

**CITY OF WAUKESHA****Administration**

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<b>Committee:</b> Board of Public Works	<b>Date:</b> 1/19/2017
<b>Common Council Item Number:</b> ID# 17-0111	<b>Date:</b> 2/7/2017
<b>Submitted By:</b> Fred Abadi, PE, PHD	<b>City Administrator Approval:</b> Kevin Lahner, City Administrator KML
<b>Finance Department Review:</b> Rich Abbott, Finance Director RA	<b>City Attorney's Office Review:</b> Brian Running, City Attorney BR
<b>Subject:</b> Authorize the expenditure of \$57,490.87 to replace the failed cooling system for the Administration building at the Clean Water Plant. This expenditure will be part of change order #4 in the contract with CD Smith construction for the upgrades to the Clean Water Plant.	

**Details:**  
The tube and shell type chiller system that was installed in the project failed due to an apparent incompatibility with the plant effluent used for cooling water. Strand Associates redesigned the system to not use plant effluent as cooling water and has accepted responsibility for the failed system. This will result in a change order with the general contractor of \$116,161.87. The cost breakdown is as follows:

1. Cost of new cooling system \$116,161.87
2. Credit for failed system \$58,671 (paid by Strand)
3. Expenditure by City \$57,490.87

**Options & Alternatives:**  
A direct replacement was investigated however the manufacturer will not warranty a new tube and shell type chiller in the same application. An alternative design is proposed which is a split air cooled system. In negotiating with the contractor to attempt to reduce the costs of the new system the engineer has also requested proposals from alternative vendors to be sure that the costs are as low as possible. The option from CD Smith is the lowest cost option.

**Financial Remarks:**  
Strand Associates will reimburse the cost of the original equipment installation of \$58,671 and the City will apply that to the change order total of \$116,161.87. The additional difference of \$57,490.87 for the new system paid for under the remaining project contingency balance of \$267,920.

**Executive Recommendation:**  
Approve the additional expenditure of \$57,490.87 for the alternative design option to replace the failed cooling system.

