

## memo

To: The Board of Education and Dr. Patrick Broncato, Superintendent

From: Curt Saindon, Assistant Superintendent for Business Services/CSBO

Alex Gliwa, Director of Buildings and Grounds

Date: July 19, 2024

Subject: Solar Projects Update

In preparation for a presentation from Performance Services Inc. (PSI) at the August Board Meeting, I wanted to give you an update on both the first round of roof repairs and solar array installations completed this past year at Jefferson, Sipley, Willow Creek and Murphy, as well as the initial findings for a potential second round of projects (maybe as early as next summer if the Board is agreeable) at Edgewood, Goodrich and Meadowview.

PSI is the guaranteed energy savings contractor employed by the school district as a result of an RFP completed in the winter and spring of 2022. From that selection, PSI then developed the scope of work documents in the summer of 2022 that were used to select contractors in the fall of 2022 for both the roof repairs (completed in the late spring and early summer of 2023) and solar array installations (completed in late summer and fall of 2023). The work was completed in late 2023 and the solar arrays came online during the first quarter of 2024 (all have been up and running and generating electricity since early this year). All in all, the process went very smoothly and we have been very impressed with both PSI and the contractors they used for both projects.

We have received about \$280K in ComEd Energy Efficiency Grant funds this spring, we are beginning to receive State Renewable Energy Credit monies this summer (anticipated at just over \$1.1M in total, to be received over the next 6.5 years), and we are in the process of filing for Federal Energy Tax Credits available under the Inflation Reduction Act (anticipated to be about \$900K, and hopefully to be received in late 2024 or early 2025). All three funding sources are expected to cover just over \$2M of the just over \$3M in solar array installation costs and lower our payback period for this projects to about 7-8 years, paying off about \$1M in unreimbursed installation costs with about \$125K to \$150K in annual energy savings. We also anticipate that by the end of the useful life of these solar arrays (estimated at 25+ years), the savings will have paid for the \$2.5M in roof work as well. This is in addition to reducing our carbon footprint and being an environmentally friendly partner on planet Earth ©. While these schools were deemed



## memo

to be the most attractive in terms of cost and payback period and therefore, were selected for the first round of solar array installations, the other three schools and DAC are also viable options and were investigated to see if it made sense to consider them for phase II projects.

Edgewood, Goodrich, Meadowview and DAC were not selected for the phase I project for various reasons. Either the roof repair/replacement work was more extensive (Goodrich) or not initially as needed (Edgewood and Meadowview), the alignment of the schools to the sun was not as ideal/efficient, the percentage of roof coverage available for the solar arrays was not as great, or there were other factors that made these buildings not quite as attractive as the first four selected from a payback period standpoint. Therefore, their anticipated payback periods were a little longer and they were designated for phase II project consideration. This spring, we asked PSI to complete a phase II analysis to develop estimated roof repair costs and solar array installation costs, so we could see what the anticipated payback periods would be, and determine if it made sense to move forward with any/all of these buildings. PSI will present their findings in August, but overall I wanted to let you know that all three schools were deemed to be viable, while DAC was determined to not be viable at this time.

Overall, the roofs at these three schools appear to be in decent shape (they are from 2002-2004 and are just over 20 years old right now, so nearing the end of their expected useful life). Meadowview and Edgewood are recommended for overlay of the existing roof, while Goodrich's roof (with the exception of the west wing that was overlaid this summer) is recommended for full replacement. PSI can provide more details next month, but they expect anticipated roof repairs to cost about \$3M-\$4M in total, with the Goodrich roof being the most expensive and costing an extra \$1M or so due to the need for full replacement there. The solar arrays are expected to cost about \$2.46M in total (~\$550K @ Goodrich, ~\$770K @ Edgewood and ~\$1.14M @ Meadowview) with an overall payback period of about 12 years (10yrs.@ Edgewood, 12yrs.@ Meadowview and 13yrs.@ Goodrich). It is expected that savings/positive cash flows would pay for the roof repair costs at Edgewood and Meadowview within 25 years and Goodrich would be close, being paid for at around 26 years. Again, PSI can provide more details in August as they present their findings and discuss potential next steps.

Therefore, in total, we would be looking at about \$6M in total estimated project costs (the same amount as for the four schools completed as part of phase I) with an overall estimated payback period of about 12 years and a total payback, including roof repairs, of about 25 years. These projects are definitely viable and worthwhile from a cost-benefit perspective, and we do have the funds available to complete the work up front if desired, and then realize the savings/benefits over the expected useful life of the solar arrays. Again, we would anticipate receiving Energy Efficiency Grant monies, State Renewable Energy Credit rebates and Federal



## memo

Clean Energy Tax Credits that would hopefully cover about 50% to 75% of the solar array installation costs (and possibly some of the Goodrich roof replacement costs). We can talk more in August and see if the Board has any questions or concerns. Thank you.