



October 9, 2015

Robert Siminski  
Superintendent  
Regional School District No. 8  
PO Box 1438  
Hebron, CT 06248

**Subject: RSD No. 8 - RHAM High/Middle School Building Evaluation Findings**

Dear Bob:

Colliers International was engaged by Region 8 to conduct an assessment of RHAM High School and Middle School. The goal of this assessment is to identify the current maintenance backlog of the complex and identify upcoming major capital exposures. The findings of this report will serve as a tool for the development of a long-range plan for Region 8.

The overall identified need for RHAM totals \$7.1 million, of which only \$453.3 thousand was designated as high priority. The identified need in RHAM High School totals \$6.3 million, while the need in RHAM Middle School is \$744.8 thousand. Table 1, below, demonstrates the identified need by building and priority.

**Table 1: Summary of Identified Needs**

Priority	Time Frame	\$ in Millions		
		High School	Middle School	Total
Priority 1: High Priority	Within 3 Years	\$0.2	\$0.2	\$0.5
Priority 2: Important	4-5 Years	\$1.0	\$0.4	\$1.4
Priority 3: Future Planning	6-10 years	\$3.5	\$0.1	\$3.6
Priority 4: Program Upgrade	--	\$1.6	\$0.0	\$1.6
Total Identified Need		\$6.3	\$0.7	\$7.1

### Facilities Conditions Assessment Methodology

Facilities inspections of RHAM High/Middle School were conducted in mid-September by Colliers professionals experienced in the conduct of similar assessments at educational institutions throughout the country. These inspectors identified maintenance repair needs associated with the complex that were individually codified and prioritized in order to develop a database of projects that will serve as a tool for Region 8 to utilize in the development of future planning efforts.

Each identified project was assigned an Estimated Project Cost based upon current 2015 market conditions. Estimated project costs are inclusive of all material, labor, design, and administrative expenses which may be associated with its undertaking. Although Region 8 may ultimately choose to undertake some of the identified projects with internal staffing, the overall project costs to the District will likely be similar to those identified. Illustrated on the following page are the components of each project's cost:



Each identified project was also assigned a priority based upon its relative urgency of need. Four priorities were utilized for this study as defined below:

**Priority 1: High Priority** – Priority 1 projects address issues of asset protection, quality of space, physical environments, or regulatory concern

**Priority 2: Important** – Priority 2 projects are not imminent in nature, but will need to be attended to in the near term to maintain the quality of the RHAM environment

**Priority 3: Deferrable** – Priority 3 projects are recognized for the impending nature of their existence; however, at this time, these issues can be deferred until a later date

**Priority 4: Program Upgrade** – Priority 4 projects reflect recommended changes to existing systems to improve program support; these projects are not considered building repair and renewal

## Maintenance Repair and Renewal Findings

RHAM High School was constructed in 2003 with the Middle School additions and renovations occurring the following year. At 11-12 years old, the complex is still considered to be relatively new. Most major building systems have an expected life of twenty-five years or greater, and the RHAM systems should reach their expected life cycles and beyond, with a few notable exceptions. In general, the ongoing maintenance programs and service contracts are maintaining equipment and systems in an appropriate manner. The windows, which have replacement in negotiation with the vendor, and the vinyl floor tiles, which have already been replaced once, are systems that are in need of attention prior to their expected life cycles. Both of these issues appear to be related to manufacture and/or installation, not RHAM's maintenance programs.

The Colliers inspection team identified projects related to maintenance repair and renewal totaling \$5.5 million. Each project was assigned a priority based upon its relative urgency of need. Of the total need, only \$453.3 thousand is considered high priority. The maintenance needs across the complex by priority are summarized in Table 2 as follows:

**Table 2: Summary of Identified Renewal and Replacement Needs (\$ in millions)**

	<u>Total Need</u>	<u>% of Total</u>
<b>Priority 1 (High Priority)</b>	<b>\$0.5</b>	<b>8.3%</b>
<b>Priority 2 (Important)</b>	<b>\$1.4</b>	<b>25.0%</b>
<b>Priority 3 (Deferrable)</b>	<b>\$3.6</b>	<b>66.7%</b>
<b>Total Facilities Needs</b>	<b>\$5.5</b>	<b>100.0%</b>

The Facilities Conditions Assessment is a technical assessment of maintenance needs across the complex's major building components. The individual needs identified in this assessment were categorized within six major Maintenance Systems (Exterior Shell, Interior Shell, HVAC, Electrical, Plumbing, and Statutory) and are summarized in the following paragraphs. A detailed list of the individual projects is included at the back of this report.



- The largest area of exposure in terms of total need is within the Exterior Shell components at \$3.6 million, of which \$132.2 thousand has been designated as Priority 1. The largest identified project is the replacement of the High School roof, which will likely be required within the next ten years. Other needs related to the Exterior Shell include repairing the roof and column at the high school main entrance, repairing the loading dock slab, repairing and re-caulking the exterior wall systems at the High School roof level, investigating possible movement in the exterior wall of selected Middle School 1<sup>st</sup> floor classrooms, re-caulking control joints on the original section of the Middle School, and resetting exterior slabs to prevent water intrusion. The cost of window replacement has not been included in this assessment.
- Interior Shell projects were identified to address issues related to building interior spaces. The total identified need for Interior Shell projects is \$1.5 million with a Priority 1 need of \$125.6 thousand. Interior Shell projects include repairing and replacing vinyl floor tile and carpeting, replacing “recycled” classroom furniture, repairing and refinishing lockers, and replacing acoustical panels in Lecture Room 115 and the rear lobby of the auditorium. It is worth noting that there were few areas noted that require painting, which demonstrates the care and attention to maintaining the quality appearance of the schools.
- Issues related to the Schools’ HVAC systems total \$188.5 thousand, of which \$39.5 thousand is designated as Priority 1. The majority of HVAC components should reach their expected life cycle, which falls outside the timeframe of this assessment. Many of the HVAC issues in the building are due to a lack of balance in the system creating uneven temperature and humidity issues. These issues should be addressed through the retro-commissioning process that is slated to begin shortly; therefore, they are not duplicated within this assessment. Identified HVAC projects include providing supplemental cooling in the Media Center server room, providing exhaust in the chiller room, re-piping chilled water to the gymnasium and auditorium, upgrading boiler burner controls, extending the science fume hood stacks above the roof line, and upgrading the dust control system in the wood shops.
- Electrical projects total \$42.2 thousand and include repairing floor outlet box covers, upgrading electrical and data wiring to the high school Media Center computer lab, and replacing the rusting exterior light fixtures under the Middle School entrance canopy.
- Projects classified as Plumbing represent a total need of \$28.0 thousand to replace the remaining original domestic hot water heaters.
- While this Assessment is not intended to be a comprehensive survey of safety and statutory issues, several items were identified that will improve building safety and code compliance. Statutory projects totaled \$91.1 thousand, of which \$88.8 thousand was designated as Priority 1. Statutory projects include ensuring proper fire separation in corridors and stairs, installing a flammable storage cabinet in the auditorium scene shop for spray paints and other flammables, repairing damaged fireproofing on steel beams in the boiler room, and adding safety rails at rooftop equipment within 10’ of the roof edge.

The detailed inventory of identified needs is attached.

### **Program Modernization Upgrades**

In addition to the maintenance repair and renewal needs discussed above, several items were identified that are considered modernization. These items do not support the existing systems as they currently function, but offer enhancements. These projects have been designated as Priority 4 and total \$1.6 million.

The largest individual program need is the expansion of the emergency power system to allow the school to function as a shelter. This project includes the installation of a 1,000 kW generator and

auxiliary equipment, appropriate fuel storage, and rewiring as necessary to serve the entire building, including HVAC systems, kitchen, domestic hot water, bathrooms and locker rooms, assembly spaces, and other areas needed for a functioning emergency shelter. The current generator provides limited support, primarily serving exit signs and emergency lights, and other equipment needed to evacuate the building. The cost of this project is estimated to be in the range of \$1.5 million.

Other program enhancements include the provision of air conditioning to the fitness room, locker rooms, and two adjacent classrooms that were not cooled in the original construction, and the installation of motion sensors and daylighting controls in selected areas to reduce electricity consumption.

The total identified need across the complex, including maintenance repairs & renewal and program modernization, is \$7.1 million.

Please feel free to call at your convenience at (860) 395-0055 x117 regarding this report or any other matter with which we may offer assistance.

Sincerely,

A handwritten signature in blue ink, appearing to read "Daniel Phillips".

Daniel "Chip" Phillips  
Project Manager