Lincoln Eliot School – Design Review Committee Meeting

Design Review Committee Meeting with others in attendance.

Meeting: May 10, 2023 (6:00PM-8:00 PM)
Location: Digital, via Zoom

Attendees

City of Newton:	Alejandro Valcarce	Stephanie Gilman	
Design Review Committee:	John Mulligan	Jonathan Kantar	Ambrose Donovan
	Amy MacKrell	David Gillespie	Ellen Light
	Emily Prenner	Peter Barrer	Thomas Gloria
	Maria Leo		
Arrowstreet Architects:	Larry Spang	Tina SooHoo	Tora Coursey
	Sneha Ameya		
Hill International:	Douglas Murray	Mark Krikorian	
Others:	Jini Fairley	Marc Kaufman	Cheryl Salvucci
	Ima Jonsdottir		

Link to Meeting Recording
Link to Presentation PDF

Exterior Design Review

Tina SooHoo briefed the DRC on exterior design updates and presented exterior massing

- Massing has remained the same
- Work on fenestration is proceeding

Perspective views of the exterior were presented and reviewed

- Approach from Jackson Road
- Approach from Bus Pick-up/Drop-off area
- Approach from Waban St.

Exterior Elevations were presented and reviewed.

Exterior Materials were presented and reviewed

- Split face CMU [Concrete Masonry Unit] (Jandris)
- Ground face CMU (Jandris)
- Weathered Polish CMU (Jandris)
- Clay Brick (Consolidated Brick)

Ellen Light requested Arrowstreet present a plan view of the gymnasium.
Ellen Light asked if there will be an airlock or vestibule incorporated on the Gymnasium egress doors.
Alejandro Valcarce noted that there will be no vestibule for the Gymnasium egress doors.

Ellen light asked for clarification on areas that will be finished in brick versus CMU.
Tina SooHoo clarified stating that the admin wing will be predominantly brick with CMU at the higher elevations. Arrowstreet is continuing to study utilizing brick versus CMU on the lower base areas.

- Gymnasium will be CMU
- Lower level around the elevator will be brick
- Upper level around the elevator will be CMU

Larry Spang added that there will be Clay Brick, and Concrete Brick. CMU will be in various sizes, some of which are very similar to brick size, some that are longer than brick, and some that are closer to traditional CMU.
Ellen Light expressed concerns that concrete brick comes in different sizes compared to traditional brick.
Tina SooHoo added that there will be various finishes of brick that are utilized. Ground Face CMU, Split Face CMU, and weathered polish CMU finishes will be utilized.

Maria Leo asked if the design team is trying to pick up the light warm brown colors from the existing building.
Alejandro Valcarce noted that the design team is attempting to incorporate some of the lighter brown colors from the existing building.
Tina SooHoo added that the design team is trying to select warmer tones, not cool greys but warm greys with the aggregates with some brown aggregates. Additionally, incorporating a warmer base tone, with some white aggregate.

Amy MacKrell asked if the Kalwall design was a cost driven decision, expressing concerns with daylighting within the gymnasium and suggested incorporating clear glass.
Alejandro Valcarce noted that the decision to proceed with Kalwall was not cost driven, adding that clear glass can cause glare issues necessitating window treatment. Utilizing Kalwall enables the design team to more closely match the existing building, while negating any concerns with glare.
Tina SooHoo added that the gymnasium is only Kalwall with minimal clear glass at the storefront gymnasium entry doors. Ms. SooHoo noted that clear glass would require shades which could be an operational and maintenance concern.

Example photos of gymnasium Kalwall implementation were presented and reviewed.
Tina SooHoo noted that various degrees of translucency will be utilized based on the location on the gymnasium to minimize glare and maximize natural daylight.

Ellen Light expressed concerns over the lack of a vestibule at the gymnasium entry, citing thermal concerns.
Jonathan Kantar agreed with Ellen Light.
Alejandro Valcarce noted that if a vestibule is to be incorporated, it would need to be located outside of the building as to not impede with the gymnasium.
Larry Spang stated that Arrowstreet will study a gymnasium vestibule.

Jonathan Kantar asked if all the flat/low-pitch roofs will be ready for PV's, and equipment would be placed in areas of shade to preserve the more desirable areas for Solar panels.
Alejandro Valcarce confirmed, noting that the team is working to maximize the Solar ability of the building.

Jonathan Kantar expressed concerns over the complexity of the masonry noting that it is utilizing a lot of different types of brick and CMU and hopes it can fit within the budget.
Alejandro Valcarce noted that the team is studying simplifying the design and implementation. The team is also studying the use of a thin-brick façade system.

Jonathan Kantar asked if trees and other plantings can be incorporated to provide screening and help shield the massing of the gymnasium.
Alejandro Valcarce noted that the team is looking into planting a lot of trees throughout the site. There are several opportunities across the site to plant a large number of trees.
Tina SooHoo of Arrowstreet noted that there are a number of colors the design team is looking at and will be simplifying it without sacrificing the design intent of the gymnasium. Ms. SooHoo also noted that there will be new plantings of trees throughout the site.

Larry Spang noted that a pricing set will be going out to the estimator next week which will answer some questions with regards to the cost of the brick.

Jonathan Kantar recalled that the gymnasium at Cabot has minimal variety in materials.
Alejandro Valcarce stated that Cabot utilizes two different types of brick.
Jonathan Kantar asked how functional the vertical glass at the Cabot gymnasium is.
Alejandro Valcarce noted many issues with vertical glass and added that lessons learned is to place the glass at higher elevations.

David Gillespie expressed concerns over the use of masonry suggested simplifying the gym façade and using color or alternate materials to draw attention to the entrance of the building.
Alejandro Valcarce note that the team is currently studying materials and colors and suggested incorporating metal banding at higher elevations.
David Gillespie suggested utilizing metal banding for signage and pulling some color from the interior to the exterior features.
Alejandro Valcarce stated that the team will continue studying the signage band, alternate materials, and bringing some color to the exterior.

Jonathan Kantar noted that he thinks the signage band above the main entry works well and could be turned into a prominent feature.
Alejandro Valcarce agreed and noted that because the entrance is set back, it may warrant something larger in scale.

David Gillespie asked what the design team intended for material for the signage banding above the main entry.
Larry Spang noted that it is currently being shown as metal.

Jonathan Kantar asked if roof drainage has been explored and how water will drain from the roof.
Tina SooHoo of Arrowstreet noted that the roof is mainly flat, with a sloped roof over the media center/library. Water on the roof will get diverted to roof drains and is piped through the building to drainage.
Jonathan Kantar asked if there are thermal concerns with roof drainage conducting through the pipe and into the building envelope.

Tina SooHoo of Arrowstreet noted that they have not studied the calculations of roof drains versus scuppers and downspouts.
Larry Spang noted that other net-zero building designs have also had roof drains.
Alejandro Valcarce noted that NPB would like to stray away from downspouts citing maintenance concerns.
Mr. Valcarce added that the team will ensure that drains and piping through the building will not thermally compromise the envelope.

Jonathan Kantar noted that there are scuppers at Angiers to drain the flatter roofs.
Alejandro Valcarce clarified, stating that scuppers are required for lower height roofs for emergency overflow drainage.
Larry Spang added that on lower roofs, an additional drain or scuppers are required noting that scuppers could compromise the façade.

Thomas Gloria noted that Jandris did an embodied carbon analysis on their products in October 2021, noting that they come in slightly under an equivalent concrete product. (Link) Mr. Gloria added that the numbers are shifting and it is important to stay diligent to keep up with the most up to date information.
Tina SooHoo of Arrowstreet noted that the Jandris representatives have been promoting products which have lower embodied carbon.
Ellen Light asked Thomas Gloria how the products compare to brick.
Thomas Gloria noted that Jandris products are roughly 30% lower embodied carbon than brick.

Ellen Light asked to see a more dramatic cornice on the admin portion to draw more attention to it, and would like to see the detail of where brick meets CMU at the Gymansium-Admin transition.
Tina SooHoo noted that the dimensions of CMU and brick align at three(3) bricks per one(1) CMU.
Alejandro Valcarce suggested studying a band for signage that continues along the entire admin bar.

Energy Code/Wall Assemblies for the new addition were presented and reviewed. Assemblies will meet or exceed code requirements.

- Brick Veneer on CMU – U Value 0.0710
- CMU Veneer on CMU – U Value 0.0710
- Brick Veneer on Metal Stud – U Value 0.0487
- CMU Veneer on Metal Stud – U Value 0.0487

Wall Assembly details were presented and reviewed.

- Final assemblies will meet or exceed code minimums

Jonathan Kantar asked Arrowstreet to study the energy performance benefit of using 4-inch low global warming potential XPS foam (R5) versus mineral wool as well as the embodied carbon delta.

Jonathan Kantar asked if the analysis presented takes thermal bridging into account.
Tina SooHoo noted that they do account for thermal bridging through the anchors. Additional detailed information can be provided if desired. Ms. SooHoo added that a whole wall analysis will be conducted to identify any thermal break de-rating that's accounting for door openings, window openings, and the metal studs.
Jonathan Kantar noted he'd be interested in studying the performance with increasing the stud insulation in the wall cavity to 5.5 inches or 6 inches.

Tina SooHoo stated they could study it and asked for further clarification on the desired overall U value target.
Jonathan Kantar noted that the more you increase the efficiency of the envelope, the more energy savings you'll have which in turn will enable downsizing of systems and lessen operational costs.
Larry Spang noted that they are trying to keep some airgap in the stud cavity to prevent condensation.
Jonathan Kantar agreed, stating that we are not at that level yet.
Larry Spang noted that thermally isolated anchors will be incorporated and expressed interest in more environmentally friendly insulation options.
Jonathan Kantar suggested Owens Corning formula NGX, and asked which is the better option and by how much, noting that mineral is not as good as once believed.
Tina SooHoo noted that Arrowstreet will follow up with the Owens Corning representative to study the additional options.

Interior Design

Tina SooHoo presented the overall concept and theme of the design noting that the team worked with the principal, teachers, and other staff.

- Earth, Nature, Environment, and Global Identities
    - Oceans
    - Mountains
    - Countryside

Colors pulled from these concepts include:

- Beiges
- Blues
- Greens
- Oranges

Colors have been assigned to floor/grade levels

- Blue – First Floor (Kindergarten-Grade 1)
    - Calming, soothing effect
    - Improves focus and mental alertness
    - Helpful for students to concentrate on studies
- Green – Second Floor (Grades 2-3)
    - Peaceful, harmonious atmosphere
    - Reduces stress and anxiety
    - Improves reading ability and academic performance
    - Enhances creativity and improves focus.
- Orange – Third Floor (Grades 4-5)
    - Stimulates the brain
    - Increases energy levels and improves creativity
    - Associated with feelings of warmth and friendliness
    - Can promote positive learning
    - Encourages social interaction

Interior design "mood board" was presented and reviewed.
Tora Coursey of Arrowstreet noted review with Principal Maura Morse and the Lincoln Eliot Art Teacher.
Materials are not finalized and will continue to be studied.

Main Lobby and Media Center renderings were presented and reviewed.

- Library is the "Jewel box"
- Acoustic baffles act as branches to the tree
- Librarian has sightlines to the entire library from the desk.
- Reading nooks incorporated for moments of respite
- Pendant lighting within the library
- Suspended acoustical panels acting as lily pads within the Media Center
- Water design on floor to act as wayfinding.

It was noted that the mural shown in the renderings is not finalized. It was determined that this location is a great opportunity for environmental graphics.

View from the librarian's desk was presented.

- Back of the reading nooks will be glass so students will be visible

Carpeting shown in the renderings to demonstrate general shape.

- Carpet used will be a hexagon shape which would require no cutting

3D rendering of the Cafeteria Lobby was presented and reviewed.

- Circular design in the flooring replicated on the ceiling for "stargazing"
    - Will be open with exposed mechanical
        - HVAC and other mechanical can be painted
- Will act as a hub for students prior to entering the cafeteria, art, and/or music rooms
- Walls can be utilized for environmental graphics
- Bench located near the entry/exit doors

3D rendering of the entrance to the Cafeteria was presented and reviewed.

- Art room located on the left
    - Gallery space in the hallway to display student art across from Cafeteria
- Green and Blue flooring for wayfinding to and from the cafeteria
- Additional windows for additional daylighting and to be able to see into the cafeteria.

Cafeteria Interior was presented and reviewed.

- Acoustic baffles with blue tones
    - Ceiling rises as you move away from the servery due to the auditorium floor above
- Opportunity for environmental graphics on the wall at the cafeteria entrance
- Utilizing color tones that would be relaxing to students
    - Existing columns will be painted green
        - Flooring will tie into the columns to help it "disappear"
    - Windowsills and walls painted green
- Low ceiling above entry and servery queue with raised ceiling with felt panels at the seating area
    - Felt panels utilized are for acoustic baffles to minimize noise.
    - Exposed ceiling with visible MEPS will be screened by the acoustic baffles.

Jonathan Kantar expressed concern about cleaning and maintenance of the felt panels. Mr. Kantar asked if the acoustic baffles will be cleaned and if they will not be cleaned, how will they look once they are dirty.
Alejandro Valcarce noted that the acoustic baffles will not be cleaned as a part of regular maintenance.

Jonathan Kantar asked what material the acoustic baffles will be made from, citing concerns over the use of flammable materials.
Tina SooHoo of Arrowstreet noted completing a material checklist of items to ensure there are no or minimal ingredients that are flammable.
Alejandro Valcarce added that the team could explore alternate materials that provide the same acoustic baffling, noting that acoustic baffles need to be durable and as low-maintenance as possible.
Jonathan Kantar added that he does not want a fabric material that will be a dust magnet and does not want dust to be collecting above where people will be eating their lunch.

Amy MacKrell recommended that the acoustic baffles do not need to be colored, suggesting that the use of white will make the colors pop.
Alejandro Valcarce stated the team will continue studying the colors of the acoustic baffles, noting that some colors have already been removed.

Alejandro Valcarce noted that the auditorium floor, which is sloped, is the ceiling of the Cafeteria.

Alejandro Valcarce noted that the team will have to balance out some of the paintings. Environmental graphics are shown as opportunities, not final locations for graphics, and will continue to be fine tuned.
Tina SooHoo of Arrowstreet noted that the area wall could be a location for a mural or wall graphic if the school decides to incorporate one in the future. It was also noted that the simple blue wall in the cafeteria will be set up with a projector screen and projector to hold meetings and events with staff.
Alejandro Valcarce added that the staff wanted a more intimate meeting spaces that isn't as large as the auditorium. If the staff are taking part in a workshop, the cafeteria would be a good location for it.

Ellen Light asked when the project is going out for bid.
Alejandro Valcarce gave a brief summary of the schedule:

- 60% CD Cost Estimate will be fine tuned
- 90% CD's will be provided to the DRC for review in July
- Responses back from DRC by July 31
- DRC Vote on August 16
    - Alejandro Valcarce noted that he would like to move the 8/16 DRC meeting ahead of schedule one week to 8/9/23

Ellen Light asked if the DRC will have feedback on pricing before looking at the drawings.
Alejandro Valcarce noted that the team will provide a general summary and report back on next steps to keep the project on track.

Ellen Light asked about the possibility of running up against the budget, and if there will be add alternates.
Alejandro Valcarce noted that there may be add alternates included, adding that the only alternate on the radar, due to availability, is Linoleum tiling for classrooms and corridors.

Alejandro Valcarce concluded the meeting at 8:05PM
Please send any questions/comments to: lincolneliot@newtonma.gov

Meeting recording can be found on the project website at:
http://lincolneliot-necp-projects.com/meeting-recordings/

The next Lincoln-Eliot Design Review Committee Meeting is scheduled for June 14, 2023 at 6:00PM via Zoom.

These notes will become part of the project record as written

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: Mark Krikorian