

HVAC PHASE I Cost Breakdown

Invoice Date	Contractor	Description	Amount
	Hartwig Mechanical, Inc.	Application Payments	\$1,215,312.35
3/15/2024	Ceroni Piping Company	<p>Capron Elementary School - New univents were not heating.</p> <p>The units were all going off on freeze protection. Found massive air leaks coming through the outside air dampers and air coming through the cabinets.</p> <p>Went through with help from maintenance and stuffed insulation inside of the cabinets or the univents.</p> <p>Disabled the outside air dampers. Also blocked off outside air intakes.</p> <p>The hot water coil in the univent for the stem room froze and broke.</p> <p>Isolated that coil from the hot water system and refilled the hot water loop.</p> <p>Removed the coil from the unit and pressurized. Found holes in the coil.</p> <p>Repaired the leaks and confirmed there were not any more.</p> <p>Reinstalled the coil and returned to service.</p> <p>After the insulation was put into the units, they stayed online.</p> <p>This fix is temporary. The air filtration needs to be addressed for these units to operate correctly.</p> <p>On the steam units, the steam is collapsing in the coil allowing only half of the coil to heat effectively.</p>	<p>Labor \$5,455.84</p> <p>Material \$99.25</p>
3/15/2024	Ceroni Piping Company	<p>Capron Elementary School - Pneumatic Work</p> <p>During the univent installation project, the pneumatic control lines were cut.</p> <p>This caused the air compressor to run constantly and the units that were not replaced to also run constantly.</p> <p>Went through the building to plug the cut lines and repair leaks.</p> <p>Ran new mains and branch lines in some parts of the building.</p> <p>Confirmed proper operations of the compressor and pneumatic equipment.</p>	<p>Labor \$3,498.56</p> <p>Material \$419.76</p>

03/15/2024	Ceroni Piping Company	<p>North Boone Middle School - Univent Issues</p> <p>The customer could not get the new univents to heat.</p> <p>Air was leaking severely through the outside air dampers and through the cabinets.</p> <p>The units were going off on freeze protection even though the steam valves were open and steam was going through the coils.</p> <p>Disabled outside air dampers and packed insulation in blower sections and the cabinet end sections.</p> <p>The units were able to run but the air is still leaking and the steam is collapsing halfway through the heating coil.</p> <p>A permanent solution needs to happen for these units to operate properly.</p>	Labor \$1,868.00
3/15/2024	Ceroni Piping Company	<p>Manchester Elementary School - New Univent Issues</p> <p>Units were going off on freeze control.</p> <p>Steam was going through the unit except for rooms 223 and 227.</p> <p>Found frozen condensate return lines on both.</p> <p>Found that the lines were not pitched correctly.</p> <p>Repiped the line.</p> <p>There was excessive air leaking through and around the univents.</p> <p>Packed insulation in the blower sections of the units and the cabinets.</p> <p>It helped keep them online but steam is still collapsing in the coils of the univents causing only half of the coils to heat.</p> <p>In room 223, the blower would still not run.</p> <p>Called tech support and they stated it was a faulty control board.</p> <p>Ordered a new control board.</p> <p>Trance came to install and program.</p> <p>Blocked off all of the outside air inlets with foam board.</p> <p>The insulation is a temporary fix and a permanent solution needs to be done.</p>	<p>Labor \$8,290.40</p> <p>Material \$2,970.15</p>
9/16/2024	Ceroni Piping Company	Completed inspection of all new unit ventilators per quote.	\$24,560.00
			\$47,161.96

Grand Total \$1,262,474.31