

# SCHOOL BUILDING COMMITTEE MEETING MINUTES



Project: Tri-County Regional Vocational Technical HS  
Subject: School Building Committee Meeting No. 34  
Location: ZOOM  
Distribution: Attendees, Project File  
MSBA Module: 6- Detailed Design

Project No: MP20-28  
Meeting Date: 02/15/24  
Time: 4:00 PM  
Prepared By: E. Grijalva

---

## **Present**

Brian Mushnick*	SBC Chair
Karen Maguire*	Superintendent
Dan Haynes*	Business Admin.
Jonathon Dowse*	SBC Member
Harry Takesian*	Facilities Director
Michael Procaccini*	SBC Member
Brendan Bowen*	SBC Member
Bob Foley*	Adult Ed. Dir
Dana Walsh	SBC Member -TCRVTHS Principal
Trip Elmore	DWMP- Project Director
Mike Cox	DWMP – Project Manager
Elias Grijalva	DWMP- Assistant PM
Rachel Rincon	DWMP- Assistant PM
Vladimir Lyubetsky	DRA- Project Manager
Carl Franceschi	DRA – Principal in Charge
Wayne Mattison	G & V (Mechanical)
Bob Bravo	G & V (Electrical)
S. Johnson	Consigli- Sr. Project Manager
Kristy Lyons	Consigli - Sr Pre-Con Manager

\*SBC Voting Member

Item/ No.	Description	Action
35.1	<p><b>Call to order:</b> 4:09 PM meeting was called to order by SBC Chair B. Mushnick, <b>9</b> of 11 voting members in attendance.</p>	Record
35.2	<p><b>Previous Topics &amp; Approval of January 18,2024 Meeting Minutes:</b>            A motion to approve the <u>January 18,2024</u> previous meeting minutes as submitted was made by J. Dowse and seconded by B. Foley.</p> <p><b>Discussion:</b> None; <b>Roll Call Vote:</b> B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), B. Mushnick (Y); <b>Abstentions:</b> None.            All in favor. Motion passes.</p>	Record
35.3	<p><b>Invoices and Commitments for approval:</b></p> <p><b>Invoice 1:</b> DWMP January Invoice, in the amount of <u>\$100,000.00</u>            A motion was made by M. Procaccini and seconded by J. Dowse for the approval of the DWMP January invoice.</p> <p><b>Discussion:</b>            B. Foley shares his concerns about ensuring that the payment reflects the actual progress made by the Team. He suggests a need to form a verification mechanism, for example a schedule of values.</p> <p>T. Elmore explains that this budgeting process involves setting up different funding categories for various stages of the project. We are currently in the construction documents phase, and the invoices reflect this stage. You're making periodic monthly payments, as we go through each of these phases.</p> <p>B. Foley comments that there is a level of uncomfortableness for me in approving these large invoices without being able to compare them to a schedule of values.</p> <p>C. Franceschi acknowledges B. Foley's concerns about the oversight and suggests establishing a requisition subcommittee to review the architect's work and ensure progress is on track.</p> <p>Requisition Subcommittee Members:            B. Bowen, Bob Foley, Karen Maguire, Dan Haynes, Trip Elmore, Vladimir, Carl Franceschi</p> <p><b>Roll Call Vote:</b> B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), D. Haynes (Y), B. Mushnick (Y); <b>Abstentions:</b> None.            All in favor. Motion passes.</p>	Record

	<p><b>Invoice 2:</b> DRA January Invoice, in the amount of <u>\$976,955.00</u></p> <p>A motion was made by B. Foley and seconded by J. Dowse for the approval of the DRA January invoice.</p> <p><b>Discussion:</b> None; <b>Roll Call Vote:</b> B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), D. Haynes (Y), B. Mushnick (Y); <b>Abstentions:</b> None; All in favor. Motion passes.</p>	
	<p><b>Invoice 3:</b> DRA January Professional Services Invoice, in the amount of <u>\$33,672.10</u></p> <p>The motion was made by B. Foley and seconded by J. Dowse for the approval of DRA January Professional Invoice.</p> <p><b>Discussion:</b> V. Lyubetsky explains this invoice is related to Amendment No.006 Geotechnical related work.</p> <p><b>Roll Call Vote:</b> B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), D. Haynes (Y), B. Mushnick (Y); <b>Abstentions:</b> None. All in favor. Motion passes.</p>	
	<p><b>Invoice 4:</b> Consigli January Invoice, in the amount of <u>\$31,191.00</u></p> <p>The motion was made by J. Dowse and seconded by B. Foley for the approval of the Consigli January Invoice.</p> <p><b>Discussion:</b> T. Elmore explains this is for their preconstruction fee that is invoiced consistently every month.</p> <p><b>Roll Call Vote:</b> B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), D. Haynes (Y), B. Mushnick (Y); <b>Abstentions:</b> None. All in favor. Motion passes.</p>	
35.4	<p><b>DRA Update: Mechanical and Electrical Systems</b></p> <p>V.Lyubetsky introduces his two engineers in the meeting today, Wayne Mattison &amp; Robert Bravo from G &amp; V.</p> <p>W. Mattison provides a HVAC progress update from schematic design to design development phase.</p> <p><b>Lifecycle Cost Analysis (LCCA) for HVAC Systems</b></p> <ul style="list-style-type: none"> <li>• Compare various HVAC systems for vocational schools.       <ul style="list-style-type: none"> <li>○ Air Source Heat Pump, Water Source Heat Pump, VAV systems</li> <li>○ Compares installation costs versus the energy consumed, cost of maintenance replacement cost and operational costs.</li> </ul> </li> </ul>	Record

### **Variable Refrigerant Flow System (VRF) - Current Design**

- Meets ASHRAE Standard 54: thermal comfort design & 62- ventilation standard.
- Meets international energy conservation code.
- Meets ASHRAE 90.1- Energy Standard for Building
- Meets NC & ANSI sound standards.
- Classrooms, Office, Conference rooms types of spaces
- System consists of:
  - Roof or Ground Mounted Heat Pumps
  - Ceiling Cassettes
  - Concealed Fan coil Units
  - Refrigeration Piping w/ Branch Controllers
  - Energy Recovery Units for Ventilation
- System Provides:
  - Simultaneous Heating & Cooling
  - Individuals Space Temperature Control
  - Built-in Redundancy through the use of multiple compressors
- Gymnasium, Auditorium & Student Dining
  - served by split type air heat pumps.
- Classrooms
  - Heating & Cooling handled by VRF System.
  - Ventilation provided by roof mounted packaged air source heat package.
  - Teachers can control their own environment.
- Roof
  - Air source heat pumps that provide ventilation

\*The whole system is controlled by a building management system, a central computer, where all the scheduling of the equipment exists.

### **Discussion:**

B. Bowen asks if these rooms have a fan coil system or a quiet system.

W. Mattison replies, the ceiling cassettes are a ductless fan coil, extremely quiet, meets LEED standard for enhanced acoustical environment.

B. Bowen asks if the ceiling cassettes paired with any specific ratings within the room or ceiling type?

V. Lyubetsky replies that as part of the LEED submission, our acoustic engineers Acentech are going to provide the reverberation time calculations.

W. Mattison states Acentech will review our design; we provide them with our equipment selections and they will make recommendations. It's an iterative process.

B. Bowen asks are there any potential issues arising from activities within the shop that could affect the performance or effectiveness of the energy recovery system.

W. Mattison replies, in various shops like the woodshop, automotive, welding plumbing and HVAC, industrial equipment such as wood dust collectors, vehicle exhaust systems, and welding fume capture equipment is utilized to manage emissions. These shops also use MERV 8 filters on the return side of the energy recovery system's wheel to capture airborne dust particles. Additionally, MERV 13 filters are employed to further enhance indoor air quality, aligning with the best engineering practices, though it's not mandated. This comprehensive filtration system helps protect the wheel from contamination, minimizing the need for extensive cleaning.

K. Maguire asks, is this system adequate given the complexities of vocational program spaces and the challenges with air circulation and ventilation, particularly considering colleagues experiences with system issues in other schools, to ensure we're selecting the most appreciate solution for our needs.

W. Mattison states our systems are designed in accordance with the Industrial Hygienist handbook, which follows OSHA standards, ensuring that vocational school environments meet industrial safety requirements akin to those of professional automotive shops. These systems encompass extensive ductwork to capture emissions from various equipment such as table saws and belt sanders in the woodshop and soldering stations in the HVAC shop, with dedicated exhaust systems for areas like nail benches in Cosmetology to address specific chemical hazards. Despite being overlooked as industrial environments, vocational schools require meticulous ventilation planning to ensure the safety and well-being of students and staff.

B. Mushnick asks what is the expectancy of the filters?

W. Mattison replies, MERV 13 about a year and MERV 8 about 2 years to replace.

H. Takesian comments, that is what we are currently doing now for current filters in place.

R. Bravo provides an Electrical progress update from schematic design to design development phase.

- Trilogy services to the building with two electric utility company transformers on-site.
- Two switchboards inside the building are estimated at 4000 amps at 277/480 volts each.
- Panel boards and transformers were distributed throughout the building.
- Individual panel boards for each shop equipped with shunt trip breakers and emergency power-off buttons.
- Planning for an 800-kW diesel generator housed in a soundproof enclosure.
- Adjustments made from originally planning two generators to one, requiring reassessment of emergency power equipment.

	<ul style="list-style-type: none"> <li>• Implementation of an addressable fire alarm system with voice evacuation, typically specifying an auto call system for public bids.</li> <li>• Lighting Fixtures - LED</li> <li>• Exterior lighting fixtures include site and wall-mounted fixtures, with lighting controls featuring occupancy sensors with dimmers and daylight harvesting in each room.</li> <li>• Exterior lighting controlled by relay panels with occupancy sensors adjusting light intensity based on motion detection, integrating with on-site cameras for enhanced security.</li> <li>• Compliance with energy code requiring automatic receptacle control, with 50% of receptacles in specific rooms controlled by occupancy sensors.</li> <li>• Implementation of a bi-directional amplifier system to amplify police and fire radios as required by code.</li> <li>• Provision of electric vehicle charging stations, typically constituting 2% of overall spaces to meet green vehicles credit in LEED certification.</li> <li>• Installation of a mass notification system including amber strobes for active shooter alerts, with control points for communication.</li> <li>• Implementation of a lightning protection system for the building.</li> </ul> <p><b>Discussion:</b></p> <p>D. Walsh asks should we involve the Franklin Fire Department in our discussions regarding the active shooter systems.</p> <p>V. Lyubetsky comments that we plan on meeting with the fire department to review the system and receive their feedback.</p>	
35.5	<p><b>Solar PV Array Update</b></p> <p>D. Haynes provides an update.</p> <ul style="list-style-type: none"> <li>• Contacted Solect Energy to provide a cost to remove the solar panels.</li> <li>• Option 1: exit the contract with luminance, take ownership of the panels and have them removed.</li> <li>• Option2: Clause in contract: substitution of premises, which would be the new building to redevelop the solar, but we're responsible for the cost of relocating the system.             <ul style="list-style-type: none"> <li>○ Question: What is the scope of work for this depth. If they remove the panels, they remove the structures that hold the panels, but about what about the underground conduit.</li> <li>○ Question: When could they commence solar work on the new building?                 <ul style="list-style-type: none"> <li>▪ 80% would be on the rooftop; the rest will be top of bleachers/ parking canopy.</li> </ul> </li> </ul> </li> </ul> <p><b>Discussion:</b></p>	Record

	<p>T. Elmore asks S. Johnson if it is possible to leave the screw anchors in place and address their removal through civil?</p> <p>S. Johnson replies, we do not need the solar removal company to do that portion of the work.</p> <p>T. Elmore comments that the scope of work would be anything that sits on the surface and anything that sits underground can be removed by Consigli. It will be more cost effective.</p> <p>T. Elmore comments the summer, before the students go back to school, would be a good time to commence solar panel work on the new building.</p> <p>S. Johnson suggest starting the process sooner then later, due to the number of applications.</p> <p>B. Bowen asks is the scope of the removal defined. Or should this be part of the scope question?</p> <p>D. Haynes replies, Solect puts the panels on a train to Georgia to get recycled, which will be part of the cost projections.</p> <p>B. Mushnick comments that in the state of Massachusetts you can just dispose of them. It's not a hazardous material. Ultimately, we'd love to recycle and have someone else reuse them. It's trying to find someone willing to take them and pay.</p>	
35.6	<p><b>Other Topics not Reasonably anticipated 48 hours prior to the Meeting.</b></p> <p><b>Discussion:</b>          J. Dowse request an update on environmental issues in the solar fields?</p> <p>B. Mushnick provides an update:</p> <ul style="list-style-type: none"> <li>• Standstill with the town regarding differing perspectives on the presence of wetlands on the property</li> <li>• Retained an environmental lawyer Glenn A. Wood to present our side of the discussion to the town.</li> <li>• Further updates will be provided.</li> </ul>	Record
35.7	<p><b>Public Comment:</b>          Discussion: None</p>	Record
35.8	<p><b>Next Meeting:</b></p> <p><u>School Building Committee Meeting</u></p> <ul style="list-style-type: none"> <li>• School Building Committee In-person Meeting – March 21, 2024; Location: Tri-County Regional Technical High School</li> </ul>	Record

	<ul style="list-style-type: none"> <li>School Building Committee Meeting – April 25, 2024; Location: TBD</li> </ul> <p><b>Discussion:</b> None</p>	
35.9	<p><b>Adjourn: 5:37</b> PM motion was made by K. Maguire and seconded by J. Dowse to adjourn the meeting.</p> <p><b>Discussion:</b> Roll Call Vote: B. Foley (Y), B. Bowen (Y), D. Walsh (Y), M. Procaccini (Y), K. Maguire (Y), H. Takesian (Y), J. Dowse(Y), D. Haynes (Y), B. Mushnick (Y); <b>Abstentions:</b> None; All in favor. Motion passes.</p>	Record

Sincerely,

DORE + WHITTIER

Elias Grijalva

Assistant Project Manager

Cc: Attendees, File

The above is my summation of our meeting. If you have any additions and/or corrections, please contact me for incorporation into these minutes.