PERMANENT BUILDING COMMITTEE SCHOOL BUILDING COMMITTEE SUB-COMMITTEE MEETING MINUTES



Project:	Clinton Middle School	Project No:	202000640305
Subject:	School Building Committee Meeting	Meeting Date:	10/03 <mark>/</mark> 2023
Location:	ZOOM	Time:	6:30 PM
Distribution:	Attendees, Project File	Prepared By:	E. Grijalva
MSBA Module:	4- Schematic Design		

Meeting Agenda

- 1. Call to Order & Number of Voting Members
- 2. Previous Topics and Approval of September 19, 2023, MM
- 3. Invoices and Commitments for Approval
- 4. Mechanical Systems Discussion and Vote
- 5. Construction Management @ Risk Subcommittee Selection
- 6. OIG Application Submission Permission
- 7. Construction Management @ Risk RFQ Draft Discussion
- 8. Other Topics not Reasonably Anticipated 48 hours prior to the meeting
- 9. Public Comment
- 10. Next Meeting
- 11. Adjourn

Name

Steven Meyer* Chris McGown *

Michael Moran* Brian Delorey* **Brendan Bailey Brian Farragher** Matthew Varakis Phil Duffy **Trip Elmore** Elias Grijalva Peter Caruso Sean Brennan Anthony Hardman Carrie Havey Kevin Seaman J Blume Mark Abdella Josiah Herbert Jeff Cammuso

Affiliation

Superintendent – PBC Member Chair of PBC- Head of DPW

PBC Member PBC Member School Committee Chair Director of Facilities School Committee Vice-Chair Director of Community & Econ. DWMP- Project Director DWMP – Assistant PM LPA|A – Project Manager

LPA|A – Project Architect Green Engineer Green Engineer Seaman Engineer Public – Fontaine Bros Public – Fontaine Bros Public – Shawmut Design

Public – Shawmut Design

*PBC Voting Members



Item No	Description	Action
17.1	Call to Order: 6:36 PM meeting was called to order by PBC Chair, C. McGown with 5 of 7 members in attendance.	Record
17.2	 Previous Topics & Approval of September 19, 2023, Meeting Minutes: A motion to approve the 09/19/2023 meeting minutes was submitted by S. Meyer_and seconded by B. Delorey. Discussion: None. Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y) Abstentions: None All in favor, motion passes, September 19, 2023, meetings are certified as approved. 	Record
	Invoices and Commitments for Approval	Record
	 Invoice 1: DWMP Invoice #014, for the month of September, in the amount of \$15,000.00 A motion was made by S. Meyer and seconded by B. Delorey for the approval of the DWMP September invoice. Discussion: None. Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y) Abstentions: None All in favor, motion passes to approve DWMP September invoice. LPA[A Amendment No.005 Request for Approval, in the amount of \$14,190.00. T. Elmore states this amendment is a result of additional services relative to proving the Traffic Analysis that the MSBA wants us to conduct. A motion was made by B. Delorey and seconded by S. Meyer for the approval of the LPA A Amendment No.005. Discussion: None. Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y) Abstentions: None All in favor, motion passes to approve LPA A Amendment No.005. Budget Revision Request (BRR) No.002 Request for Approval in the amount of \$10,465.00 T. Elmore explains that this BRR form is to approve moving money within the budget to cover Designer's Amendment No.005. Moving \$10,465.00 from the other category to the Environmental and Site category. A motion was made by S. Meyer and seconded by M. Moran for the approval of the LPA A Amendment No.005. Discussion: None. Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), C. McGown (Y) 	
	All in favor, motion passes to approve Budget Revision Request No.002.	

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Mechanical Systems Discussion and Vote S. Brennan introduces the consulting engineers that are present in the meeting; Carrie Havey, Anthony Hardman from the Green Engineer, and Kevin Seam from Seaman Engineering. He then recaps what was discussed in the last meeting as well as provides an Order of Magnitude understanding of the cost to go from the New Stretch Code to the Updated Code. the anticipated lifecycle, and the usable life of these new fixtures.	Record
• MSBA revised its funding regarding green incentive points. The 2% that was previously qualified no longer exists. MSBA offered a compliance pathway towards getting an additional 4% points overall.	
 New Stretch Mandatory Code: C402.1.5- Envelope Backstop, C402.3- Rooftop Solar Ready, C402.5 Air Leakage Testing, C402.7- Thermal Bridge Derating, C403 – Building Mechanical System w/ Energy Recovery, C404- Service Water Heating, C406 Additional Efficiency Measures, EV Parking 	
• The New Stretch Code is an MSBA Requirement, whether the town has adopted it or not and we have to meet a Target Performance Pathway called TEDI. This is the biggest step to meet the New Stretch Code. It's a smaller step to get into the specialized Opt-in Code with all electrified systems.	
• Dual Fuel Option requires putting PV on the roof and being electric ready, meaning running conduits and providing space for additional switch gears or panels that you might need to require in the future. You would also have to bring electrical service that would be large enough to surface those future devices.	
 PSR Design MSBA Reimbursement: \$81.75M Included 2% Energy Efficiency Incentive Points 	
 Stretch Mandatory Code MSBA Reimbursement: \$83.25M Includes 2% loss Energy Efficiency Incentive Points + Stretch Code improvements Insulation Increase (to meet TEDI) 	
 Opt-In Code (Stretch code plus the following) MSBA Reimbursement: \$80.25M Includes 4% Energy Efficiency Incentive Points + Stretch Code improvements 	
 Path 1 All Electric HVAC Electric Domestic Hot Water Electric Cooking Equipment Hybrid fossil electric HVA Full electric infrastructure for future retrofit 	
	 S. Brennan introduces the consulting engineers that are present in the meeting; Carrie Havey, Anthony Hardman from the Green Engineer, and Kevin Seam from Seaman Engineering. He then recaps what was discussed in the last meeting as well as provides an Order of Magnitude understanding of the cost to go from the New Stretch Code to the Updated Code. the anticipated lifecycle, and the usable life of these new fixtures. MSBA revised its funding regarding green incentive points. The 2% that was previously qualified no longer exists. MSBA offered a compliance pathway towards getting an additional 4% points overall. New Stretch Mandatory Code: C 402.1.5- Envelope Backstop, C402.3- Rooftop Solar Ready, C402.5 Air Leakage Testing, C402.7- Thermal Bridge Derating, C403 – Building Mechanical System w/ Energy Recovery, C404- Service Water Heating, C406 Additional Efficiency Measures, EV Parking The New Stretch Code is an MSBA Requirement, whether the town has adopted it or not and we have to meet a Target Performance Pathway called TEDI. This is the biggest step to meet the New Stretch Code. It's a smaller step to get into the specialized Opt-in Code with all electrified systems. Dual Fuel Option requires putting PV on the roof and being electric ready, meaning running conduits and providing space for additional switch gears or panels that you might need to require in the future. You would also have to bring electrical service that would be large enough to surface those future devices. PSR Design MSBA Reimbursement: \$81.75M Included 2% Energy Efficiency Incentive Points + Stretch Code improvements Includes 2% loss Energy Efficiency Incentive Points + Stretch Code ing Powerments Opt-In Code (Stretch code plus the following) Other Amadatory Code MSBA Reimbursement: \$83.25M Includes 4% Energy Efficiency Incentive Points + Stretch Code inprovements



S. Brennan demonstrates a real-life example of data that was collected on gas and electricity usage from The Town of Shrewsbury, who was nice enough to share all their usage, payment terms, and Kw over the past few years. We averaged the numbers out and looked at the consumption for the building heating and what that cost would be in Clinton Dollars. **The biggest question is whether** we are going all-electric or trying to keep fossil fuels in the building and what would impact operating costs.

- Example: Beal Elementary, Shrewsbury MA
 - o 142,000 SQF Building
 - Hybrid Fuel Systems
 - Rooftop Package unit with Perimeter fin tube radiation system
 - Estimated Additional Operating cost for Clinton: \$28,000.00

Systems type	Fuel	Service Life
DHW Boilers	Gas	25+/- Years
DHW Boilers	Electric	15+\- Years
Heating Boilers	Gas	25 +\- Years
Air Source Heat	Electric	15+\- Years

T. Elmore asks how much would PV cost for a building of this size.

A. Hardman replies that the rule of thumb is \$3 per watt.

C. McGown states we have a project about a mile away that requires solar panels. Is there a way to tie these two projects together where we could use solar to bring the power to this building?

S. Brennan states I've never dived that deep into it. What I can say is Beal Elementary School, did this very thing, put in a PV system in their landfill. They voted at the town level to allocate 100% of their coverage for their electrical use. So that building in essence is Net Zero electric based on their local community grid.

C. Havey comments you can do offsite PV if it's allocated to this project. I think the broader question is, does that work per the energy code?

A. Hardman states he believes off-site is permissible for code.

S. Brennan states the PSR estimate did not have PV panels in it. We'll be looking at an estimated \$1.5 million add for a 500 Kw PV system, cost could increase if canopies are added. The existing service to the school is a 2000-amp service.

M. Moran asked what the new service would be.

S. Brennan confirms the new service would be 4000-amp.

K. Seaman states in the PSR Design the VRF systems are in office admin and nursing areas, then for the rest of the building has a mix of air handlers fed by air-source heat pumps for large spaces and chilled water fed style displacement systems with hot water radiation for classrooms. Chilled and hot water would be fed by an air source heat pump chiller/heater. The chiller/heater would make warm enough water to utilize multi-tier fin-tube, coils, or radiant heat. The decision is whether you will with a gas boiler or an electric boiler for supplemental heat.

P. Duffy asks if you go all-electric are you limited to only heat pumps for heating? Can you use an electrical lead to generate a hydronic system?

S. Brennan replies that we could do Geothermal.

17.5



K. Seaman states as far as electric resistance heat, you're limited to how much of that you can use such as a cabinet heater, it would also be expensive.	
A. Hardman talks about the incentives between air sources and geothermal.	
 T. Elmore talks about Lexington Hasting School's Geothermal system. M. Moran asked what the cost was and what was the outcome as far as electric usage. T. Elmore states the Green Engineer did a study on the payback. The Geothermal costs about 2.5 million for roughly a building of this size and there was never a payback. 	
S. Meyer comments that I think if we were building a system that was primarily future-proof, it would make sense to go full electrification.	
A motion was made by S. Meyer and seconded by M. Ward to pursue full electrification.	
Discussion	
M. Moran comments there are too many variables with electrification. 67% of electricity generated in Massachusetts is by gas.	
C. McGown comments it might be the case today, but I doubt it will be in 5-10 years.A. Hardman states if you go hybrid, we're still doing all the infrastructure for a fully electric building,	
so we are duplicating cost.	
Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Ward (Y), C. McGown (Y) Abstentions: M. Moran	
All in favor, motion passes to proceed with full electric mechanical systems.	
Construction Management @ Risk Subcommittee Selection	Record
T. Elmore recaps the outcome of the last PBC Meeting. The Town voted to go CM @ Risk as the Construction Delivery Method for this project. One of the components of this process is selecting a CM @ Risk subcommittee.	
 CM @ Risk Subcommittee Owners Project Manager (OPM) Representative – Trip Elmore – Project Director Designer Presentative – Eric Moore – Senior Project Architect Town of Clinton S. Meyer M.Moran 	
Discussion: None	



17.6	OIG Application Soumission Permission :	Record
	T. Elmore states that we would like Procurement to review the OIG Application if possible because we are submitting the application under the Town of Clinton.	
	A motion was made by S. Meyer and seconded by M. Moran to approve the OIG Application pending final review by M. Ward.	
	Discussion:_None Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y) Abstentions: None	
	All in favor, motion passes to approve the OIG Application pending final review.	
17.7	Construction Management @ Risk RFQ Draft Discussion	Record
	T. Elmore comments that we have drafted a standard Request for Qualification (RFQ) that was shared prior to this meeting. From a procurement standpoint, we would have to advertise this once we are authorized to put the RFQ on the street. We would like to release the RFQ by next Wednesday, October 11, 2023, so it would need to go into the Central Register by Thursday, October 5 th , and we would also need to put out a local ad as well as put an ad on COMMBUYS.	
	M. Ward comments to get an ad in the local paper for next week, we would have to submit an ad this Friday by Noon. I can do COMMBUYS once I have the general information.	
	 Prepare and Advertise the RFQ: October 05, 2023 RFQ Issue Date: October 11, 2023 RFQ Deadline: November 02, 2023 	
	A motion was made by B. Delorey and seconded by M. Moran to issue all the publications according to the schedule that was discussed.	
	Discussion: M. Moran asked if this is enough time for CMs to submit their qualifications by November 2 nd . T. Elmore confirms this is sufficient time.	
	Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y)Abstentions: NoneAll in favor, motion passes to approve issuing the publications.	



17.8	Other Topics not Reasonably Anticipated 48 hours prior to the Meeting:	Record
	T. Elmore mentions that LPA A received preliminary survey information on the easement location	
	from their surveyor. Within the next couple of days, we will receive the final survey that can be	
	forwarded to National Grid.	
	Discussion: None	
17.9	Public Comment:	Record
	Discussion: None	
17.10	Next Meeting:	Record
	10.17.2023 – CMS Building Committee Remote @ 6:30 PM – In-Person @ Clinton Middle School	
	11.14.2023 – CMS Building Committee Remote @6:30 PM – Location TBD	
	12.19.2023 – CMS Building Committee Remote @6:30PM – Location: TBD	
	Discussion: None	
17.11	Adjourn: 8:16 PM a motion was made by S. Meyer and seconded by M. Moran to adjourn the	Record
	meeting.	
	Discussion: None.	
	Roll Call Vote: B. Delorey(Y) S. Meyer (Y), M. Moran (Y), M. Ward (Y), C. McGown (Y)	
	Abstentions: None	
	All in favor, the meeting is adjourned.	

Sincerely, DORE + WHITTIER Elias Grijalva Assistant Project Manager Cc: Attendees, File The above is my summation of our meeting. Please contact me for incorporation into these minutes if you have any additions and/or corrections.