-Residence 1 to the east. The parcel consists of approximately 70,000 square feet of land improved with the current school building and modular classrooms, and associated parking. All three stories of the building will be preserved. A playground to the north of the school will be redesigned for use by a younger population of all abilities and will continue to be owned and maintained by the Newton Parks and Recreation Department.

2. Proposed Improvements

The five modular classrooms on the building will be removed for this project. Improvements and updates to all systems are proposed for the three-story building where needed. The administrative offices are planned for the first floor near the entrance, along with rooms for common uses. The nurse's office will be located at the east side entrance for easy access to ambulances in the event of an emergency. All classrooms are planned for the second and third floors.

The front entrance facing Albemarle Road will open onto an accessible plaza or piazza, which will serve in part as a public gathering area. Seven accessible parking spaces with a 2% or less grade will be provided at the front of the school at this west entrance. The new north side entrance for vans will have a new accessible ramp, stairs, and a raised crosswalk leading into the building, as well as across the driveway to the playground.

Long-term staff parking will be provided in a small dedicated parking lot at the northeast corner of the site, using a one-way driveway leading east from Albemarle Road. The exit route from this lot will be along the east side of the lot moving south onto Watertown Street. The elevator shaft will be installed at the center of the building and accessed by a ramp at the north entrance to the building. A new central stair will also be added to the interior of the building. All bathrooms on all levels will be accessible. No kitchen facilities are proposed for this building, as there will be neither a cafeteria nor the need for a centralized area for the distribution of food.

Predominantly on-street parking at the site will be used to accommodate approximately 165 parking spaces. Public street parking is already provided on Albemarle Road.

III. OTHER REVIEWS

- **Associate City Engineer.** The proposed work will result in a net increase in the amount of impervious surface on the site. Plans are under review by the Engineering Division and comments will be provided. All recommendations must be addressed prior to the issuance of any building permits.

- **City Traffic Engineer.** There will be no increase in the amount of parking provided on-site for school staff. Nevertheless, Public Buildings Department should continue to work with the Traffic Engineer to manage vehicular circulation on site should there be unanticipated effects on the neighborhood as the school reaches the projected capacity.
- **Fire Department.** The Public Building Department should continue to coordinate with the Assistant Fire Chief and Fire Prevention to meet all applicable safety codes. At a minimum the van lane must remain 18 feet wide. Current plans show a 20-foot width.
- **Conservation Commission.** With the exception of the staff parking area to the northeast, the entire school site is in the Cheese Cake Brook riverfront protection area. Further review by the Conservation Commission is required before additional impervious surface is created.
- **Newton Historical Commission.** The current Horace Mann School was built in 1965, and five modular classrooms were added in 2009. The project will involve no demolition that would meet the minimum criteria for review by the Newton Historical Commission.

IV. CONSISTENCY WITH NEWTON COMPREHENSIVE PLAN AND OTHER PLANS/STUDIES

The *Newton Comprehensive Plan* notes that Newton residents have made education a strong social value and a community priority. More than 11,000 pupils are currently served through 21 public schools including 15 elementary schools.

The *Plan* also acknowledges that change over time is inevitable and spatial needs must respond to it. Population projections prepared by the Metropolitan Area Planning Council (MAPC) show an eventual decline in the City's school age population by 2030. For the long term, the *Newton Comprehensive Plan* advocates for "creative consideration of future activity and facility configurations."

V. SITE PLAN REVIEW CRITERIA

In accordance with Section 5-58, the Design Review Committee has filed plans for Site Plan Approval. These are to be reviewed in accordance with the procedure outlined in Chapter 30: Zoning, Article 6, Chapter 5, Section 5-58 of the Revised Ordinances. The following is a review of the submitted plans against the relevant criteria established in this section.

A. Convenience and safety of vehicular and pedestrian movement within the site and in relation to the adjacent streets, properties or improvements

Van access will be limited to a circular entry drive for pick-up/drop-off at the east side of the school. Vehicular access by school staff will be from Albemarle Road leading to a designated parking lot where long-term staff parking will be available. The proposed location and increase in spaces will be an improvement over the existing conditions and ensure that this portion of the site will be the least trafficked area during the school day.

Peak parking demand at the Jackson Street location was assessed by MDM, Transportation Consultants, Inc. Parking demand at the site reached its peak at 9:00 am and noon, which corresponded with drop-off and pick-up of pre-school students. As will be the case at the 687 Watertown Street location, staff or parents will likely escort each child into the building.

There is no yellow bus service or Blue Zones proposed for the Watertown Street location, so all parents who drive will require a parking space. Van drop-offs and pick-ups are centered on a single doorway into the building from a designated driveway on the east side of the building.

Short-term parking for parents and caregivers will be available on Albemarle Road. Sidewalks and wayfinding signage will enhance the safety of pedestrian circulation. Several new crosswalks from all perimeter streets will be added to ensure high visibility for both walkers and drivers. The Planning Department believes that the on-site vehicular and pedestrian circulation plan as proposed will accommodate the anticipated increase in pedestrians and the need for parking.

Emergency vehicular access to the site will encircle the school building. Access to the rear of the lot will be provided via Albemarle Road, with a dedicated pathway on the east side of the building designed for use as emergency access only.

New directional signage to the parking lot and handicap parking, and parking signs along the road are recommended. This parking arrangement will be in place after construction, since the school is not projected to be in use for the duration of the project.

An elevator will be installed at the center of the building and accessed by a ramp. All classrooms will be located on the second and third floors.

B. Adequacy of the methods for regulating surface water drainage

The overall impervious coverage on site will be increased by the dedicated circular drive for van traffic and additional walk paths and playground space. The Public Buildings Department will coordinate with the Engineering Division of the Department of Public Works to ensure that all surface water is adequately managed on-site.

C. Screening of parking areas and structures from adjoining premises. Location of parking between the street and existing or proposed structures shall be discouraged.

The parking configuration on-site will be assisted by parking stalls on the surrounding streets. The current on-street parking space total of approximately 95 spaces will continue to serve vehicular access to the school site.

On-street parking will be visible on both sides of Albemarle Road where parking is currently allowed. The adapted school building will sit no closer to abutting residences, but access to the east side of the site will necessitate removal of several scrub trees. The redesign of the site should not have any significant visual effect on abutting properties and will likely be improved by the removal of the modular classrooms. Nevertheless, neighbors should be consulted as to their choices for screening plantings and/or fencing to ameliorate potential effects from the project where warranted.

Out of respect for the residential abutters, new lighting fixtures that are proposed for the perimeter of the school property should have shields to direct light onto the school property and be set on timers.

D. Avoidance of topographic changes; tree and soil removal shall be minimized.

During non-school hours, the parking area will be shared with users of the adjacent field owned and maintained by the Parks and Recreation Department, and possibly by patrons of the Boys and Girls Club located to the east. Tree removal is anticipated along the border between these two lots. The proposed site work will come under the Tree Preservation Ordinance requirements and should be monitored by the Director of Urban Forestry with respect to possible mitigation, if warranted.

E. Consideration of site design including relationship to nearby structures.

The school is in a densely developed residential neighborhood in Newtonville. The scale and design of this public structure will not substantially change. The facades of the building will be re-sheathed with a stucco skim. The Planning Department believes that the proposed design respects the proportions found on the existing school building and surrounding neighborhood.

The Planning Department received conceptual elevations and material specifications, which are subject to change during the design process. Final specifications of materials, colors, and landscaping should be submitted to the Planning Department for review prior to issuance of a building permit only if substantive changes have been made to the originally approved schematic design.

VI. CONSTRUCTION MANAGEMENT

The contractor should submit a Construction Management Plan ("CMP") to the Director of Planning and Development, the City Engineer, the City Traffic Engineer, and the Commissioner of Inspectional Services for review and approval before any construction activities related to this project are commenced on the site.

This plan should identify hours of construction, expected length of construction, location of proposed on-site contractor parking, and material storage and staging areas. It should also incorporate preferences and input from neighbors, and the telephone number for the contractor's primary contact person. Copies of the final approved CMP should be submitted to the Executive Office and each of the Ward 2 Councilors.

VII. CONCLUSION AND RECOMMENDATIONS

The Director of Planning and Development has determined that the site plans for 687 Watertown Street are consistent with the *Newton Comprehensive Plan* and any other relevant plans and studies, including the site plan review criteria listed in Section 30-23. It appears that the Public Buildings Department has given serious consideration to finding the best plan to safely accommodate the all-ability pre-school student population in Newton while adaptively re-using the 1965 education building.

With that in mind, the Planning Department wishes to offer the following items for consideration:

- Restrict passenger drop-offs and pick-ups to the curbsides of streets and driveways
- Secure long-term parking for staff, and designate short-term parking for parents/caregivers
- Separate van access from parent access to the site
- Protect pedestrian driveway crossings during peak arrival and dismissal periods
- New lighting fixtures located at the perimeter of the property should have shields to focus light onto the school property and not spill over onto the neighbors' property.
- The Planning Department supports any measures to conserve energy and natural resources in the adaptive reuse of this building.

If the Council, Executive Office and School Committee choose to approve these plans, prior to applying for Building Permits the Public Buildings Department should submit:

- 1) The most current plans showing any alterations to proposed driveways, pick-up/drop-off areas, or landscaping to the Planning, Engineering, and Fire Departments;
- 2) Final material samples to the Planning Department, where warranted;
- 3) A construction management plan to the Planning, ISD and Engineering Departments and Ward 2 Councilors.