## Whitman Middle School Building Committee

## Meeting Minutes Time: 4:30 PM

Place: Whitman-Hanson Regional High School Date: Tuesday, March 28, 2023

**Members Present:** Fred Small, John Stanbrook, George Ferro, Jeff Szymaniak, John Galvin, Crystal Regan, Brandon Frost, Timothy Holly, Rich Pulkinen, Beth Stafford, Kathleen Ottina, Josh MacNeil, Mary Beth Carter, Randy LaMattina, Don Esson, Christopher Scriven ~*Participated Remotely* 

**Absent:** Robert Curran

**Building Team Present:** John Bates, OPM – (CPL), Troy Randall, Principal Architect – Ai3 Architects (Ai3), Julie Rahilly, Architect – (Ai3)

**Absent:** Alisa Santos, BD Manager – (CPL)

#### Call to Order:

At 4:30pm Fred Small, The Committee Chair opened the meeting by calling it to order.

#### Pledge of Allegiance

#### I. OPM

## a. OPM Monthly Report

i. Budget (Budget Revision Request #1 Update)

Mr. Bates notified the Committee the MSBA's auditing team has finished its review of the Budget Revision Request #1 (BRR#1) to move \$48,000 of funds from the contingency budget line titled *Other* into the Environmental and Site (E&S) line to cover the overage in the (E&S) budget line. With the MSBA having formally approved BRR#1, the District may resume submitting expenses toward the E&S budget line as well as re-submit payments previously rejected due to them being over the budget line basis.

#### ii. Schedule (Town Meeting and Election Date)

Mr. LaMattina informed the Committee that there are 2 options being discussed for the Town Meeting and Election date; either January or March of 2024. The Whitman Board of Selectmen plans to take a vote on April 11, 2023 to finalize the date. The referendum will need to be completed within the 120 day window from the date of the MSBA Board's approval to enter into a Project Scope and Budget Agreement with the District. Therefore, the date of the referendum has implication on when the project would go in front of the MSBA Board. Mr. Bates noted that in discussions with the MSBA, they are currently able to hold both the October 25, 2023 and December 13, 2025 Board Meeting dates for the Whitman Middle School project until the referendum date is confirmed, but cannot guarantee how long both spots can be held. Therefore, Mr. Bates advised that the sooner the Town informs the MSBA of their referendum date, the better.

### b. MSBA Facilities Assessment Subcommittee Update

Mr. Bates informed the Committee that on March 15<sup>th</sup>, the District (Mr. Szymaniak, Mr. Ferro, and Mr. Frost) along with Ai3 and Colliers delivered a brief, 15 minute

presentation to the MSBA Facilities Assessment Subcommittee (FAS) on the District's Education Plan and how the Preferred Design Option supports their educational vision. Mr. Bates noted that the FAS routinely meets to hear district presentations on proposed projects to provide feedback before the project is presented to the MSBA Board. Mr. Bates added that the presentation was very well received and the feedback on both the education plan and design response was complimentary.

#### c. Public Relations Subcommittee

Mr. Galvin reminded the Committee of the concerns he expressed at the February 14<sup>th</sup>, 2023 meeting regarding a lack of public outreach efforts. During that meeting, Mr. Galvin and Mr. Frost volunteered to dedicate effort towards public outreach. Since that meeting, Colliers has presented a public outreach plan of action and engaged the support of their business development manager, Alisa Santos. Mr. Galvin brought forth the proposal to further support that effort through formation of a public outreach subcommittee.

Mr. Small noted that Mr. Galvin has an expertise in videography that can be used to document the existing school and its current deficiencies. Going forward, videos may also be used to communicate the vision for Whitman Middle School's future. Lela Donovan, 81 Old Mansion Lane commented that there is a group of parents that are trying to organize to do a similar outreach effort and is glad to hear that a professional is also assisting in that effort. Mr. Bates and Mr. Small noted that Colliers would be available to support such local groups by way of providing information about the project that they could distribute. However, they also reminded those in attendance that as paid consultants, regulations prevent Colliers (and Ai3) from publicly advocating for the project.

Mr. Scriven volunteered to be a part of the subcommittee in addition to Mr. Galvin and Mr. Frost.

# d. Construction Delivery Methods (Design Bid Build vs. Construction Manager at Risk)

Mr. Bates delivered a presentation on the 2 public construction delivery methods available to this project by Massachusetts General Law (MGL):

- General Contractor (GC)
  - o Traditional Design-Bid-Build Approach
  - o Utilizes Chapter MGL 149
- Construction Manager at Risk (CM)
  - o Approved by Massachusetts for public projects in 2004
  - o Utilizes Chapter MGL 149a
  - o Applicable to projects greater than \$5 million

The following is an overview of the General Contractor delivery method:

- Traditional approach to design and construction
- Project is fully designed 100% and then bid
- Bid is awarded to pre-qualified General Contractor (GC) based upon lowest price
- MGL requires pre-qualification of GC's and major sub-contractors
- Sub-contractors all become part of the GC team
- Contract is based upon lump sum amount

The major advantages of the General Contractor method are:

- Familiar process
- Simpler to manage with single point of responsibility
- Fully defined scope of project for construction
- Lowest price proposed and accepted

The major disadvantages of the General Contractor method are:

- Linear process potentially elongates schedule
- Limited input from builder during phase and design process
- Pre-qualification of trade sub-contractors only for those mandated by law

The following is an overview of the Construction Manager at Risk delivery method:

- Construction Manager (CM) retained early in the design process
- CM provides support services as a member of the project team throughout design and construction
- CM firm is selected based upon qualifications and individuals assigned, not price
- MGL requirement for pre-qualification of trade sub-contractors still applies
- CM becomes the builder
- Ability to allow construction to start prior to full completion of design early packages
- CM leads the pre-qualification and bidding process
- Requires OIG approval in advance

The major advantages of the Construction Manager at Risk method are:

- Selection of builder based upon qualifications not just price
- Builder as part of team throughout design and construction
- Ability to fast-track construction
- Complex phasing logistics can be improved with sophisticated builder crafting the sequencing plan

The major disadvantages of the Construction Manager at Risk method are

- More expensive option than traditional GC approach
- No guarantees problems will still occur
- Increased complexity of process for all parties

Mr. Bates noted that Colliers references a report done by the MSBA on June 1, 2016 regarding the 2 delivery methods. Although the report is now several years old, the dollar figures can be extrapolated to current market conditions, thus making the data still relevant.

From an analysis of 71 MSBA core projects, those projects utilizing the Construction Manager at Risk method were approximately \$23/SF higher that General Contractor projects at Schematic Design, and \$35 to \$38/SF higher at the time of the Guaranteed Maximum Price/Bid.

Out of those 71 projects, 26 had reached final audit at the time of this report. The audit produced the following information:

- Final Audit: Projects using the Construction Manager at Risk method were approximately \$33 to \$38 higher than projects utilizing the Design-Bid-Build method.
- 12 of the 16 (75%) projects utilizing the Design-Bid-Build method had a lower final cost than the construction budget estimated at schematic design.

• 3 of the 10 (30%) projects utilizing the Construction Manager at Risk method had a lower final cost than the construction budget estimated at schematic design.

Additionally, the report noted that the comparison on change orders as a percentage of bid costs, typically between 0% and 2%, did not differ between the 2 construction delivery methods.

In summary, and according to the office of the Inspector General, the data indicates that the Construction Manager at Risk delivery method is most appropriate for complex, multi-phased, logistically challenging projects. Furthermore, the cost savings of the General Contractor method outweigh the benefits of Construction Manager at Risk when dealing with "simple" construction projects.

Mr. Bates added that the preliminary cost estimates for the preferred option expect that the Construction Manager at Risk Delivery method would represent an additional \$5 million +/- to the project.

Mr. Bates advised the Committee that at the next meeting, this topic should be further discussed with the potential to vote on the selected construction delivery method.

### **II.** Designer Update

## Schematic Design (SD) Activities & Milestones

As of this meeting, Ai3 is continuing with the originally proposed schedule showing submission of the Schematic Design Package to MSBA on August 31, 2023 and the referendum for project funding certification in November 2023. However, that schedule can be adjusted depending on the Whitman Board of Selectmen's vote on the actual date.

Ai3 conducted programming meetings with middle school staff in the month of March for updates and feedback on the design work to date.

Mr. Randall reminded the Committee that the Whitman Hanson Regional High School Project, completed approximately 20 years ago, was at the forefront of sustainable design during its design. Codes have changed since that time and the process has evolved, but the High School building remains an energy efficient school. Ai3 plans to discuss the latest sustainable building practices that can benefit the Whitman Middle School project.

#### Energy Goals and How to achieve Them

The state has committed to Net-Zero emissions by 2050. To accomplish that goal, there are 3 main strategies:

- 1. Eliminate Fossil Fuel Use
- 2. Reduce demand
- 3. Produce Electricity On-Site

The latest stretch code requires that all new buildings 5-stories or less must be Net-Zero Ready, which entails the production of on-site renewables (e.g., photovoltaic panels).

Whitman is a Green Community and committed to the Stretch Code in 2016, thereby committing to energy efficient building.

There are 3 important metrics to evaluate a building's sustainability performance:

- TEDI (Thermal Energy Demand Intensity) A measure of envelope performance, air infiltration and ventilation energy recovery
- EUI (Energy Use Intensity) A measurement of efficiency as Energy Use/SF/Time

• NZE (Net Zero Energy) - Equal amount of Energy Use and Energy Production

#### Intro to Net-Zero Energy (NZE) & Sustainable Design

A noteworthy example of a Net-Zero project is the recently completed (2022) Hosmer Elementary School in Watertown, MA, designed by Ai3 and is similar in size to the proposed Whitman Middle School.

Sustainable strategies on Hosmer Elementary included:

- Renewable energy production
- Passive Solar
- Enhance Enveloped
- Occupany Sensors
- Air Sourced Heat Pumps

Reduced energy use and low EUI presents cost, health, and educational benefits for the students and the Town.

Other available renewable energy technology includes:

- Geothermal Wells
- Wind (have not seen that implemented in MA to date)

### <u>Utility Incentives Programs through Mass Save</u>

The following is a summary of the available incentives programs available for projects considering a Net Zero or Net Zero Ready path:

- Path 1/Zero Net Energy Needs to be engaged with the local utility compnay (National Grid) during Schematic Design. Ai3 has already begun that engagement. This pathway will require a building EUI of 25 or less.
- The District would need to execute a Memorandum of Understanding to commit to the Path 1. The program offers an incentive of \$2/SF, which would equal approximately \$278,000 at the end of construction as a rebate to the District.
- A Post Occupancy Evaluation done by a 3<sup>rd</sup> party consultant to measure the building's performance would result in an additional \$1.5/SF (approx. \$210,000 total) to the District.
- The SMART Program is a solar incentive program that the District would be eligible for if it decides to invest in solar panels as part of the project.
- The energy that is being produced by renewables gets sent to the utility as opposed to directly back to the building itself. The renewables will also reduce the amount of energy consumption, thereby reducing usage and the energy bills.

#### Additional Comments:

- The MSBA provides a 2 point incentive toward its reimbursement for achieving a LEED minimum threshold.
- Ai3 will perform a life cycle payback with their engineering team.
- The preliminary design costs estimates carried a variable refrigerant flow (VRF) system in the project's base scope as well as solar panels as an Add Alternate. VRF has the benefit of being a decentralized system where if one unit needs repair the other units will continue operating.
- The actual cost for solar panels is dependent on the size of the system which will need to be calculated for this project.
- The state's commitment to requiring Net Zero Readiness for new building projects means that buildings need to be equipped with the <u>infrastructure</u> for renewable energy technology systems, but not the system itself.
- A possible next step would be to evaluate the current electric bills to determine the payback period on the solar panel system cost.

• There will be an energy charette in the near future with the design team, town representatives, and national grid to discuss energy goals and how to achieve them.

#### **Upcoming Events**

Ms. Rahilly noted the following project related upcoming events:

- The next Community Forum is scheduled for April 13, 2023
- The Whitman Middle School website has recently been launched.

## **III.** Account Invoice Approvals

The chair entertained o motion to approve the invoices as presented in the meeting materials package:

Motion: Ms. Stafford Second: Mr. LaMattina

Vote: The motion passed unanimously by roll call vote.

Next Meeting Date: Tuesday, April 25, 2023

### **Adjournment**

Mr. Small entertained a motion to adjourn.

Motion: Mr. LaMattina Second: Ms. Ottina

Vote: The motion was approved unanimously by roll call vote at 5:46pm.