

Yee Cho, P.E., L.S.P. Kathleen Campbell, P.E., L.S.P., LEED, AP John Goodhall, P.E.

June 8, 2012

Ms. Lisa Pecora-Ryan Office of Michael Rosenfeld, Inc. 543 Massachusetts Avenue West Acton, MA 01720

RE: Hazardous Materials Summary Report Cost Memorandum-Revision

Concord-Carlisle High School, Concord, Massachusetts

CDW Project #1135.00

Dear Ms. Pecora-Ryan:

CDW Consultants, Inc. (CDW) is pleased to present this cost memorandum for the findings of the hazardous materials survey and additional survey of the Concord-Carlisle High School, Concord, Massachusetts.

The associated costs for the asbestos abatement and other hazardous materials are presented in the table on the next page.

Please call if you have any questions or require additional information.

Very truly yours,

CDW CONSULTANTS, INC.

Susan Cahalan, P.G.

Project Manager

TABLE 1
Asbestos Containing Material & Other Hazardous Materials Costs

Description	Location	Result	Approximate Quantity	Unit Cost	Total Estimated Cost
Floor Tiles and Mastic – Both 9" x 9" and 12" x 12"	Throughout	2%-3% Chrysotile	70,000 SF	\$4/SF	\$280,000
Older Window Glaze in Café /Kitchen	Café	2% Chrysotile	8 Window Banks	\$275/Each	\$2,200
Window Glaze in Hall Outside Café	Hall Outside Café	3% Chrysotile	4 Window Banks	\$275/Each	\$1,100
Steel Column Caulk Interior	Throughout	3% Chrysotile	5,000 LF	\$10/LF	\$50,000
Glue Tab in Boiler Room	Boiler Room	20% Chrysotile	200 SF	\$15/SF	\$3,000
Window Glaze in Gym	Gym	2% Chrysotile	20 Windows	\$275 Each	\$5,500
Interior Window Glaze in Library	Library	2% Chrysotile	4 Window Banks	\$275 Each	\$1,100
Caulk on Block Wall	Throughout	3% Chrysotile	5,000 LF	\$10/LF	\$50,000
Door Frame Caulk	Interior Throughout	3% Chrysotile	3,750 LF	\$10/LF	\$37,500
Black Sink Coating	Throughout	5% Chrysotile	50 Each	\$150/Each	\$7,500
Interior Hall Window Glaze	Throughout	2%-5% Chrysotile	250 Each	\$275/Each	\$68,750
Hard Fittings	Throughout	20% Chrysotile	2,000 Each	\$15/Each	\$30,000
Black Material Behind Concrete Block on Exterior	Exterior	10% Chrysotile	75,000 SF	\$5/SF	\$375,000
Walk in Refrigerator and Freezer Coating	Assumed		4 Each	\$5,000/Each	\$20,000
Hidden Pipe Insulation	Assumed		2,000 LF	\$15/LF	\$30,000
Lab Hoods	Assumed		8 Each	\$150/Each	\$1,200
Fire Doors	Assumed		50 Each	\$150/Each	\$7,500
Subsurface Transite Pipe	Assumed		2,000 LF	\$15/LF	\$30,000
Hidden Transite Panels	Assumed		10,000 SF	\$10/SF	\$100,000
Dry Transformer Lining	Assumed		30 Each	\$100/Each	\$3,000
Fire Curtain	Visual		1 Each	\$2,000/Each	\$2,000

TABLE 1
Asbestos Containing Material & Other Hazardous Materials Costs (Continued)

Description	Location	Result	Approximate Quantity	Unit Cost	Total Estimated Cost
Roof Core	Auditorium Building	5% Chrysotile	20,000 SF	\$7/SF	\$140,000
Roof Curb	Above Door # 56	10% Chrysotile	20,000 SF	\$7/SF	\$140,000
Window Glaze on Fire Door Assemblies	Science and Math Wing	2% Chrysotile	4 Assemblies	\$250/Each	\$1,000
Window Glaze on Classroom Doors Math and Science Wing	Science and Math Wing	5% Chrysotile	42 Each	\$100/Each	\$4,200

LF = Linear Foot SF = Square Foot

Table 2 Other Hazardous Materials

Description	Location	Result	Approximate Quantity	Unit Cost	Total Estimated Cost
Ballasts (PCBs)	Throughout		800	\$5/ea	\$4,000
Florescent Bulbs (Mercury)	Throughout		3,000	\$2/ea	\$6,000
Thermostats and Switches (Mercury)	Throughout		70	\$20/ea	\$1,400
Emergency Light Batteries (Lead)	Throughout		50	\$20/ea	\$1,000
Dry Type Transformers (Possible PCBs)	Throughout		30	\$100/ea	\$3,000
Chemicals in Sinks and Other	Throughout		One Drum	\$500/ea	\$500
Mercury Containing Rubber Floor	LL Gym	33.9 mg/kg	10,000 SF	\$10/SF	\$100,000
PCBs > 50 PPM	Exterior Kitchen Wing Bottom Pink Window Panels to Concrete	920-1,000 mg/kg	150 LF	\$40/LF	\$6,000
TOTAL ESTIMATED COST					\$1,512,450

CDW Consultants, Inc.