Falmouth Memorial Library -Cost Estimate for on-site second story expansion ("option E")

Prepared by Associated Design Partners February 8, 2011

The supplemental cost estimates for option E are attached. They range between \$4,184,254 and \$3,716,085.

These estimates include the range of costs anticipated to add a second floor to the existing library building, mainly over the newer section and partly over the old section. A total SF of 18,645SF was conceptually designed with reasonable consideration for existing building roof configurations, floor plan requirements, and existing structural limitations. Additional on-site parking was considered and a conceptual design concept was prepared.

I could attempt a more formal written explanation to go along with the revised budgets and concept site and building plans (plans to be mailed out or can be picked up tomorrow at my office)..... but likely couldn't get a formal written explanation done by Thursday...... much to much design effort has already overtaken the limited available budgetmy primary focus was to give due consideration to Hunt, and other concerned citizen commentary, in order to further investigate feasibility of staying on site.....For my own selfish reasons I would love to see the library stay put. But, as one can see, the second floor option was not pursued very far by our design team for good reason. The cost is too high, as well as the physical disruptions that would be imposed. Also, while reviewing this second story expansion option, I revisited the estimate used for the initial 4000 sf second story investigation and realized that I had also done a range of costs with that budget. The \$800,000 was the lower end, while the upper end was closer to 1.2M, and those estimates did nothing to reconfigure the other existing space that really should be considered in order to conform to either of the Library Consultant's space planning recommendations. Furthermore, that 4000SF option only gained about 2600SF of usable space and didn't include costs for several other considerations, such as; furnishings, architectural fees, and repairs to the existing building, which must also be included for a straight up apples to apples comparison. To date, this has not been done for the initial 4000sf scenario.

Some additional points to consider for the full second story expansion option...

- The second floor option requires temporary relocation of the library or shutting it down...you can't simply pull the roof off that building, add a second floor structure, walls, and new roof, without some significant weather considerations....
- This stay-put option and add a second story without expansion of the existing site does not allow for adequate parking. We really need the ordinance required **93 spaces minimum.** Assuming my *unique* site design would even be permitted (it would definitely need Town gifted permitting lenience) we could only get about 75 spaces....leaving the library use short of what it really needs.
- Managing and operating a two story library space is less than ideal.
- This option leaves no opportunity for future expansion and ultimately costs more money

- The new second floor expansion should include about 8250sf total which includes a full second story over the newer section (6850SF) plus a small section (1395sf) over the older section yielding a net total SF of about 18,645sf. This total SF is about 1145 more than the Lushington recommendation of 17500, but is required in order to accommodate the two stair towers, elevator, and elevator machine room. These second floor extras take up about 1200SF of unusable space.
- Raising the roof causes a snow drift load problem on an already structurally compromised and substandard old roof structure, which then requires further upgrades.

Perhaps I could better address any further questions in person, if so requested.

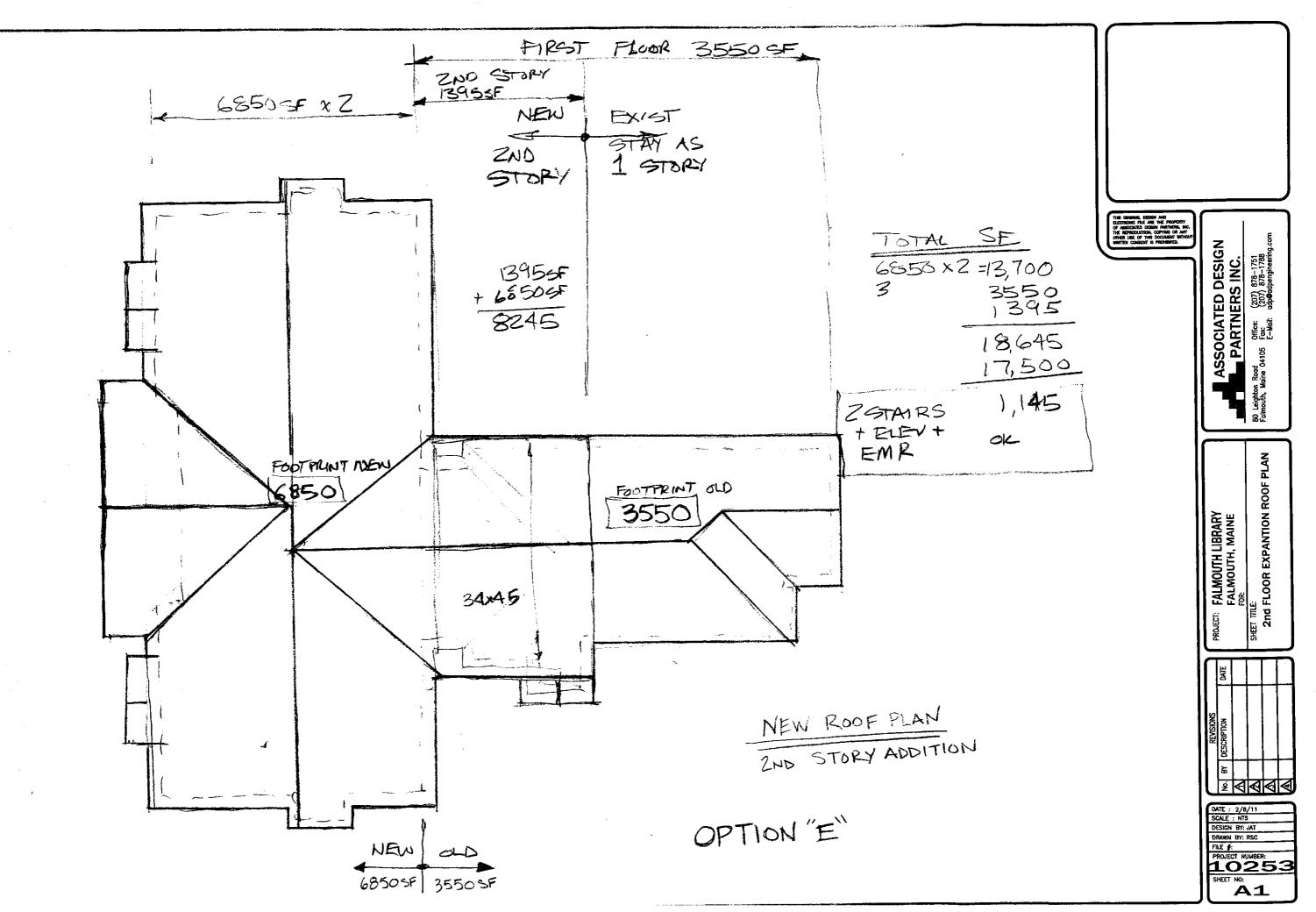
James Thibodeau P.E. President

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Design Options for:											
Falmouth Memorial Library											
November 29, 2010											
Upper Range											
		Option A		Option B		Option C		Option D		Option E	Option "E" comments
Opinion of Estimated Probable Cost		Existing Site		Lunt Site		Plummer Site		New Site		Existing Site	
		Existing one		Lanconce						Add Second Story	
Construction Cost										Add Second Story	
Land Acquisition		\$410,000.00								\$ -	
Site		2410,000.00								Ş -	
Site Upgrades (modify spaces and overlay)				\$ 40,000.00		\$ 55,000.00					
		¢ 200.000.00	15		12		02	¢ 405 000 00	75	¢225.000.00	
Parking Spaces (\$5k each)	76 spaces	\$ 380,000.00	45 spaces	\$225,000.00	43 spaces	\$215,000.00	93 spaces	\$ 465,000.00	75 spaces	\$225,000.00	
Misc	Bldg demo	\$30,000									· · · · · ·
Total Site Cost		\$820,000.00		\$ 265,000.00		\$ 270,000.00		\$ 465,000.00		\$225,000.00	This provides inadequarte parking per ordinace and per actual needs
	-			Ŧ,				* • •		• •	
Building											
Building Demolition (\$7/sf)			7,200 sf	\$ 50,400.00	-		1				
			7,200 51	\$ 50,400.00	-						for support of second story and roof
Structural Upgrades						\$ 280,000.00				É85 000 00	modifications to old section
			-			, ,					
Basement Water Entry	9,590sf @					\$ 15,000.00				\$75,000.00	Addressed in building insp report
Control Air Conditioning	9,590st @ \$5/sf	\$ 47,950.00		\$ 80,000.00		\$ 95,000.00				692.000.00	Modify ovisting HVAC
Central Air Conditioning	\$5/st	\$ 47,950.00		. ,	_	, ,					Modify existing HVAC
Exterior Upgrades				\$ 15,000.00		\$ 160,000.00				\$30,000.00	builidng façade modifications
Roofing Upgrades				\$ 5,000.00	_	\$ 25,000.00					
Chimney work				\$ 3,000.00		\$ 15,000.00					
ADA Upgrades						\$ 35,000.00					
Environmental Upgrades			-	\$ 20,000.00		\$ 20,000.00				\$30,000.00	Clean Mold
Extention of Elevator						\$ 25,000.00					
Misc upgrades					boiler	\$ 105,000.00					
	5,268sf @		8,160sf @		5,568sf@				5,268sf@		
Renovations to Existing Spaces	\$20/sf	\$ 105,360.00	\$70/sf	\$ 571,200.00	\$110/sf	\$ 612,480.00			\$30/sf	\$158,040.00	+10\$/sf for elec & lighting
	4,322sf @		2,800sf @		8,351sf@				4,322sf @		
Renovations to Existing Spaces	\$110/sf	\$ 475,420.00	\$50/sf	\$ 140,000.00	\$65/sf	\$ 542,815.00			\$120/sq	\$518,640.00	+10\$/sf for elec & lighting
	6,605sf @	. ,	5,983sf @	. ,	484sf@	. ,	17,570 sf		8,245sf @	. ,	
New Construction	\$190/sf	\$ 1,254,950.00	\$200/sf	\$ 1,196,600.00	\$200/sf	\$ 96,800.00		\$ 3,250,450.00	\$220/sq	¢1 912 000 00	2nd story addition
		J,234,930.00		÷ 1,150,000.00	J200/SI	φ 90,000.00	2100/51 س	ب 3,∠30,430.00	,,2∠0/SY	\$1,012,900.00	
	660sf @		1,004sf @								
New Exterior Canopies	\$75/sf	\$ 49,500.00	\$75/sf	\$ 75,300.00		<u> </u>					
Furnishings (10% of average building cost)		\$200,000.00		\$200,000.00		\$200,000.00		\$200,000.00		\$200,000.00	
	17570sf @										
Moving Cost \$2.50/sf	\$2.50sf	\$ 52,000.00		\$43,925		\$43,925	_	\$43,925		\$52,000.00	X 2, must move twice
Total Building Cost		\$ 2,185,180.00		\$ 2,400,425.00		\$ 2,271,020.00		\$ 3,494,375.00		\$3,045,580.00	
		ļ									
Administrative Cost			-								
A/E Fees, Legal, Accounting (20%)		\$ 437,036.00		\$ 480,085.00		\$ 454,204.00	18%			\$609,116.00	
Construction Contingency (10%)		\$ 218,518.00		\$ 240,042.50		\$ 227,102.00	8%	\$ 279,550.00		\$304,558.00	
Total Administrative Cost		\$ 655,554.00		\$ 720,127.50		\$ 681,306.00		\$ 908,537.50		\$913,674.00	
Total Project Cost		\$ 3,660,734.00		\$ 3,385,552.50		\$ 3,222,326.00		\$ 4,867,912.50		\$ 4,184,254.00	
			_		-						
Fix basement water entry & clean mold		add P19 + P25	-								
Adjusted budget for option A	1	\$3,765,734.00			1	1	1	1	1		

Design Options for:										
Falmouth Memorial Library										
November 29, 2010										
Lower Range										
		Option A		Option B		Option C		Option D		Option E Option "E" comments
Opinion of Estimated Probable Cost		Existing Site		Lunt Site		Plummer Site		New Site		Existing Site
										Add Second Story
Construction Cost										
Land Acquisition		\$410,000.00								\$ -
Site										
Site Upgrades (modify spaces and overlay)				\$ 40,000.00		\$ 55,000.00				
Parking Spaces (\$5k each); includes 30%	76 spaces	\$ 380,000.00	45 spaces	\$225,000.00	43 spaces	\$215,000.00	93 spaces	\$ 465,000.00	75 spaces	\$225,000.00
Misc	Bldg demo	\$30,000								
Total Site Cost		\$820,000.00		\$ 265,000.00		\$ 270,000.00		\$ 465,000.00		This provides inadequarte parking per \$225,000.00 ordinace and per actual needs
Building										
Building Demolition (\$7/sf)			7,200 sf	\$ 50,400.00					↓	
										for support of second story and roof
Structural Upgrades					-	\$ 280,000.00				\$85,000.00 modifications to old section
Basement Water Entry	0.500.5.0		+		-	\$ 15,000.00			┨───┤	\$75,000.00
Control Air Conditioning	9,590sf @	¢ 47.050.00		¢ 00.000.00		¢ 05.000.00				
Central Air Conditioning	\$5/sf	\$ 47,950.00		\$ 80,000.00		\$ 95,000.00				\$83,000.00 Modify existing HVAC
Exterior Upgrades				\$ 15,000.00 \$ 5.000.00		\$ 160,000.00 \$ 25,000.00				\$30,000.00
Roofing Upgrades		+ +		\$ 5,000.00 \$ 3,000.00	-	\$ 25,000.00 \$ 15,000.00	-			
Chimney work		+ +	-	ş 3,000.00	+	\$ 15,000.00	-			
ADA Upgrades Environmental Upgrades		+ +	+	\$ 20,000.00	+	\$ 35,000.00 \$ 20,000.00	-		+ +	\$30,000.00 Clean Mold
Extention of Elevator				\$ 20,000.00	-	\$ 25,000.00				\$30,000.00 Clean Mold
Misc upgrades					new boiler	\$ 105,000.00				
wise upgrades	5,268sf @		8,160sf @		5,568sf@	\$ 103,000.00			5,268sf@	
Renovations to Existing Spaces	\$15/sf	\$ 79,020.00	\$65/sf	\$ 530,400.00	\$110/sf	\$ 612,480.00			\$25/sf	\$131,700.00 +10\$/sf for elec & lighting
Renovations to Existing Spaces	\$15/5i	\$ 75,020.00	<i>\$03</i> /31	\$ 550,400.00	\$110/5i	<i>y</i> 012,400.00			<i>\$23</i> /31	\$151,700.00 110,731 for cice & lighting
	4,322sf @		2,800sf @		8,351sf@				4,322sf @	
Renovations to Existing Spaces	\$90/sf	\$ 388,980.00	\$40/sf	\$ 112,000.00	\$55/sf	\$ 542,815.00			\$100/sq	\$432,200.00 +10\$/sf for elec & lighting
	6,605sf @	+	5,983sf @	+	484sf@	+	17,570 sf		8245sf @	+ ·····
New Construction	\$160/sf	\$ 1,056,800.00	\$,983sr@ \$165/sf	\$ 987,195.00	48451@ \$180/sf	\$ 87,120.00		\$ 2,986,900.00	\$245sr@ \$190/sf	\$1,566,550.00 2nd story addition
		\$ 1,050,800.00		\$ 907,195.00	\$100/SI	ογ,120.00	w ک۲/۵/۶۱	\$ 2,960,900.00	3T20/21	
	660sf @	¢	1,004sf @	¢						
New Exterior Canopies	\$60/sf	\$ 39,600.00	\$60/sf	\$ 60,240.00		ć200.000.00		¢200.000.00		¢200.000.00
Furnishings (10% of average building cost)		\$200,000.00		\$200,000.00	-	\$200,000.00		\$200,000.00		\$200,000.00
Moving Cost \$2.50/sf		\$ 43,925.00		\$50,000.00	+	\$50,000.00	-	\$50,000.00		\$52,000.00 10,400 sf X 2, must move twice
Total Building Cost		\$ 1,856,275.00		\$ 2,113,235.00		\$ 2,267,415.00		\$ 3,236,900.00		\$2,685,450.00
		÷ 1,030,273.00		÷ 2,113,233.00		÷ 2,207,413.00		÷ 3,230,500.00		γ ∠,003, τ30.00
Administrative Cost		+ +			-					
A/E Fees, Legal, Accounting (20%)		\$ 371,255.00		\$ 422,647.00	1	\$ 453,483.00	18%	\$ 582,642.00	+ +	\$537,090.00
Construction Contingency (10%)		\$ 185,627.50		\$ 211,323.50		\$ 226,741.50	8%			\$268,545.00
		- 100,027.00	+	- 211,525.50	1		5/0	- 200,002.00		+ 100/0 10100
Total Administrative Cost		\$ 556,882.50		\$ 633,970.50		\$ 680,224.50		\$ 841,594.00		\$805,635.00
Total Project Cost		\$ 3,233,157.50		\$ 3,012,205.50		\$ 3,217,639.50		\$ 4,543,494.00		\$ 3,716,085.00
fix basement water issues & clean mold		add 75K + 30K								
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