

# Measurement & Verification Report



## Energy Savings Summary

Work Description	Location	Calculated Energy Savings	Guaranteed Energy Savings	Actual Energy Savings	Annual O&M Savings
<b>Building Envelope Improvements</b> - seal envelope wall/ceiling, doors and windows.	All	\$7,652	\$5,030	\$7,652	\$0
<b>Lighting Upgrade</b> - Replace existing lighting with LED retrofit technology.	All	\$32,260	\$30,610	\$34,401	\$2,300
<b>Destratification Fans</b> - Moving hot air at the ceiling to the occupied area	Streets; Parks; Police; Hanger 1; RCC	\$8,186	\$5,170	\$8,186	\$0
<b>Street Lighting</b> - Replace existing street lights with new LED fixtures	City Wide	\$93,868	\$89,180	\$93,942	\$0
<b>Traffic Lights</b> - Replace existing traffic lights with new LED fixtures	City Wide	\$14,511	\$13,790	\$14,511	\$8,362
<b>IT Savings</b> - Install computer software to turn the computers off	City Hall	\$422	\$260	\$422	\$270
<b>Refrigeration System with East Rink Tie-In</b>	Ice Arena	\$35,358	\$30,500	\$36,343	\$7,000
<b>Refrigeration System Alt</b> - Adder for 3rd Compressor	Ice Arena	\$0	\$0	\$0	\$0
<b>Build Addition for new plant</b> - New building to the North of the Link	Ice Arena	\$0	\$0	\$0	\$0
<b>New West Rink Floor</b> - New Concrete floor for the practice rink	Ice Arena	\$0	\$0	\$0	\$0
<b>New West Rink Dehumidification Unit</b> - New unit for Humidity Control and Ventilation	Ice Arena	\$5,384	\$4,800	\$5,384	\$1,000
<b>Electrical Service Improvements</b> - Service moved for 3rd sheet	Ice Arena	\$0	\$0	\$0	\$0
<b>Door Replacement Coolers &amp; Shelves</b> - Replace existing door with new doors, LED lighting, and new shelves for beer	Both Liquor Stores	\$3,238	\$3,240	\$3,238	\$0
<b>Cooling Equipment</b> - Replace evaporator and outside condenser	Plaza Liquor	\$981	\$840	\$981	\$0
<b>Cooling Equipment</b> - Replace condenser and move outside	Downtown Liquor	\$301	\$180	\$301	\$0
<b>RCC Roofing Replacement</b> - Replace roofing over the curved roof	Ice Arena	\$0	\$0	\$0	\$0
<b>Roof Upgrade</b> - Replace roof over the flat link and provide drainage	Ice Arena	\$0	\$0	\$0	\$0
<b>Controls Upgrade</b> - Replace existing VAV boxes and pneumatic system with new DDC System	City Hall	\$4,465	\$3,500	\$2,456	\$500
<b>Boiler Plant Replacing</b> - Replace one existing standard efficiency boiler with one 1.6MMBTU High Efficiency Condensing boiler	City Hall	\$3,119	\$2,400	\$3,119	\$500
<b>Total</b>		<b>\$209,744</b>	<b>\$189,500</b>	<b>\$210,935</b>	<b>\$19,932</b>

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<b>Lighting Upgrade</b> - Replace existing lighting with LED retrofit technology.	All	\$32,260	\$30,610	\$34,401	\$2,300
<b>Destratification Fans</b> - Moving hot air at the ceiling to the occupied area	Streets; Parks; Police; Hanger 1; RCC	\$8,186	\$5,170	\$8,186	\$0
<b>Street Lighting</b> - Replace existing street lights with new LED fixtures	City Wide	\$93,868	\$89,180	\$93,942	\$0
<b>Traffic Lights</b> - Replace existing traffic lights with new LED fixtures	City Wide	\$14,511	\$13,790	\$14,511	\$8,362
<b>IT Savings</b> - Install computer software to turn the computers off	City Hall	\$422	\$260	\$422	\$270
<b>Refrigeration System with East Rink Tie-In</b>	Ice Arena	\$35,358	\$30,500	\$38,239	\$7,000
<b>Refrigeration System Alt</b> - Adder for 3rd Compressor	Ice Arena	\$0	\$0	\$0	\$0
<b>Build Addition for new plant</b> - New building to the North of the Link	Ice Arena	\$0	\$0	\$0	\$0
<b>New West Rink Floor</b> - New Concrete floor for the practice rink	Ice Arena	\$0	\$0	\$0	\$0
<b>New West Rink Dehumidification Unit</b> - New unit for Humidity Control and Ventilation	Ice Arena	\$5,384	\$4,800	\$5,384	\$1,000
<b>Electrical Service Improvements</b> - Service moved for 3rd sheet	Ice Arena	\$0	\$0	\$0	\$0
<b>Door Replacement Coolers &amp; Shelves</b> - Replace existing door with new doors, LED lighting, and new shelves for beer	Both Liquor Stores	\$3,238	\$3,240	\$3,238	\$0
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<b>Boiler Plant Replacement</b> - Replace one existing standard efficiency boiler with one 1.6MMBTU High Efficiency Condensing boiler	City Hall	\$3,119	\$2,400	\$3,119	\$500
<b>Total</b>		<b>\$209,744</b>	<b>\$189,500</b>	<b>\$212,832</b>	<b>\$19,932</b>