

## Elementary Grade Enrollment Projections – DPC Confirmation

December 12, 2006

**Elementary School Masterplan**  
Lexington Public Schools

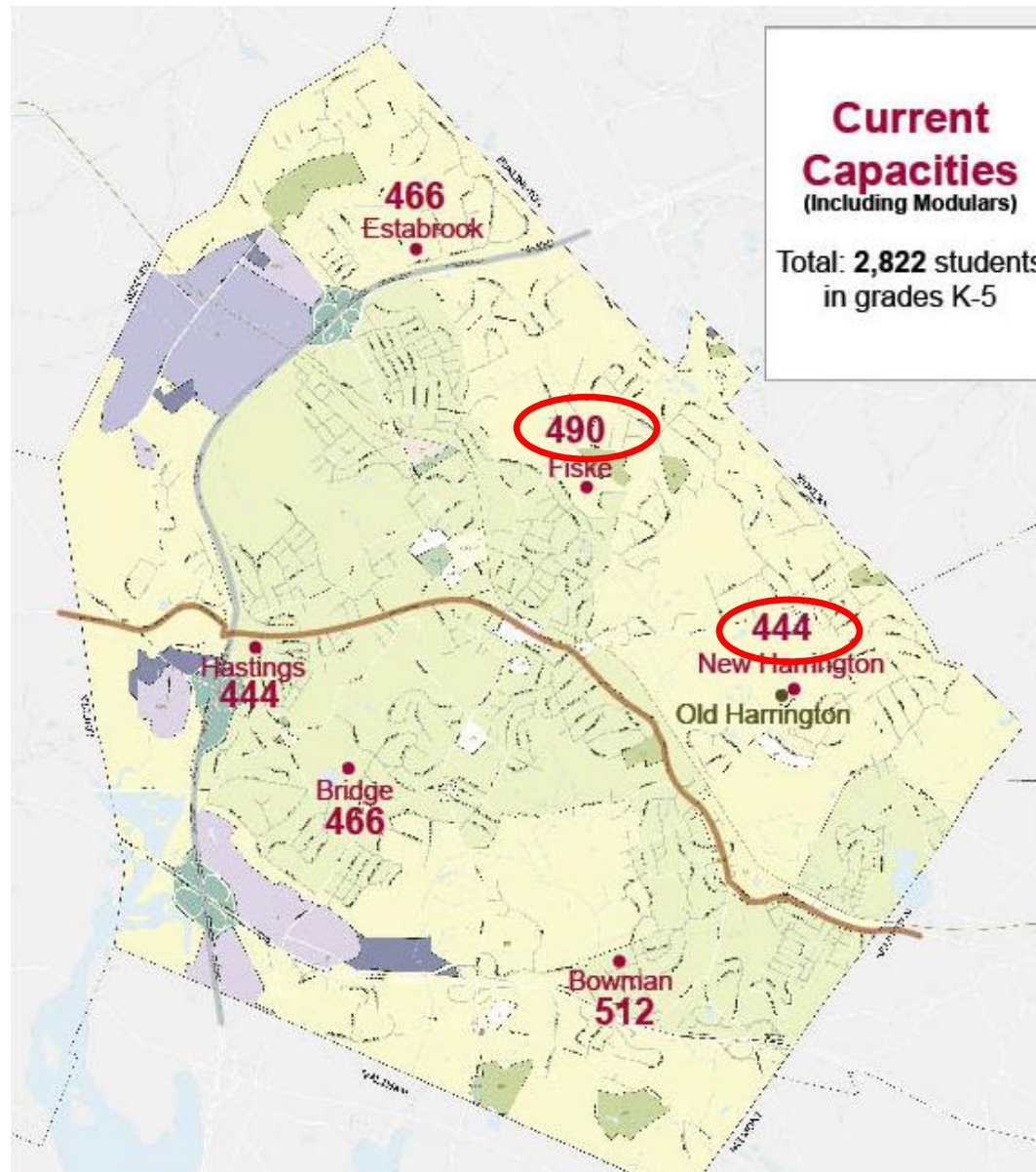
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**Lexington Elem Schools**  
**Total capacity analysis**  
10/16/06

	Bowman	Bridge	Estabrook	Hastings	Fiske	Harrington	Total	<i>total KG + general CR</i>
<b>I. Room count</b>								
KG's	4	4	4	4	4	4	24	127
gr. 1-2 CR's	8	7	7	6	7	6		
gr.3-5 CR's	11	10	10	10	11	10		
<b>total general CR's</b>	<b>19</b>	<b>17</b>	<b>17</b>	<b>16</b>	<b>18</b>	<b>16</b>	<b>103</b>	
swing CR's	1	1	1	1	1	1		
<b>District-wide Spec. Ed.</b>		2	2	2	2	2		
	LLP	CARE	CARE/EI	ILP	ILP	DLP		
<b>Art</b>	1	1	1	1	1	1		
<b>Music</b>	1	1	1	1	1	1		
<b>Technology</b>	1	1	1	1	1	1		
<b>Extended Day</b>	0	0	0	0	0	0		
<b>II. Pupil Capacities</b>								
KG	72	72	72	72	72	72	432	
gr. 1--5	440	394	394	372	418	372	2,390	
<b>TOTAL</b>	<b>512</b>	<b>466</b>	<b>466</b>	<b>444</b>	<b>490</b>	<b>444</b>	<b>2,822</b>	

- Notes:
1. Modular classrooms are included in the capacity counts.
  2. Classrooms used for extended day are not separately accounted but are recorded as regular classrooms.
  3. At schools where offices and small group rooms are currently used for Reading and Resource in lieu of full-sized classrooms, this analysis assumes continuation of that practice.
  4. At Estabrook, this analysis assumes that lunch continues to be taken in the main lobby.
  5. At Fiske, this analysis assumes that the District-wide Curriculum Center will be housed at another location.
  6. At Harrington, this analysis assumes that the existing Early Childhood Center will remain.
  7. Pupil capacities are calculated for the general classroom and kindergarten count at each school (excluding swing CR's) based on the following policy for optimum class size at each grade:

Kindergarten:	18
Grades 1 & 2:	22
Grades 3, 4, & 5:	24



## Elementary School Capacities

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Site Plan

## New Construction - Bowman Elementary School



Site Plan

## Addition / Renovation - Bowman Elementary School

# Bowman Elementary Site Plans

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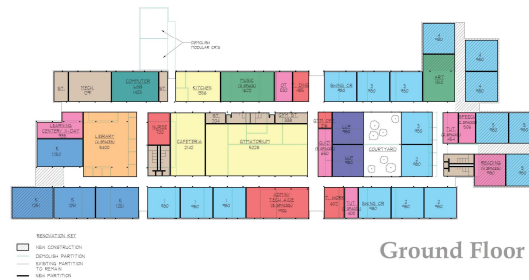


Second Floor



Ground Floor

## New Construction - Bowman Elementary School



Ground Floor

## Addition / Renovation - Bowman Elementary School

# Bowman Elementary Floor Plans

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Site Plan

### New Construction - Bridge Elementary School



Site Plan

### Addition / Renovation - Bridge Elementary School

## Bridge Elementary Site Plans

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Site Plan - Option 1  
Site Plan - Option 2  
New Construction - Estabrook Elementary School



Site Plan  
Addition / Renovation - Estabrook Elementary School

## Estabrook Elementary Site Plans

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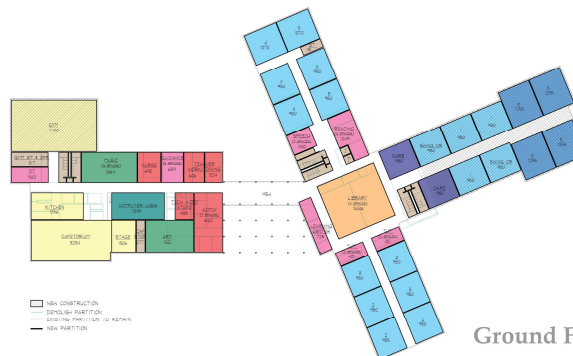


Second Floor



Ground Floor

## New Construction - Estabrook Elementary School



Ground Floor

## Addition / Renovation - Estabrook Elementary School

# Estabrook Elementary Floor Plans

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Site Plan - Option 1



Site Plan - Option 2

## New Construction - Hastings Elementary School



Site Plan

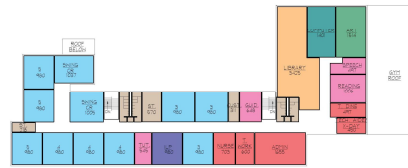
## Addition/ Renovation - Hastings Elementary School

# Hastings Elementary Site Plans

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Second Floor



Ground Floor

## New Construction - Hastings Elementary School



Second Floor



Ground Floor

## Addition / Renovation - Hastings Elementary School

# Hastings Elementary Floor Plans

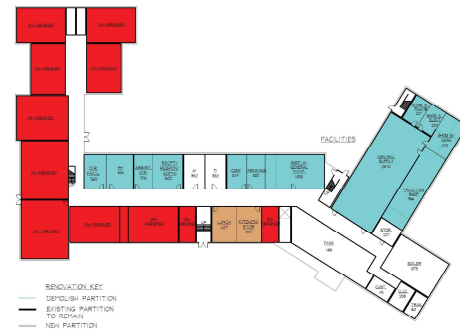
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Main Floor



Ground Floor

## Renovation - Old Harrington Building

### Old Harrington Floor Plans

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	New School		Additions & Renovations		
	New SF	project cost	New SF	Renov SF	Project cost
<b>Bowman Elementary School</b>	72,364	<b>\$24,228,110</b>	11,259	61,349	<b>\$20,609,124</b>
<b>Bridge Elementary School</b>	71,988	<b>\$24,123,131</b>	10,879	61,349	<b>\$20,445,066</b>
<b>Estabrook Elementary School</b>	72,234	<b>\$24,435,088</b>	20,476	51,723	<b>\$22,514,286</b>
<b>Hastings Elementary School</b>	76,818	<b>\$25,461,195</b>	48,732	27,406	<b>\$23,300,841</b>

**Notes:**

1. Estimated costs are complete project costs, including construction, site work, survey, site exploration, furnishings & equipment, technology, design and engineering fees, project management fees, commissioning, and bonding.
2. **Estimated costs are in 1/1/2007 dollars.** Escalation will have to be calculated separately for future construction dates.
3. All costs, new and renovation, are for schools built, new or "functionally as new", to equivalent ed specs for a 450 pupil K-5 school, including 4 KG's and 17 general CR's, dedicated space for Art, Music, Technology, Resource & Remedial. Each school includes 2 additional classrooms for district-wide SpEd programs.
4. Based on projected enrollments, it appears that 3 schools at 450 pupils will be sufficient to meet Lexington's projected K-5 needs.
5. **Effect of escalation:**
  - a. Average cost of new school, 2007 dollars (Bowman, Bridge and Estabrook): **\$24,300,000**
  - b. Cost in future years, calculated at annual construction cost escalation of 7%:

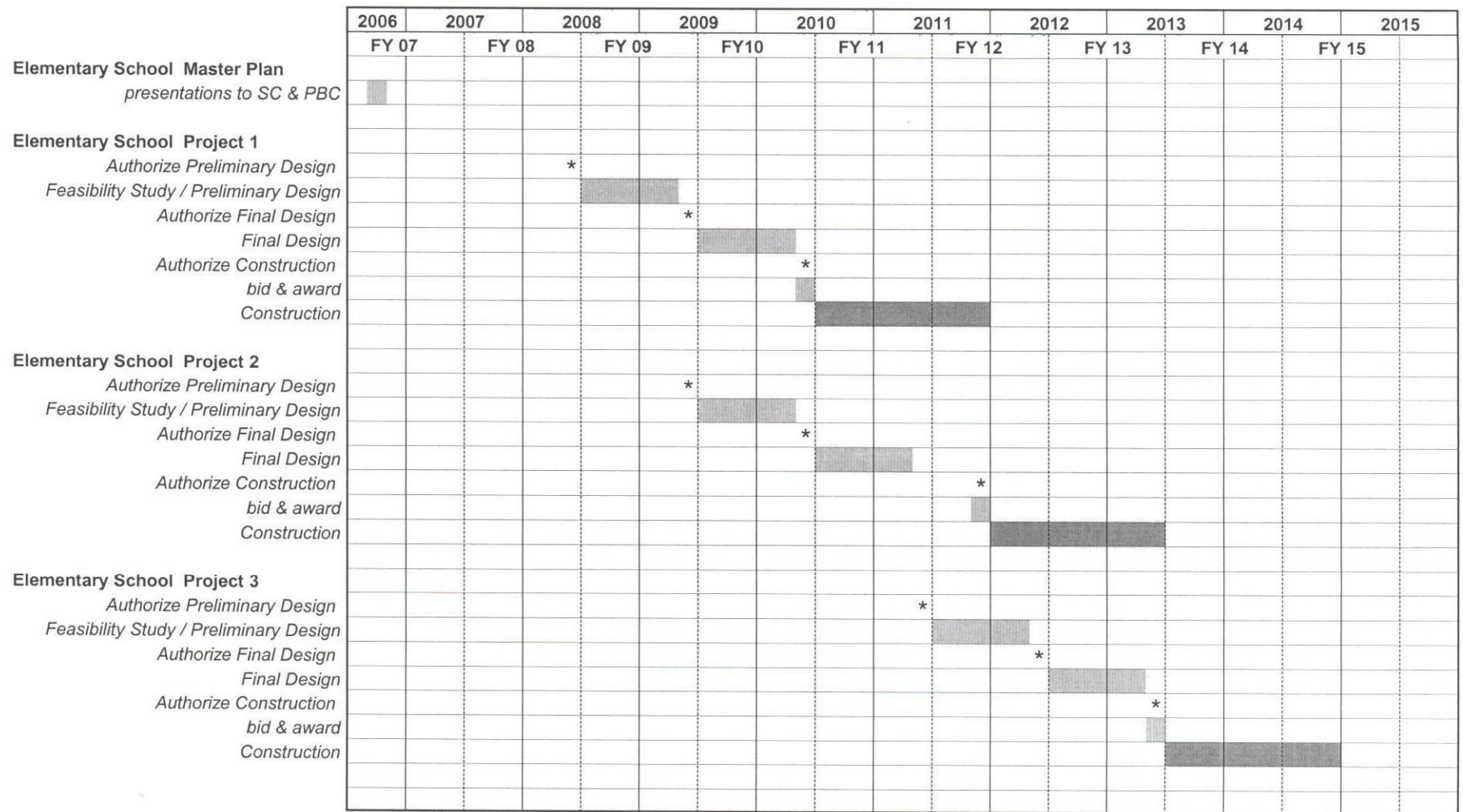
year	escalated total project cost
2007	\$24,300,000
2008	\$26,001,000
2009	\$27,821,070
2010	\$29,768,545
2011	\$31,852,343
2012	\$34,082,007
2013	\$36,467,748

## Preliminary Project Cost Estimates

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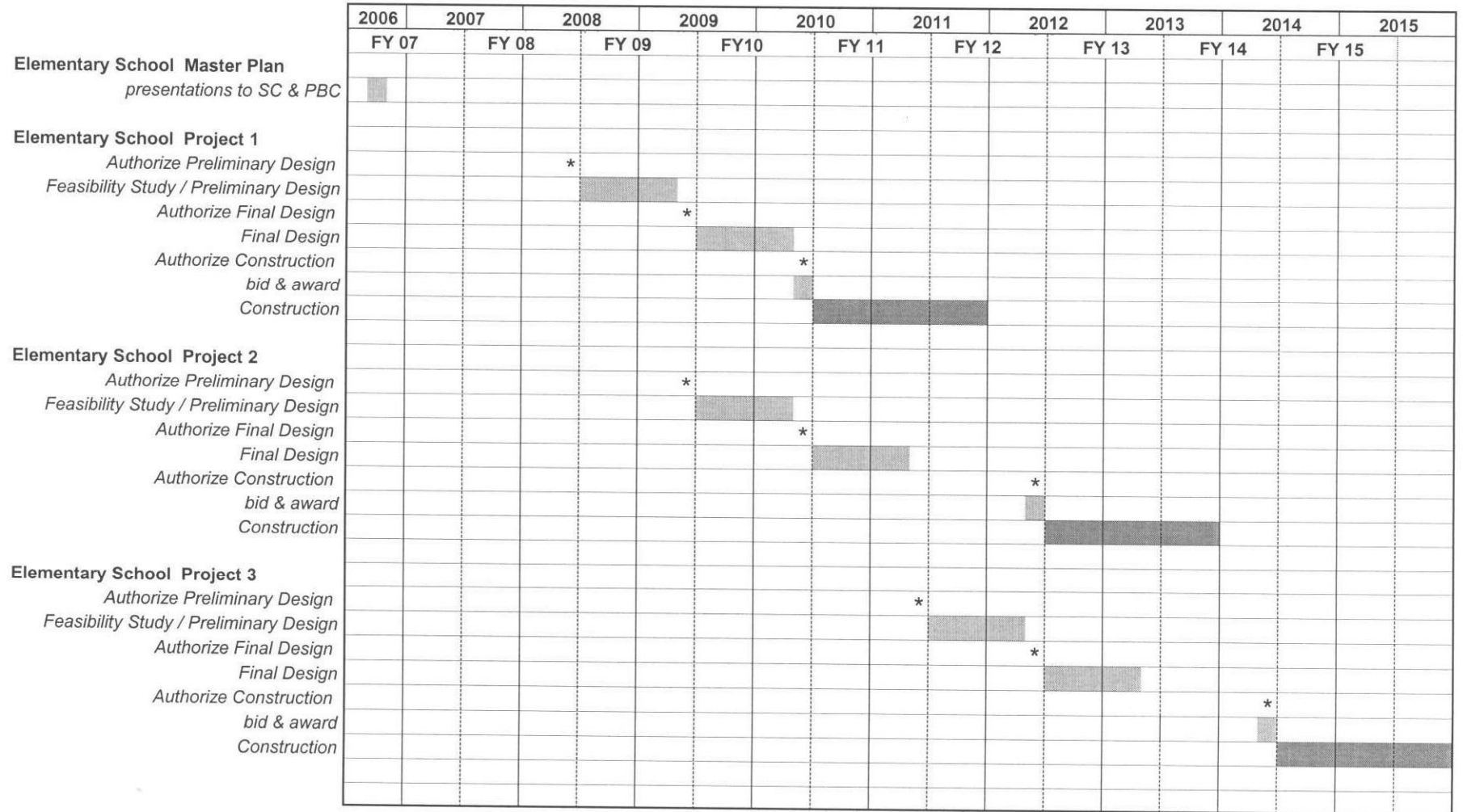


Preliminary Implementation Plan – 18 months between const.projects

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Preliminary Implementation Plan – 24 months between const.projects

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**Lexington Public Schools**

12/11/2006

**Phase II build-out**

(assumes phase I work already complete)

**Old Harrington School  
conversion to Central Admin**

			21,366	
	<i>Building Area--gross SF:</i>	<i>49,900</i>	<i>49,900</i>	<i>49,900</i>
		RENOV	Existing Unrenovated	TOTAL
A.	BUILDING TRADE COST			
	General Construction--upper floor	\$36.74	\$1,833,155	\$1,833,155
	General Construction--lower floor		(unassigned space excluded)	\$0
	Remedial Structural		\$0	\$0
	Casework		\$0	\$0
	Fire Protection	\$3.22	\$160,678	\$160,678
	Plumbing	\$4.98	\$248,502	\$248,502
	HVAC (includes partial-load AC)	\$26.78	\$1,336,322	\$1,336,322
	fire alarm			\$0
	Electrical	\$18.28	\$911,947	\$911,947
	SUBTOTAL	\$89.99	\$4,490,604	\$4,490,604
B.	SITEWORK TRADE COST			
	bulk demolition	RG		
	Hazardous Materials Abatement			
	Earthwork/Site Improvements			\$50,000
	Utilities -- Civil			
C.	TOTAL TRADE COST			\$4,540,604
	General Conditions	7.5%		\$340,545
	Overhead & Profit	6.2%		\$281,517
D.	SUBTOTAL GENERAL CONTRACTOR'S COST			\$5,162,667
E.	<b>TOTAL GENERAL CONTRACTOR'S COST</b>			<b>\$5,162,667</b>
	Bidding Contingency	3.0%		\$154,880
F.	<b>TOTAL ESTIMATED BID</b>			<b>\$5,317,547</b>
	Construction Contingency	10.0%		\$531,755
G.	<b>TOTAL ESTIMATED CONSTRUCTION COST</b>			<b>\$5,849,302</b>
	INDIRECT EXPENSES			\$790,365
	FURNITURE & EQUIPMENT			\$50,000
	EDUCATIONAL TECHNOLOGY			\$50,000
H.4	<b>TOTAL ESTIMATED PROJECT COST</b>		<b>\$135.06 \$ / SF</b>	<b>\$6,739,667</b>

**Old Harrington Conversion to Central Administration**

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## 1. Options considered

Part of the charge for the Master Plan study is to look at options for relocation of the Lexington Schools Central Administration and to make recommendations. We restricted our consideration to buildings under the control of the Lexington Public Schools, specifically the “White House”, the old Harrington School, and the Hastings School, which is recommended to come out of service as a school.

The Hastings and Old Harrington are of similar size and fit for Central Admin. The major difference in suitability is that Hastings is slated to remain in service as a school until either 2015 or 2016, whereas old Harrington can be made available as soon as Fiske moves into its own building.

Given the size limitations and cost per square foot to reconstruct the “White House”, as reported in a previous study, it appears that renovation of the old Harrington is a more cost-effective solution. Although overall cost for a full renovation to old Harrington may be higher, the old Harrington provides much more space, including a significant amount of “unassigned space” available for other functions.

## 2. Costs for renovation of Old Harrington

The task of developing a renovation plan for old Harrington has been complicated by the fact that there have been some changes, and there remain unanswered questions, about the ultimate location of some program functions. The K-5 curriculum center, previously expected to go to the new Fiske, is now being proposed as part of Central Administration, to allow a higher pupil capacity at Fiske. School Facilities has been proposed for relocation to a new DPW building, but that plan does not seem certain. Accordingly, we have continued to show space for Facilities in a relocated Central Administration. We have also included central supply storage, a function currently located elsewhere.

For the sake of this report, we have looked at renovation costs in two ways. We have calculated a Phase I cost, which is the minimal cost to renovate old Harrington so that Central Administration can move in on a short-term basis. These renovations are thought to be sufficient for

an occupancy of several years, but they do not address long-term building system and envelope needs.

The Phase II renovation cost assumes full renovation of building systems and exterior enclosure, including new HVAC, full electrical, plumbing and fire protection, new roof and windows, as well as completion of interior renovations for Central Administration. The only work not included in this cost is interior renovations of spaces not assigned as part of the relocation of Central Administration.

Rough budget costs, expressed in current dollars, are as follows;

Phase I: \$2,650,000

Phase II: \$6,750,000

Combined total: \$9,400,000.

Note that the Phase II costs assume that Phase I work is already completed, so that the total cost to complete Phase II is the combined total.

# Evaluation of Options for Central Administration

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