



City of Newton
Lincoln Eliot – NECP Project
Project Monthly Report

April 2020

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 2020.

During the month of April 2020, Hill provided the City with budget utilization updates, cost/budget documents for NECP at 687 Watertown St, Lincoln Eliot (LE) feasibility study documentation, project schedule and work plan updates, and LE-NECP Projects web page content management.

On March 13, 2020, the City of Newton and its Design Review Committee authorized Arrowstreet to proceed to 100% Construction Documents (CDs) for the NECP at 687 Watertown Street project with condition to address all document review comments for the 60% CD documentation.

On March 30, 2020, Newton Public Buildings provided the professional team with a draft Invitation for Bid (IFB) and City of Newton Contract for Construction and General Conditions for inclusion in the NECP bid documents.

On April 1, 2020, the City of Newton provided the professional team with material test reports for concealed folding partitions located at classrooms at the 687 Watertown St building. This documentation was included in the bid documentation for the NECP Project.

On April 2, 2020, the LE-NECP Working Group convened to review the NECP Project bid schedule and process, reviewed the Design Review Committee presentation scheduled April 6, 2020, reviewed progress on the NECP building wide and classroom based technology design, and reviewed NECP classroom and breakout space layouts and Lincoln Eliot (LE) future building program and space summary.

On April 3, 2020, representatives for Arrowstreet, Garcia, Galuska and Desousa, HVAC Engineers, Hill, Newton Public School facilities department, and Newton Public Buildings met to review the scope for heating, ventilating, and air conditioning systems, automatic temperature control systems, and HVAC building management systems for the NECP Project. As a result of discussions, the NECP Project HVAC systems were changed to a predominately constant volume system for roof top units, variable refrigerant flow heat and air conditioning units with BACNet control, and local temperature control for supplemental heating units.

On April 6, 2020, Newton's Design Review Committee (DRC) convened to discuss the 100% CD documentation for the NECP Project and consider authorization to bid the NECP Project. Following a project design advancement presentation, HVAC system and controls systems update report, question and answer session, and Committee deliberations, the Design Review Committee voted unanimously to authorize bid of the NECP at 687 Watertown Street Project, with the following contingencies: 1.) The DRC will receive the proposed bid documents on April 10, 2020, for review and comment to the PBD. Prior to their release, the Public Buildings Department shall confirm to the DRC that the final documents are acceptable for bidding. 2.) During the bid phase DRC comments shall be addressed by

addenda as appropriate prior to acceptance of filed-sub bids. 3.) Although the VRF manufacturer will provide commissioning for that system, the overall HVAC system shall be reviewed by a commissioning agent. Building envelope systems shall also be reviewed by a commissioning agent. 4.) Final scope and submittals for envelope air sealing shall be reviewed by the DRC. It is recommended that the blower-door-directed air sealing method be used.

On April 9, 2020, the City of Newton submitted project information to the MA Secretary of State Office for Central Register posting/notification of the NECP at 687 Watertown bid. NECP bid notification was published in the MA Central Register on April 16, 2020.

On April 10, 2020, Arrowstreet submitted to the City of Newton, NECP Project bid documents including plans, specifications, reports, general conditions, and contract for construction services for posting to the City's procurement web site. The 100% construction documents (bid set) were forwarded to Design Review Committee (DRC) members for their review and comment as required by the conditions of DRC bid approval.

On April 14, 2020, representatives for Arrowstreet, Hill, Newton Public Buildings, and Newton Public Schools met to review NECP Project building wide technology infrastructure, building communications, and security systems, and classroom and meeting room technology needs. The meeting created a scope for construction contract infrastructure and turnkey installations by Newton Public School vendor contracts that will be supported through NECP Project funding.

On April 16, 2020, the LE-NECP Working Group convened to review the NECP Project bid schedule and addendum process, Design Review Committee (DRC) 60% Construction Document presentation and bid authorization, Newton building permit process and documentation requirements and technology and furnishing, fixtures and equipment program advancement, As well as, Lincoln Eliot (LE) at 150 Jackson Road conceptual building plan options and initial site plan.

On April 21, 2020, Addendum No. 1 for the NECP Project bid documents was issued and posted on the City of Newton Procurement page.

On April 22, 2020, representatives for Arrowstreet, Hill, Newton Public Buildings, and Newton Public Schools met to review NECP Project furnishing, fixture and equipment including an existing inventory survey, new equipment needs, student cubby need, cost assignment, staff room assignments, and schedule for NECP Project move and furnishing procurement and installation.

On April 23, 2020, the City of Newton hosted pre-bid inspections at the 687 Watertown Street property for the NECP bid. The inspections were performed by appointment only and attendees were required to comply with COVID 19 social distancing and worker safety requirements posted by the City prior to the inspections.

On April 24, 2020, Addendum No. 2 for the NECP Project bid documents was issued and posted on the City of Newton Procurement page.

On April 27, 2020, representatives for Arrowstreet, Hill, and Newton Public Buildings met to review comments for the NECP Project bid documents and discuss updated existing

conditions reports that should be added to the bid documents as part of bid addendum no. 3.

On April 27, 2020, the City of Newton hosted pre-bid inspections at the 687 Watertown Street property for the NECP bid. The inspections were performed by appointment only and attendees were required to comply with COVID 19 social distancing and worker safety requirements posted by the City prior to the inspections.

On April 30, 2020, the LE-NECP Working Group convened to review the NECP Project bid schedule and scope of addenda issued to date, report of pre-bid inspections scheduled April 23 and 27, 2020, Design Review Committee (DRC) 100% Construction Document review comments and associated bid document amendment, and technology and furnishing, fixtures and equipment program update. As well as, Lincoln Eliot (LE) at 150 Jackson Road conceptual site development options.

Hill Invoice #PBO-02339.00-00000018 and Arrowstreet Invoice 726584 were submitted and processed for payment.

Additional project updates, presentation materials, and documentation may be obtained at the project web page: <http://lincolneliot-necp-projects.com/>

Progress and Milestones Achieved

The following milestone was achieved during the month of April 2020:

- Design Review Committee approval to bid the NECP at 687 Watertown Street Project with conditions.
- Issue of the Invitation for Bid for the NECP at 687 Watertown Street Project.
- Pre-Bid inspections for the NECP at 687 Watertown Street Project.
- Lincoln Eliot Project reconciliation of building program to the space summary.
- Lincoln Eliot feasibility study conceptual floor plan and site plan options.

Key Objectives

The key objectives for the coming month are:

- Respond to Design Review Committee 100% CD documentation review comments for the NECP Project.
- Receive, open, review, and make award recommendation for filed sub-bid and general bids for the NECP Project. Filed sub-bid due May 7, 2020 and general bids due May 21, 2020.
- Confirm scope, costs and schedule for technology infrastructure and equipment installations for the NECP Project.
- Prior to start of construction, record with the Registry of Deeds the executed MA DEP Storm Water Management Permit application and Riverfront Protection Act Permit application and associated Order of Conditions.
- Continue feasibility study phase for Lincoln Eliot at 150 Jackson Rd.

Financials

The LE-NECP budget includes multiple appropriations that total \$13,852,266.

Contracts commitments through April 2020 include: Hill International for Owner Project Management Services Amendment #03 for Construction Document Phase, Bid, and Construction Administration for the NECP Project and Arrowstreet Designer Services Amendment #04 for Construction Document Phase, Bid, and Construction Administration for the NECP Project totaling \$2,598,131.

With contract commitments through April 2020 totaling \$2,598,131, NECP total project budget totaling \$13,902,366 and the new LE-NECP total project budget totaling \$13,852,266, the project remains on budget.

Schedule

The next milestones for the project are:

- Receive, open, review, and make award recommendation filed sub-bid and general bids for the NECP Project. Filed sub-bid due May 7, 2020 and general bids due May 21, 2020.
- Prior to start of construction, record with the Registry of Deeds the executed MA DEP Storm Water Management Permit application and Riverfront Protection Act Permit application and associated Order of Conditions.
- Continue feasibility study for Lincoln Eliot School at 150 Jackson Rd Project.

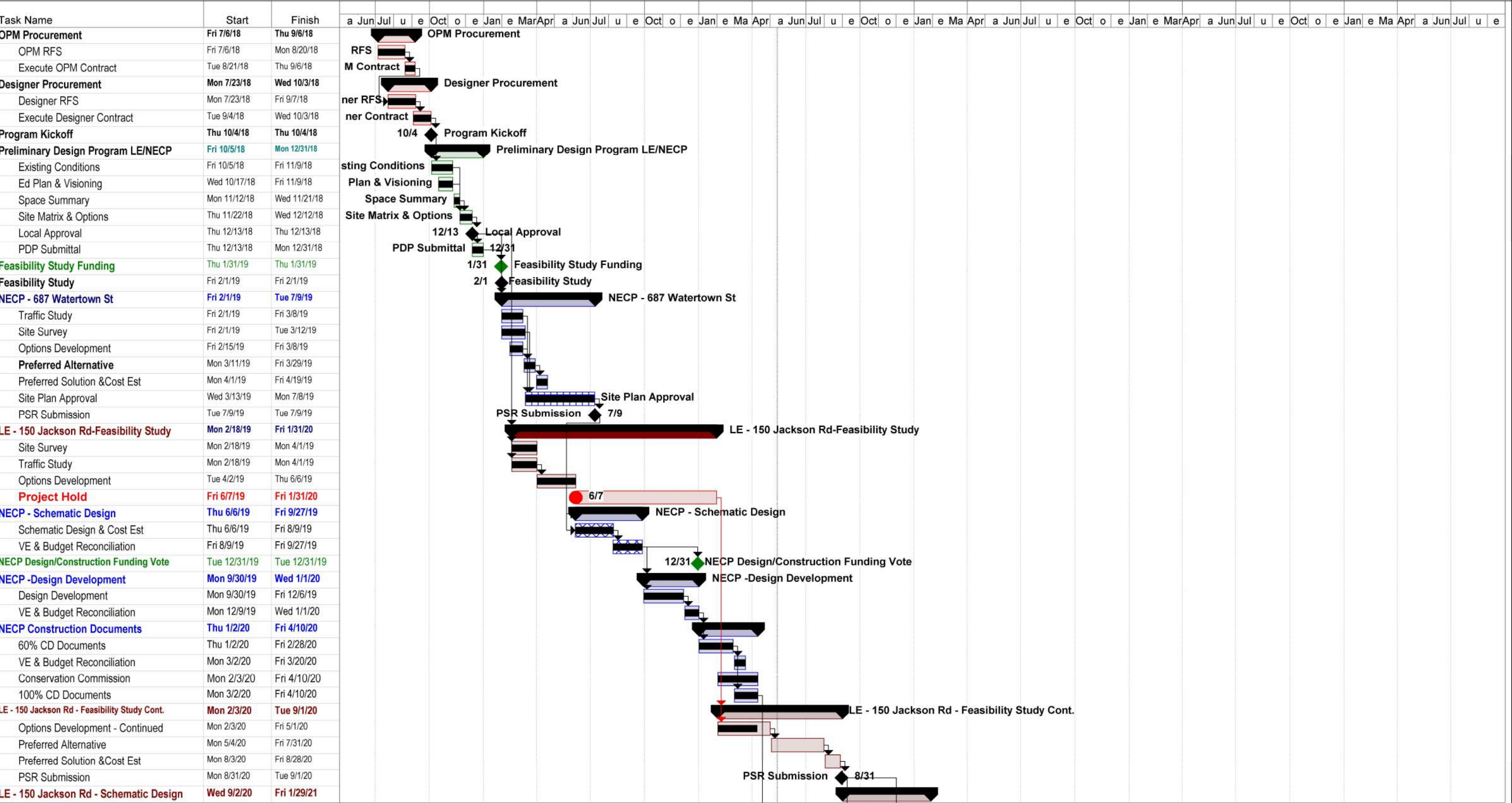


2. Schedule

- a. Project Schedule, dated May 6, 2020
- b. NECP Project Timeline, dated May 6, 2020

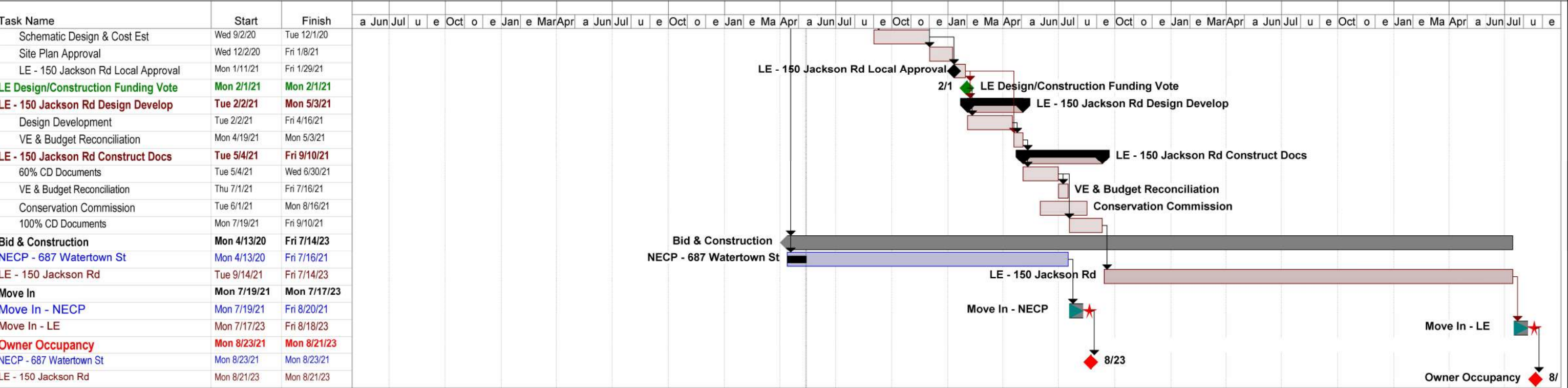
City of Newton
LE-NECP Schools Project

PROJECT WORK PLAN SCHEDULE



City of Newton
LE-NECP Schools Project

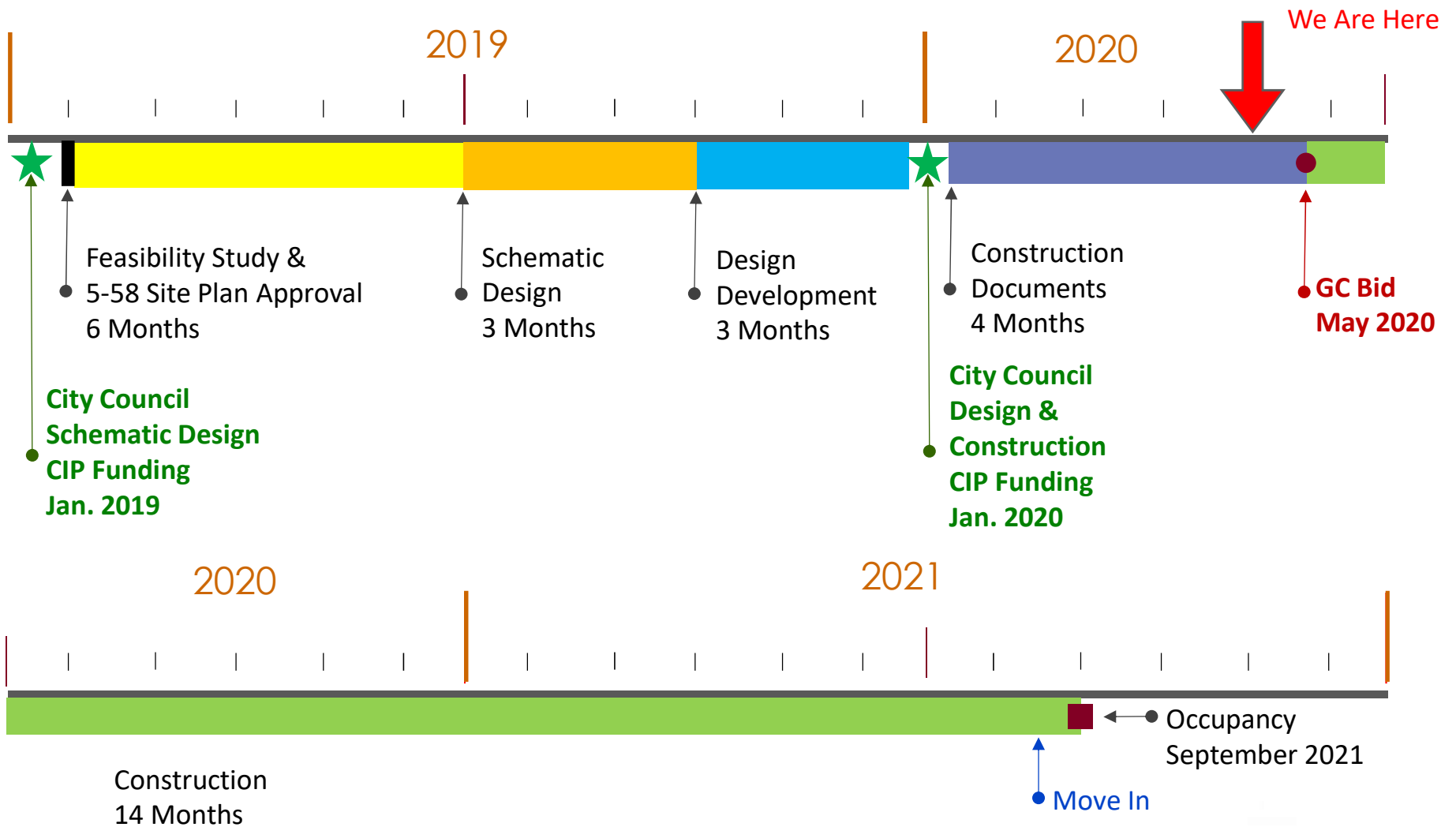
PROJECT WORK PLAN SCHEDULE





CITY OF NEWTON | NECP PROJECT

Project Plan & Timeline





3. Financials

- a. Project Budget, dated May 6, 2020



Project Budget and Cost Summary

Description	Total Budget	BUDGET			COST			CASH FLOW	
		Baseline Budget	Authorized Changes	Current Budget	Committed Costs	Uncommitted Costs	Total Project Costs	Expenditures to Date	Balance To Spend
20 Construction									
NECP - Construction	\$0	\$0	\$10,465,631	\$10,465,631	\$0	\$10,465,631	\$10,465,631	\$0	\$10,465,631
LE- Construction	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Alternates		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Contingency	\$0	\$0	\$536,788	\$536,788	\$0	\$536,788	\$536,788	\$0	\$536,788
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	\$211,550	\$53,350
5-58 Site Plan Approval - NECP	\$121,320	\$56,440	\$0	\$56,440	\$56,440	\$0	\$56,440	\$56,440	\$0
5-58 Site Plan Approval - LE	\$0	\$64,880	\$0	\$64,880	\$64,880	\$0	\$64,880	\$0	\$64,880
Schematic Design - NECP	\$535,900	\$243,160	\$0	\$243,160	\$243,160	\$0	\$243,160	\$243,160	\$0
Schematic Design - LE	\$0	\$292,740	\$0	\$292,740	\$292,740	\$0	\$292,740	\$0	\$292,740
Design Development - NECP	\$0	\$0	\$261,641	\$261,641	\$261,641	\$0	\$261,641	\$261,641	\$0
Design Development - LE		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Documents & Bid - NECP	\$0	\$0	\$341,297	\$341,297	\$341,297	\$0	\$341,297	\$273,038	\$68,259
Construction Documents & Bid - LE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Admin/Closeout - NECP	\$0	\$0	\$236,641	\$236,641	\$236,641	\$0	\$236,641	\$0	\$236,641
Construction Admin/Closeout - LE		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Services -Con Comm Approval	\$0	\$0	\$20,000	\$20,000	\$20,000	\$0	\$20,000	\$15,000	\$5,000
A&E Sub Consultants	\$0	\$0	\$30,000	\$30,000	\$5,000	\$25,000	\$30,000	\$3,000	\$27,000
Geotechnical Engineering	\$21,010	\$21,010	\$11,722	\$32,732	\$32,732	\$0	\$32,732	\$22,227	\$10,505
Geoenvironmental Engineering	\$0	\$0	\$13,278	\$13,278	\$0	\$13,278	\$13,278	\$0	\$13,278
Site Survey	\$37,950	\$37,950	\$7,909	\$45,859	\$45,859	\$0	\$45,859	\$45,859	\$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	-\$19,632	\$37,868	\$16,264	\$21,604	\$37,868	\$0	\$37,868
Traffic Studies	\$67,690	\$67,690	\$0	\$67,690	\$52,690	\$15,000	\$67,690	\$44,569	\$23,121
Other Services	\$28,500	\$25,000	\$0	\$25,000	\$0	\$25,000	\$25,000	\$0	\$25,000
Printing (Over the Minimum)	\$0	\$0	\$12,091	\$12,091	\$0	\$12,091	\$12,091	\$0	\$12,091
Testing & Inspections	\$0	\$0	\$5,000	\$5,000	\$0	\$5,000	\$5,000	\$0	\$5,000
Reimbursable Expenses	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Subtotal	\$1,303,930	\$1,300,430	\$919,947	\$2,220,377	\$2,098,404	\$121,973	\$2,220,377	\$1,340,644	\$879,733
40 Administrative Costs									
OPM -Ed. Program Services	\$43,140	\$43,140	\$0	\$43,140	\$43,140	\$0	\$43,140	\$43,140	\$0
OPM Study/Schematic Design	\$155,830	\$155,830	\$0	\$155,830	\$155,830	\$0	\$155,830	\$33,088	\$122,743
OPM Design Development - NECP	\$0	\$0	\$20,000	\$20,000	\$20,000	\$0	\$20,000	\$20,000	\$0
OPM Design Development - LE	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Construction Documents - NECP	\$0	\$0	\$20,000	\$20,000	\$20,000	\$0	\$20,000	\$16,358	\$3,643
OPM Construction Documents - LE	\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Bid/Construction Admin - NECP	\$0	\$0	\$250,000	\$250,000	\$250,000	\$0	\$250,000	\$0	\$250,000
OPM Bid/Construction Adm - LE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM Closeout - NECP	\$0	\$0	\$10,000	\$10,000	\$10,000	\$0	\$10,000	\$0	\$10,000
OPM Closeout - LE			\$0	\$0	\$0	\$0	\$0	\$0	\$0
OPM: Cost Estimates	\$15,000	\$15,000	\$15,000	\$30,000	\$0	\$30,000	\$30,000	\$0	\$30,000
OPM Reimb & Site Approval Services	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Commissioning	\$0	\$0	\$10,000	\$10,000	\$0	\$10,000	\$10,000	\$0	\$10,000
Other Admin Costs/Move	\$2,000	\$5,500	\$35,000	\$40,500	\$757	\$39,743	\$40,500	\$757	\$39,743
Utility Fees	\$0	\$0	\$25,000	\$25,000	\$0	\$25,000	\$25,000	\$0	\$25,000
Legal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Construction Testing & Inspections	\$0	\$0	\$25,000	\$25,000	\$0	\$25,000	\$25,000	\$0	\$25,000
Subtotal	\$215,970	\$219,470	\$410,000	\$629,470	\$499,727	\$129,743	\$629,470	\$113,342	\$516,129
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	\$12,332,366	\$13,852,266	\$2,598,131	\$11,254,135	\$13,852,266	\$1,453,985	\$12,398,281
70 Project Contingency									
Construct Contingent (Hard Cost) (5%)	\$0	\$0	\$0	\$0			Remaining		
						\$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	\$12,332,366	\$13,902,366	\$2,598,131	\$11,304,235	\$13,902,366	\$1,453,985	\$12,448,381
Owner's FFE Contingency	\$0	\$0	\$53,900	\$53,900	\$0	\$53,900	\$53,900	\$0	\$53,900



4. Supplemental Documentation

- b. NECP minutes for the April 3, 2020 HVAC meeting
- c. Design Review Committee minutes for April 6, 2020 meeting
- d. Design Review Committee letter authorizing bid for NECP at 687 Watertown Street
- e. NECP IT minutes for April 14, 2020 meeting
- f. NECP Furnishings, Fixtures and Equipment (FFE) minutes for April 22, 20120 meeting

Newton – Lincoln Eliot/NECP Project

NECP HVAC/Electrical Scope Meeting April 3, 2020

Attendees: David Stickney – Newton Public Schools (NPS)
Josh Morse – City of Newton (CofN)
Matthew DiSalvo – Garcia, Galouska, DeSousa (GGD)
Katie Ferrier – Arrowstreet (AST)
Mary Mahoney – Hill International (Hill)

Action Items are denoted in bold/italic font.

Items Discussed:

1. Hill/GGD reviewed the HVAC system; equipment and controls, included in the NECP 60% Construction Document (60%CD) design package and proposed change, as directed by CofN during 60%CD cost estimate scope reconciliation, from a system controls/building management system to more local control.
2. NPS provided comment on system components and controls for consideration in the NECP bid documents including but not limited to:
 - a. Newton's Sustainability Group DR will prefer more global control for HVAC systems.
 - b. NPS currently has a Mitsubishi VFR system at the Ed. Center and controllers supplied with each unit by Mitsubishi works well and provide BACNet read-write capabilities.
 - c. The (4) ERU rooftop units included in the NECP design will need automatic temperature controls (ATC).
 - d. VRFs should have a separate control system provided through the manufacturer's equipment.
 - e. Local/individual control for HVAC system and equipment is not desired as it requires more labor to reset and adjust. More centralized control will help to manage system and building globally.
 - f. VRFs:
 - i. Branch controllers should be daisy chained to enable global control.
 - ii. Manufacturer based BACNet controls need to include read-write capabilities, not read only.
 - iii. Ability to schedule on/off critical to manage spaces.
 - g. Rooftop ERUs as designed for NECP – concerned with 100% outside air without providing damper adjustment. During below average cold days the system will not be able to sufficiently pre-warm air prior to distribution to spaces with 100% outside air.
 - h. Need ATC for ERUs and exhaust fans to allow for on/off scheduling.
 - i. System as designed includes "Demand Ventilation" – this system is a concern due to air quality concerns and air exchange needs specific to the NECP program and population.

3. GGD reviewed NCP Project HVAC system/controls design components:
 - a. VFR manufacturer controls for system operation – a building management system ATC system (BMS) is included to provide some additional read-write points.
 - b. VAVs only provided for “Demand Ventilation” so if VAVs are eliminated the ventilation system would become a “Constant Volume” system.
 - c. With a “Constant Volume” system VAVs and CO2 sensors for VAV control would be eliminated.
 - d. Rooftop ERUs are for air ventilation only and include reheat, pre-cool and dehumidification. System provides no damper control and is a 100% outside air system.
 - e. BMS system provided with contacts/points for controlled ventilation. With local thermostat for radiant panels/fin tube radiation for added local control.
 - f. Rooftop ERUs designed to maintain discharge temperature with BACNet to BMS.
 - g. Ductless Fan Coil Units (DFC) tied to BMS for control & status monitoring.
 - h. Elevator Machine Room ventilation control for shaft damper connected to BMS for ventilation & smoke exhaust.
 - i. Air curtain systems provided at (2) exterior door assemblies are stand-alone systems with BACNet to assign an operational set point and schedule with tie to BMS.

CofN provided the following direction on system components/controls:

- **System should include a “Constant Volume” system with component adjustments as needed to achieve.**
 - **ERUs to include operable dampers tied to BMS.**
 - **ERUs & exhaust fans tie to BMS.**
 - **VRFs use manufacturer supplied BACNet control system without tie to BMS. NPS noted its preference for manufacturer based control system for VFRs.**
 - **Radiant heat, fin tube radiant heat, air curtain systems, to be provided with local controls. These supplemental heating components to have an assigned set point of 65°F with ability for maintenance staff to adjust. Local user control not to be provided.**
 - **Add periodic thermostats throughout building that are tied to the BMS for monitoring building conditions.**
 - **BMS system including all periodic monitoring thermostats, wiring, pathways, and connections to be performed by Owner separate from the NECP Project scope and budget.**
4. Electrical:
 - a. CofN confirmed removal of the existing generator included in project scope but no new generator planned.
 - b. Discuss scope needed to support connection of a future roll up generator – **CofN stated scope does not need to be pursued for the NECP Project.**
 - c. NPS noted past issues with Fire Dept. requirements regarding number of and operating hours for battery operated wall pack emergency lights.

Newton Lincoln Eliot School - NECP Project

**Design Review Committee (DRC) – NECP at 687 Watertown Street
April 6, 2020, 7:30pm held via Zoom audio and video conferencing**

Attendees: Peter Barrer*, Ellen Light*, David Gillespie*, Robert Hnasko*, Jonathan Kantar*, Amy MacKrell*, Marc Resnick*, Carol Schein*, Steven Siegel*, Thomas Enselek*, and Maria Leo

* - Denotes Voting Member

Professional Team:	Larry Spang, Katie Ferrier	-	Arrowstreet (AST)
	David Pereira, Matthew DiSalvo	-	Garcia, Galouska Desouse
	(GGD)		
	Mary Mahoney	-	Hill International, Inc. (Hill)

Guests: Alejandro Valcarce, Paul Ferolito, Art Cabral - Newton Public Buildings
Liam Hurley, Stephanie Gilman, Kathleen Browning - Newton Public Schools

Action Items are denoted in bold/italic font.

Meeting opened at 7:41pm with introduction of attendees.

Meeting Agenda Item 2 – NECP Construction Documents and Approval to Bid taken at 7:30pm

Items Discussed:

1. A. Valcarce provided an introduction to NECP design progress reporting that on February 28, 2020, Arrowstreet issued 60% Construction Documents (60% CD) for review and independent cost estimate. On March 16, 2020 the 60% CD estimate was reconciled to project scope and budget. On April 3, 2020, the City provided direction on the HVAC system equipment and controls for inclusion in the 100% Construction Document (100% CD) documentation. Since issue of the 60% CD, Arrowstreet has continued to advance documents and incorporate 60% CD review comments received from the City and Design Review Committee (DRC).
2. AST reported on NECP at 687 Watertown progress and milestones:
 - a. Since 60% CD documents were issued, design was further advanced to meet the project schedule that includes 100% CD to be issued to the Public Buildings Department on April 10, 2020 and Invitation to Bid issue on April 16, 2020.
 - b. Site Plan Update was presented.
 - c. In January 2020, the City completed soil remediation work at the 687 Watertown Street site.
 - d. Newton's Parks and Recreation Commission held a hearing to consider placement of the NECP outdoor play area in Albemarle Park. The Commission unanimously approved the use and proposed plan for the NECP outdoor play area in Albemarle Park.

- e. Newton's Conservation Commission held a hearing in March to consider MA DEP Storm Water Drainage Permit and Riverfront Protection Permit for NECP at 687 Watertown Street. The Commission unanimously approved both permits.
 - f. The City commissioned a Qualitative Air Leakage Test at 687 Watertown Street with a report on observations and recommendations forwarded on February 18, 2020. The NECP Project Team reviewed the report recommendations with Public Buildings and will incorporate certain scope into the NECP Project including: sealing all de-commissioned unit ventilators openings in the building overhang soffit, replace existing exhaust fan curbs during new roof installation, and eliminate existing exhaust shafts not being re-used. Air sealing at the perimeter walls and roof will be performed under a separate contract by the City of Newton.
 - g. AST presented wall sections and details and review design advancement.
 - h. GGD reviewed HVAC system design and building management system and temperature controls including:
 - i. The new system will include (4) constant volume roof top units (RTU) with adjustable discharge set point and reset based on outdoor air temperature to provide 100% of the outside air for heat and cooling the building.
 - ii. Variable Refrigerant Flow (VRF) units will be provided with roof mounted condensers and classroom/space evaporators. Locally controlled electric fin tube and radiant heat panels will supplement VRFs during below average heating days.
 - iii. VRF to include system based control with scheduling and space set point capabilities.
 - iv. VRF system shall control the associated supplemental electric heat by relay with an adjustable temperature set point and time delay.
 - v. Constant volume ventilation system as requested by Newton Public Schools based on NECP program needs and population. All variable air volume (VAV) units were eliminated.
 - vi. Building Management System (BMS) shall monitor/control only the RTUs and exhaust fans.
 - vii. Air curtains and isolated terminal heaters shall be stand lone control.
3. Cost Estimate:
- a. Construction Budget = \$10,465,631
 - b. 60% CD estimate = \$ 9,824,764*
*does not include impact of COVID 19 to bid environment
 - c. IT structured cabling and equipment is not in the 60%CD estimate as work is to be performed by Newton Public School with support funding from the project.
4. NECP Project Plan and Timeline was reviewed including design phase completion and issuing of bid documents April 2020, general contractor bid May 2020, start of construction June 2020, and move in August 2021.
5. NECP Bid Schedule was reviewed including:
- a. 100% CD issued April 10, 2020
 - b. Documents made available to bidders April 16, 2020
 - c. Filed Sub-Bid opening May 7, 2020
 - d. General Bid opening May 21, 2020



- e. Pre-bid walk through to be provided by appointment with Public Buildings Department

Discussion ensued including:

- *Concern that the 60% CD documentation lacked detail on HVAC system and controls when the scope is the largest by trade for the project. – GGD reviewed HVAC system design advancement and adjustments being incorporated as a result of recent direction given by the Public Buildings Department and Newton Public Schools.*
- *Request intent and scope for project HVAC and building commissioning. - J. Morse reported the project budget will include \$10,000 for commissioning oversight assistance during shop drawing approval for air sealing, roof and HVAC equipment and manufacturer and installer HVAC system and controls functional commissioning.*
- *Request to use blower door qualitative air leakage test equipment/procedures during envelope sealing work to ensure proper and successful building seal.*
- *Question why technology cabling and equipment is not in the general contractor bid document? – Hill reported on Technology meetings held during the past month and the City's desire to work with vendors who regularly performed work at the Newton Public Schools and who can help in development of scope options for the project to ensure best value. IT and CCTV documentation be shared with DRC as the scope is developed/confirmed.*
- *DRC requested access to the 100%CD documentation for review and comment – Documents to be posted on April 10, 2020 and access information distributed to DRC members. Request review comments on or before April 13, 2020 to maintain bid schedule.*
- *Discuss how DRC 100%CD review comments will be incorporated in the bid document. – Comments will be incorporated by issue of Bid Addendum.*
- *Scope does not include a standby or emergency generator, so documents should include system drains in case there is a loss of power during cold weather. - Public Buildings Department to investigate future addition of temporary generator connection points.*
- *PV array on the roof was discussed. – AST reported on the lack of structure to bear the PV array load directly on the roof and the added structure that would be required to add roof top or roof canopy PV array. Additionally the new roof top equipment will take up most of the available roof area. HVAC RTUs will be supported with dunnage connected to the existing steel columns on the third floor.*
- *Discuss the bid market and possible impact due to COVID 19 manpower and material shortages. – Public Building Department recommended adding language to the bid documents requiring bidders to hold bids for 90 days.*

Section 5-54 DRC Building Program and Bid Certification for NECP at 687 Watertown Street.

VOTE: On a motion by Steven Siegel, seconded by David Gillespie, the members of the Design Review Committee by roll-call vote voted unanimously to certify to the Commissioner of Public Buildings that, to the best of the Committee's belief and understanding, the documents produced by Arrowstreet, Inc. substantially meet the program of the Newton Early

Childhood program, and recommends that the documents be prepared and bid in accordance with requirements of Chapter 149 with the following conditions:

1. The DRC will receive the proposed bid documents on April 10, 2020, for review and comment to the PBD. Prior to their release, the Public Buildings Department shall confirm to the DRC that the final documents are acceptable for bidding.
2. During the bid phase DRC comments shall be addressed by addenda as appropriate prior to acceptance of filed-sub bids.
3. Although the VRF manufacturer will provide commissioning for that system, the overall HVAC system shall be reviewed by a commissioning agent. Building envelope systems shall also be reviewed by a commissioning agent.
4. Final scope and submittals for envelope air sealing shall be reviewed by the DRC. It is recommended that the blower-door-directed air sealing method be used.

Meeting adjourned at 8:52pm.

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 4/14/20

City of Newton



Ruthanne Fuller
Mayor

Designer Review Committee
PUBLIC BUILDINGS DEPARTMENT
Ellen Light and Peter Barrer, Chairman
Joshua R. Morse, Commissioner
Telephone (617) 796-1600
FAX (617) 796-1601
TTY: (617) 796-1089
52 Elliot Street
Newton Highlands, MA 02461-1605

April 8, 2020

Honorable City Council
City of Newton
1000 Commonwealth Avenue
Newton Centre, MA 02459

RE: Newton Early Childhood Program, NECP Project

SUBJECT: Bid Document Review

Honorable Council:

On Monday, 6 April 2020 the Design Review Committee (DRC) met remotely via Zoom to discuss the 60% Construction Documents submitted to the DRC for comment in March by Arrowstreet, Inc. (AST) on behalf of the Public Buildings Department (PBD) and Newton Public Schools for the above referenced project. AST presented updated information in response to DRC comments regarding building envelope air sealing; roof, wall sections and details; building management systems and controls; and cost estimate. Discussions included approach to commissioning of Variable Refrigerant Flow (VRF) systems, HVAC in general and building envelope.

During the review and discussion, the Committee noted four conditions that need to be met as part of the bidding and construction phases. Those conditions are as follows:

- 1- The DRC will receive the proposed bid documents on April 10, 2020, for review and comment to the PBD. Prior to their release, the Public Buildings Department shall confirm to the DRC that the final documents are acceptable for bidding.
- 2- During the bid phase DRC comments shall be addressed by addenda as appropriate prior to acceptance of filed-sub bids.
- 3- Although the VRF manufacturer will provide commissioning for that system, the overall HVAC system shall be reviewed by a commissioning agent. Building envelope systems shall also be reviewed by a commissioning agent.
- 4- Final scope and submittals for envelope air sealing shall be reviewed by the DRC. It is recommended that the blower-door-directed air sealing method be used.

Based on the review and discussion of the proposed design documents and with certification by the Public Buildings Department that the conditions listed above will be addressed, in accordance with Section 5-54 of the City Ordinances, the Design Review Committee unanimously certifies to the Commissioner of Public Buildings that, to the best of the Committee's belief and understanding, the documents produced by Arrowstreet, Inc. substantially meet the program of the Newton Early Childhood program, and recommends that the documents be prepared and bid in accordance with requirements of Chapter 149.

Sincerely,



Ellen Light, AIA, LEED AP BD+C



Peter J. Barrer
Design Review Committee, Co-Chairs

Newton – Lincoln Eliot/NECP Project

NECP IT Meeting No. 3 – **AMENDED with amendments in font red** April 14, 2020

Attendees: Liam Hurley, Stephanie Gilman, Steven Rattendi – Newton Public Schools (NPS)
Kathleen Browning, Samuel Mayanja, John Saia
Paul Ferolito, Alex Valcarce – City of Newton (CofN)
Katie Ferrier – Arrowstreet (AST)
Mary Mahoney – Hill International (Hill)

Action Items are denoted in bold/italic font.

Items Discussed:

5. NPS reported on an inspection of 687 Watertown St. including observed existing conditions and impacts to projector location in classrooms due to the added Jack & Jill student toilets and classroom break out spaces.
6. NPS review the pathways for brining fiber service into the building and routing from the basement through the mid-level MDF room and up to the upper level. The existing Main Office may provide a vertical pathway for cable run. AST reported that only a section of the Main Office/Health Office will be changed so limited above ceiling access would be available from new construction.
7. NPS vendor to provide a proposal for 4-post rack, network switches, patch cables, structured cabling for all IT services, rough & finish (conduit, j-hooks, boxes, jacks, plates) for data/telephone/WAPS/CCTV, and devices for WAPs/Projectors/Phones/CCTV – TURN KEY installation. ***NPS to forward vendor proposal to Hill/AST when received.***
8. ***NPS vendor will furnish and install access panels required for their work.***
9. NPS requested that work associated with hardware, power supplies, communications cabling and devices, servers for access controls/card readers and request to entry audio/video devices be included in the General Contractor (GC) bid document. GC bid document includes this work.
10. NPS reported that requests for quotes for projectors is ongoing. ***NPS to forward projector quote to AST/Hill when received.***
11. GC electric power plans were discussed. ***AST to update electric power plans to removal all technology components except hardware, power supplies, communications cabling and devices, servers for access controls/card readers and request to entry audio/video devices.***
12. ***AST to forward 100% CD electric plans to NPS.***

No future meeting scheduled.

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 ***4/16/2020 R.1***

Newton – Lincoln Eliot/NECP Project

NECP FFE Meeting No. 1

April 22, 2020

Attendees: Kathleen Browning, Stephanie Gilman – Newton Public Schools (NPS)
Katie Ferrier, Victoria Wright – Arrowstreet (AST)
Mary Mahoney – Hill International (Hill)
Todd Tsiang – Todd Tsiang (Tsiang)

Action Items are denoted in bold/italic font.

Items Discussed:

1. Discuss classroom assignment floor plans provided by NPS and need for similar room assignment floor plans for 150 Jackson Road so that Tsiang can correlate moves for equipment to be re-used. 150 Jackson road room identification needs to include small rooms used throughout building. ***NPS to mark up the DiNisco floor plans with staff assignment.***
2. NPS reported that some furnishing and equipment located at 150 Jackson Road is not part of the NECP Program, i.e. cafeteria tables & chairs. Discuss whether some of these furnishing should be considered for re-use at 687 Watertown St based on new gathering and meeting spaces being created with the NECP Project. ***NPS to investigate whether any of the existing tables and chairs in the 150 Jackson Rd cafeteria can be relocated to 687 Watertown St.***
3. Discuss existing furniture in conference rooms at 150 Jackson Rd. Only furnishing in (1) conference room is suitable for relocation. ***Tsiang to include existing furnishings in (1) conference room in relocation plan.***
4. NPS advises that the furniture program needs to include furnishing for (1) non-assigned classroom to provide an available classroom should enrollment number increase. ***Tsiang to include furnishings for (1) non-assigned classrooms in FFE program.***
5. NPS reports that Room 207 at 150 Jackson Rd should be used as the model classroom set-up at 687 Watertown St for the FFE Program.
6. Discuss need for, set up, and re-use options for OT/PT suspension swing. Existing swing assemblies will be relocated however the (5) existing suspension point attachments cannot be used at 687 Watertown St due to the tectum ceiling/structure assemblies. ***The FFE Program will need to include relocating existing swing assemblies and purchase (3) new free standing swing structures.***
7. Discuss cubbies for student daily storage needs. AST reports that 272 cubbies are needed based on (16).classroom with (17) classrooms. NPS noted that the (17) classrooms includes (2) STRIDE classrooms with only 9 student/classroom. (16) student/classroom standard should be used throughout to ensure maximum flexibility and parity. Furniture type cubbies by Kaplan and School outfitters was discussed. Units are typically birch in units with (5) cubbies each. Unit cost approx.. \$800 installed. ***NPS to review purchase options with school vendors.***
8. Discuss schedule for FFE install and move. Initial move June 2021 then summer program move late August 2021.
9. Discuss Owner provided equipment for the construction contract.



- a. ***Toilet Accessories: Newton to provide paper towel dispensers, toilet paper dispensers, soap dispensers, sanitizers, sanitary napkin disposal units, and barrels.***
- b. ***AEDs: Newton to relocate AEDs at 150 Jackson Rd.***
- c. ***Copier/printers: Newton to relocate (2) existing copiers***
- d. **Fire Extinguishers: Owner in GC contract. Existing to remain at 150 Jackson Rd.**

Next NECP FFE meeting scheduled May 4, 2020 @ 9am.

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 Mahon