



# Town of Carlisle

MASSACHUSETTS 01741

## MUNICIPAL FACILITIES COMMITTEE

### Minutes

### Hybrid Meeting – Heald Room & Zoom

Thursday, July 6, 2023 10:00 a.m.

#### **Members Present**

Jerry Lerman, *Chair*, Bill Risso, *Vice Chair*, Travis Snell, *Select Board Member*, Steve Hinton

#### **Members Absent**

Carrie Patel, *School Committee Member*

#### **Staff Present**

Jim Hall, *DPW Superintendent*, Stephen Connearney, *Facilities Director*, Jennine Blum, *Administrative Assistant*

#### **Others Present**

Cynthia Sorn, *Carlisle Mosquito Reporter*

**10:04 a.m. Jerry Lerman called the meeting to order.**

#### **Minutes Approval**

Steve Hinton moved the motion to approve the May 18 and June 1, 2023 minutes with minor corrections that Jerry relayed to Jennine Blum.

Travis Snell seconded the motion.

All in favor (3 to 0). One member abstained.

#### **Facilities Managers Report**

There were no comments or questions about the report activity.

Bill Risso noted that the report is getting quite long and requested that the report reflect activity since the previous report.

Jerry reported that Steve Bastek has started entering data for the town municipal buildings which is reflected in the current report. The staff at the town hall aren't entering data yet but the school staff is making extensive use of the work order system.

#### **Gleason Public Library Roof Project Update**

**Roof.** The roofing portion of the project is estimated to be completed by the end of next week. There were some leaks over the weekend during the severe rainstorm which were attributed to the temporary work Capeway hadn't completed. Some ceiling tiles were damaged but there was no damage to books or other materials. All the issues were taken care of.

The roof comes with a two-year warranty from the contractor and a 20-year warranty from the roofing material manufacturer (Sanibel). The roofing material used on the Spaulding Building is similar and the manufacturer has honored the warranty when there have been leaks.

The job will be finished when the custom door is delivered and installed in about 3-4 weeks. Jerry explained that a smaller door was needed because of the change in roof height and added insulation.

**HVAC/RTU.** There are ongoing problems with the newly installed RTU purchased by Guardian from Trane. The RTU doesn't operate the way the MFC requested it to work. The problems were also discussed at the previous June 15<sup>th</sup> MFC meeting. The expected reduction in energy consumption and energy costs will not be realized by the town if these issues aren't addressed.

#### Original request

The MFC requested a replacement for the old RTU with a tempered fresh air RTU that includes a discharge sensor so the air introduced to the building can maintain a temperature of 68 -70 degrees. The tempered air in the building would then be further heated/cooled by the boiler/chiller and fan coil units. The new unit, like the old, should expel 3,000 cubic feet per minute (CFM). The MFC made several requests for drawings and specs to be included in the proposal and Guardian replied that this was not something they would provide.

#### The new RTU - issues

**Ventilation and humidity.** The new RTU installed by Guardian has been running like a regular RTU that heats and cools. It only recirculates the air until the CO<sub>2</sub> levels get high and a demand for ventilation is made. If the average temperature of the building is satisfied by the new RTU, the boiler and heater will not turn on and neither will the 41 fan coil units. The fan coil units are more efficient in removing humidity than the RTU. The library currently has an issue with high humidity.

**Morning building warmups.** The Trane manual states that after six minutes of operation, if the difference between the requested thermostat temperature setting and the actual building temperature is more than three degrees, the system will bypass heat pump mode and go right to resistance heating mode. Given that the heat in the library is typically turned down to 60 degrees during off hours, the system will be turning on resistance heat every morning to bring the temperature up. The MFC expressed to Guardian that it should use the heat pump to temper the air rather than resistance heating, which is the costliest way to heat.

**CO<sub>2</sub>.** Currently, the CO<sub>2</sub> levels are being controlled properly on the first and second floors. It's unclear at this point how well the unit works on the third floor as there hasn't been a large meeting in the Hollis Room. The new RTU has a 3,000 CFM fan but only provides a 50% opening of the damper for outside fresh air, unlike the old unit which had a 100% opening.

#### Resolution efforts

Guardian was advised by Trane to run the new unit as a regular heating and cooling RTU as it was manufactured. The MFC requested a fresh air unit, not a heat and cooling unit. Efforts on the part of Guardian are being made to try to make the new RTU function in a way that is satisfactory to the MFC but it's still not yet functioning the way it needs to.

Guardian has indicated that they would install data loggers to monitor the system to check if it will work satisfactorily the way it's set up. The MFC relayed to Ryan McLane, Town Administrator, that if the system isn't going to be engineered, the data logging should be done for more than a year through all the seasons and weather variations to show that it's truly going to work as required.

A couple of the MFC members believe that the new RTU could work as requested if

- a sensor was installed in the ductwork to monitor the discharge air temperature.
- software modifications were made to control the temperature based on the discharge temperature.
- software modifications were made to prevent short cycling.
- the six-minute delay was increased during morning startup.

This solution was discussed with Guardian and there was some pushback. It's unclear if the suggested software modifications posed an obstacle. It's also unclear if Guardian will step up to rectify the situation.

**School concerns.** The school is planning to replace the HVAC system in the Wilkins building. Engineers estimated the project cost to be more than \$1.5 million and Guardian stated that they could do it for \$200,000. While the MFC hasn't spoken to the school directly, they expressed that the school should proceed cautiously with Guardian if they are selected to do the work. They added that the school should demand necessary design drawings and specifications. The MFC will invite Jim O'Shea, CPS Superintendent, to a future meeting to discuss this issue as well as capital spending.

**Final comments.** The new RTU installation is unacceptable the way it is functioning today, and the town should either have Guardian fix it to function as originally requested or pay another company to fix it. Otherwise, the town will continue to pay for the inefficiencies of the system and occupancy discomfort for many years.

It was noted that the majority of the funds were paid out to Guardian early on in the project and at this point only \$5,641 remains to be paid. Approximately \$100,000 of ARPA funds were used for this project.

### **Police Station Ramp**

It was reported by the building inspector as well as the Historical Commission that the slope of the new ramp did not meet ADA requirements. It's slightly steeper than allowed and cannot presently be approved.

There are also issues with some of the footings – one is below grade and was identified as a defect. Some of the ramp legs are positioned too close to the edge of the Sonotubes – a few of these have been fixed. It was also noted that the existing irrigation lines were cut several times during the construction process and need to be repaired.

Kneeland installed connectors between the railing sections. The connectors brace the panels which were loose and wobbly – now they're more stable.

It was also reported that the black paint that had been scraped away during construction had been touched up.

Outstanding issues were discussed at an onsite meeting on June 26<sup>th</sup> with Greg (Kneeland representative), Stephen Conneaney, Ryan McLane, and Jerry Lerman. A representative from the HC was not present.

The MFC received an email dated June 29<sup>th</sup> from the Historical Commission (HC) regarding the ramp that stated three issues of concern:

1. The design approved by the HC had continuous handrails, the new handrails installed by Kneeland are not continuous.

*MFC comment: now the handrail is continuous, and they filled in the joints so it's smooth and there are no longer sharp edges.*

2. The installed protective side railings do have radius connections which is contrary to the approved drawing.
3. The HC requested that all parts of the ramp (except the ramp walking surface) should have a black anodized coating.

*MFC comment: it would be best to clarify with the HC which parts of the ramp they'd like painted as the MFC felt there was originally some ambiguity in the HC's initial request.*

Regarding the HC's general complaint that the installed railing looks nothing like the plan that was submitted as a final drawing for approval, Kneeland claimed that the drawing submitted was an artist's rendering to just show elevation. Kneeland stated that the contract contained detailed drawings of what the railings and ramp would actually look like. The contract was submitted to the town, but the MFC was not certain it had been forwarded to the HC.

Chair Jerry Lerman stated that he would discuss the issues with Ryan next week.

**Additional comments.** Before the bidding process began, Steve Bastek (Facilities Manager) and Bill Risso met with Kneeland onsite and made it very clear that the MFC expected to have an ADA-compliant ramp and planned to have ADA come to inspect it.

The RFP also clearly stated that the town/MFC required the contractor to take full responsibility for creating an ADA-compliant ramp. There was no ambiguity about this.

It was also made clear that the contractor was supposed to do all the grubbing and removal of all shrubs and they were supposed to pour concrete to make the ramp look good from the pavement towards the building.

Regarding the irrigation lines that were cut several times, Kneeland should have done their due diligence. It was evident that the water lines exited the building where they were working, and they should have known better.

**Payment status.** Kneeland application for payment #4 (\$64, 811.94) which is not the final payment has been held back until the issues are resolved.

**Reconfiguration plans - impact on ramp.** The MFC stated that the new ramp would not interfere with the original Police Station reconfiguration plans that didn't go to Town Meeting and wouldn't interfere with some of the other reconfiguration plans that were discussed.

## **Town-wide Capital Projects**

To be discussed at the next MFC meeting.

## **Other Business**

**Town Hall PFAS.** A quote of \$20,000 was received for the installation of a PFAS filtration system. The more significant problem will be where to put the system. The space required will be dependent on how many cylinders are needed, which is unknown. After the meeting, the MFC members will see if there might be enough space in the utility room where the hot water heater is, or in the heated shed where the boiler is located.

**School fire alarm system.** Jerry recalled from a past meeting that the town fire alarm system reporting to Dispatch at the Police Station was not working as well as it might have. The system currently reports the building where there is an issue but not the specific room within the building which the system used to be capable of. Jerry stated that this is an important problem to address.

## **Background**

Bill Risso provided information about the original system, problems that developed, and the less functional workaround that is being used.

The original system was designed by Simplex when the Spaulding Building was commissioned. It worked for about two years until the Simplex card went down. The person who set the system up passed away and Simplex was unable to get the system working again.

Later, when new dispatch equipment was installed at the Police Station, the PC that was part of the original Simplex system (no longer fully functional) was tucked under a desk. It's unknown whether that PC is still at the Police Station.

## **How the original system worked**

The library, school buildings, Highland Building, Town Hall, and Police Station are all connected by a pair of copper wires in a continuous loop/daisy chain. Although these buildings are also connected with fiber in a daisy chain, only one piece of fiber from the school pump house to the Spaulding Building is actually being used. These wires/fiber belong to the town. The benefit of a daisy chain is that if there is a break in the daisy chain, the information can still travel back in the opposite direction to Dispatch at the Police Station.

The original system was addressable meaning that it was able to relay to Dispatch the specific location/room of the alarm.

## **Current system**

Because the original Simplex System is not functioning properly, master boxes located at each school building alert Dispatch which building has an alarm. The Fire Department requested this system backup during the construction of the Spaulding Building.

## **Moving forward**

The question was asked if the Simplex card could be replaced. It's uncertain if replacing the card would fix the problem because there have been many updates over the years.

If a new system is designed, it's recommended that the existing fiber be used. The fiber will remain up and running for an hour or two during a power failure because each router has its own battery backup. Another benefit of fiber is that it's not susceptible to lightning as copper wiring is.

The MFC was discouraged from having Simplex do this work. Stephen Conneaney has recommended Norel Service Company for this work.

The MFC will ask Fire Chief Bryan Sorrows to come to a meeting to talk about a townwide solution. After getting some quotes, a decision will be made on whether to include this project in the fall Town Meeting capital request.

## **DPW Trailer Sprinkler System**

GGD Consulting Engineers has been commissioned to do the design and the MFC is waiting to hear from them.

## **Community Input**

None

**Next Meeting**

August 10, 2023, 10:00 a.m., hybrid

**Adjournment**

Travis Snell moved to adjourn the meeting at 11:01 a.m.

Steve Hinton seconded.

All in favor (4 to 0).

**Documents Submitted Update**

Facilities Managers' Report, dated July 5, 2023 (file: *MFC\_FMR-07-05-2023.pdf*)