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Date: December 15, 2006
To: CIP Committee
From: Greta Chapman, Director
Rapid City Public Library
Re: Library Acoustical Recommendation

Recommendation: Add library acoustical remediation to the list of CIP projects. The supply costs have increased for steel since the project was bid a year ago. The overall project cost is **\$132,205** for an increase of \$17,205 over the August 18th request.

The total request from CIP is for **\$92,205**. Library funding will provide a total of \$40,000 from two revenue sources; the previous library allocation of \$20,000 was determined to be insufficient to address the increased material costs. There were two sources of revenue designated for the project from library funds. The previous funding of \$20,000 from the library was inaccurate in calculating the total costs.

The 2002 building expansion included acoustical treatments to be completed in phases based on use of the new space. To that end, a partial dropped ceiling and a wall buffer at the top of the meeting room walls was installed with the project. The total costs for this beginning phase was \$14,000. Upon occupancy, it was determined these items did not fully address the acoustical needs throughout the building. The acoustical issues are experienced throughout the main floor lobby and the 2nd floor vaulted area, including the 2nd floor meeting room.

An acoustical report was brought forward to CIP for information on February 18, 2005. At that time, the cost to manage the noise was projected to be \$30,000-\$50,000. As a result of the CIP conversation, and given the complexity of the issue, it was determined that consulting services would better define a cost-effective permanent solution.

After following the consultant selection process, Engineered Aeroacoustics Inc. (EAI) was hired in September 2005 to conduct an assessment of the acoustics in the library. Their results showed that, in essence, the library's 2nd floor area has approximately 14% of the acoustic absorption it requires. In their report, EAI identified acoustical trouble spots and outlined specific remediation solutions. The portion of the remediation project that has the highest priority is the installation of sound absorption baffles in the vaulted area of the 2nd floor ceiling.

The library then went to bid on what was identified as the first phase: the installation of the hanging brackets for the ceiling baffles. No bids were received for this project; in speaking with contractors, they indicated the project was too small for them to bid on, and they didn't feel it



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could be effectively addressed in such small phases. Therefore, the project has now been divided into two phases for potentially more success in obtaining bids. The first phase would address installation of the ceiling baffles, including the hanging brackets; the second phase would address installation of wall mounted panels. Costs for the two phases are as follows:

Total Cost: **\$132,205**

Phase 1, acoustic ceiling baffles: \$97,155 materials
 \$11,340 labor
 -\$20,000 library budget
 \$88,495 Phase 1 CIP funding requested

Phase 2, acoustic wall baffles: \$17,500 materials
 \$ 6,210 labor
 -\$20,000 library budget
 \$ 3,710 Phase 2 CIP funding requested

