



**MONADNOCK REGIONAL
SCHOOL DISTRICT**

**ELEMENTARY LEVEL DISTRICT WIDE
FACILITY AND SPACE NEEDS
ASSESSMENT STUDY**

ADDENDUM 1 – REVISED

NOVEMBER 30, 2020



DETAILED OPTIONS COMPARISONS

The Monadnock Regional School District is a diverse and sprawling school district. Finding a solution to the building issues that satisfies all is difficult. These options are meant to show a logical thought process that explores the possibilities. The final recommendation is the option that in this writer's opinion best addresses the needs at a reasonable cost.

The ten options are meant to show a natural progression of thought from the current situation through conclusions that offer a range of possibilities. Each option is reviewed for their positive and negative aspects and the cost differences. It is well understood that the District is unlikely to support any construction project that does not make financial sense. This process is intended to evaluate each option fairly and completely using the best data available at the time.

Core to the cost evaluation are the construction cost estimates and the Life-Cycle Cost Analysis worksheets. The construction cost estimates include both Hard and Soft costs to ensure complete and reasonable estimate. Hard costs are based on the NH State Department of Education FY 2020 Maximum Allowable Costs for School Construction of \$182 per square foot for an elementary school in Cheshire County. This is then modified by 10% to account for inflation for two years. The result is a cost for construction of \$200 per square foot. Other Hard costs are the site development and earthwork. These are much more difficult to estimate. What has been used is reasonable estimate based on this writer's experience.

The Life-Cycle costs are a combination of Building Needs, Utilities, Human Resources and Financial costs. Many of these numbers are estimates but as much as possible these are researched and reasonable if not conservative. They are applied fairly across options so that if there is a mistake, it is unlikely that it would cause a change in the outcome.

The Building Needs and Utilities are relatively easy to explain. The Building Needs are the issues identified in the Building Needs Assessment Study. The Utilities are the current and projected costs for heating and electricity. Mt Caesar has recently gone through heating and electrical renovations, so there is data to show what the cost difference would be if other schools also went through similar renovations. For new construction there is data from other districts or regional and national indexes.

The costs for Human Resources are more difficult to predict but is rooted in studies and common sense. The concept is that an existing, older, poorly designed facilities with less quality materials will be less efficient for the staff and less productive for students. For an example; a new school with new and more durable materials will take less time to clean than an older school. Another example; teachers and students that work in a classroom that is well-lit, well ventilated with a comfortable temperature, will be more productive and less likely to be out sick. The savings for not having as many substitute teachers can be calculated. Also included in Human Resources is the cost of bussing which has dramatically increased in recent years. The distance that

students travel to get to school is significant and so is the cost. Options that increase the amount of students being bused can increase the cost of bussing to amounts similar to the cost of the bonds for construction and so needs to be carefully considered.

The Financial costs refer to the cost of financing a bond but also includes the value of existing buildings that could be included in the tax base. The cost of the bond comes in two parts; the principal payment and the interest. Most bonds are level principal so the interest payments actually decline over time. In 10 years the interest would be half of the first year's payment on a 20-year bond. In some options where there is consolidation of schools, the existing building is assumed to be repurposed and therefore gives value that offsets some of the costs. For the analysis the value of the sale of the property is not calculated but the potential property tax revenue is. Very conservative values of roughly \$30 per square foot are used.

The Life-Cycle cost projections are limited to 10 years. After more than 10 years it becomes increasingly difficult to predict building upgrade needs. This is when even new construction would start to need regular maintenance. A 10-year horizon does not cover the entire bond repayment which typically is 20 years, however after 10 years the bond payments are considerably less and also the population and valuation will have likely changed. New residents 10 years out will share the cost of the bond and it is likely property values will increase and negate some of the tax impact. The differences of the different options after 10 years is impossible to predict and possibly not significant.

Demographics should also influence the selection of the recommended option. Swanzey represents fully half of the districts population and therefor is the gravitational center of the district. The Middle School and the High School are located here. Fitzwilliam and Troy each represent about 16% of the population and Richmond 8% with these three towns together representing about 40% of the population.

Troy's town center is the most densely populated region. Swanzey is made up of several villages including East Swanzey and the largest, West Swanzey. The Middle School, High School and Mt Caesar Elementary are located between these villages about 3 miles from each center.

Lastly, inflation is added to all the numbers with a factor of 2.9% per year. Overall the district has seen an increase in energy costs by approximately 10 % a year for the last four years. Energy performance will have an even larger impact if energy costs continue to rise. Bond interest rates have averaged around 2.5% per year but had dropped even lower in 2020 to the lowest rates published by the NH Municipal Bond Bank. There is no guarantee that bond rates will stay low but there is little indication in the market that they are going up any time soon. With inflation and energy costs rising at the rate higher than inflation, there is a great incentive to borrow money for needed improvements.

The success of any option is likely tied to receiving State Building Aid. The rate for the Monadnock Regional School District is currently 54% which is paid up-front thus reducing the need for a bond. There are some restrictions and it is possible that some options would receive less aid or even risk not being funded at all. The State Department of Education is encouraging the implementation of certain factors

including; consolidation, solving life safety problems, energy efficiency, reuse of historic structures and other items. Options that contain the most of these factors are more likely to receive Building Aid.

OPTIONS

The options start with the simplest of scenarios and increase in complexity and explores alternatives.

Option 1 - Do Nothing

This option is literally what happens if the schools are left exactly the way they are. This is obviously not a viable option because it does nothing to solve the problems identified in the schools. What is important however is to note that “doing nothing” actually has a cost. The schools will cost more to heat, staff will spend more time cleaning and maintaining the buildings and teachers and students will be less productive. These added costs can be estimated and should be used as a benchmark when comparing to other options.

BUILDING PROJECT COST	=	\$0
STATE BUILDING AID	=	\$0
BOND AMOUNT	=	\$0
LIFE -CYCLE, 10YR COSTS	=	\$28,116,227

Option 2 - Upgrades Over 10 Years

This option is the “pay as you go” option. Common Sense might suggest that this is the most financially responsible option but that ignores a number of factors. First of all, inflation in construction and energy are outpacing the bond interest. By locking in a low interest rate bond, the value of the construction is locked in for 20 years. Also, by putting off needed improvements the district is denied the benefits of lower energy bills and better teacher and student performance. The result is a much higher long-term cost.

Building Aid is assumed to not be available due to the projects being paid through the operating budget. If Building Aid is available it would be limited by rules setting maximum size and cost of projects. Emerson and Gilsum would only be allowed a small amount of state aid due to the fact that they have received large additions within the last 50 years that received Building Aid.

BUILDING PROJECT COST	=	\$0
STATE BUILDING AID	=	\$??
BOND AMOUNT	=	\$0
LIFE -CYCLE, 10YR COSTS	=	\$47,763,930

Option 3 – Additions/Renovations District Wide in One Year

This option performs all upgrades of Option 2 in one year by financing it through a bond. By combining all the district needs into one project there is an economy of scale. As mentioned in Option 2, the cost of the interest on the bond is lower than the cost of inflation. Add to that the benefit of better facilities on maintenance and performance and the net cost of this option is much lower than doing the projects over time.

As in Option 1, State Building Aid would be limited in this scenario. Some facilities have received Building Aid in the last 50 years and those projects need to be deducted from the square foot of new construction financed by State Aid. The State also requires that renovations not exceed 60% of the value of the existing building. Renovations at Gilsum and Troy exceed 60% of their current value.

BUILDING PROJECT COST	=	\$18,354,000
STATE BUILDING AID	=	\$9,179,198
BOND AMOUNT	=	\$11,010,642
LIFE -CYCLE, 10YR COSTS	=	\$32,641,912

Option 4 – New South Elementary, Additions/Renovations North Schools

Due to the demographics and the relatively small size of Emerson and Troy it makes sense to combine these schools into one. Both Emerson and Troy have numerous upgrades making a new school somewhat close in cost. If both buildings can be repurposed it is possible to see revenue from the property taxes. The efficiency of a new school adds to the savings. Most importantly this option meets many of the States criteria for Building Aid and is more likely to receive aid than the previous options.

This option does not address all the needs and most notably does not make any change to the site at Cutler.

BUILDING PROJECT COST	=	\$25,341,000
STATE BUILDING AID	=	\$10,210,947
BOND AMOUNT	=	\$17,172,242
LIFE -CYCLE, 10YR COSTS	=	\$35,247,428

Option 5 – New South Elementary, Additions/Renovations to Mt Caesar for North School for Swanzey, Additions/Renovations to Gilsum

Like Option 4, this consolidates Fitzwilliam and Troy into one new school but here Cutler is moved to the Mt Caesar site to create one school for Swanzey. This would be a relatively easy change for Swanzey since Cutler and Mt Caesar already share the same students split by grade. A single school for Swanzey would benefit the students since there would not be the transition to a new school at third grade.

BUILDING PROJECT COST	=	\$29,420,000
STATE BUILDING AID	=	\$12,454,397
BOND AMOUNT	=	\$19,456,482
LIFE -CYCLE, 10YR COSTS	=	\$34,918,485

Option 6 – New Single Consolidated Elementary School

A common sense approach might be to consolidate all the elementary school students into one central school building. This would simplify administration and maintenance. However, the experience for the students would probably not be as favorable. The school would need to hold over 1000 students which is very large for elementary ages. It would also be a very intense use for the site which would most likely be the Mt Caesar site. Also, an important point to consider is that almost all students would need transportation and thus dramatically increase the cost of bussing and burden the system.

The State caps Building Aid on the number of square feet per student minus any previous projects that already received Building Aid. This results in all-new construction receiving less Aid than projects that reuse buildings.

BUILDING PROJECT COST	=	\$31,860,000
STATE BUILDING AID	=	\$11,556,954
BOND AMOUNT	=	\$22,614,437
LIFE -CYCLE, 10YR COSTS	=	\$37,221,168

Option 7 – New South Elementary, Additions/Renovations to Mt Caesar for North School, Redistrict

This option consolidates five schools down to two by closing four schools and building one new on. A new South Elementary would be constructed somewhere central to Troy, Richmond and Fitzwilliam, and Mt Caesar would receive additions and renovations to make a North Elementary. These two schools would be equal in size making them efficient to staff and operate. This also provides the most equivalent experience for students throughout the district. It does require that students are distributed equally meaning that some students from Swanzey would likely attend the South School.

As in Option 6, State Building Aid is reduced due to previous projects having to be deducted from the amount of new construction allowed. Even still, the savings for the improved efficiency make this option only 10% higher over 10 years than the baseline “Do Nothing” option.

BUILDING PROJECT COST	=	\$25,528,000
STATE BUILDING AID	=	\$11,375,709
BOND AMOUNT	=	\$16,427,432
LIFE -CYCLE, 10YR COSTS	=	\$32,738,665

Option 8 – Additions/Renovations to Troy for South Elementary, Additions/Renovations to Mt Caesar for North School, Redistrict

This option is similar to the previous in that it consolidates the district into just two elementary schools, one North located at Mt Caesar and one South, now located at Troy. It preserves the Troy school which is a historic building. This option is as efficient as Option 7 for operations.

The existing Troy school can be challenging to work with, but it also gives some unique opportunities. The existing building is 3-stories which keeps the footprint of the building small. If a 3-story addition were constructed to replace the 1-story wing, it is possible to have a much larger facility that does not occupy more area than it currently does.

BUILDING PROJECT COST	=	\$22,575,000
STATE BUILDING AID	=	\$11,091,909
BOND AMOUNT	=	\$13,701,472
LIFE -CYCLE, 10YR COSTS	=	\$32,106,010

*Option 9 – Additions/Renovations to Mt Caesar to Combine Swanzey and Troy,
Addition/Renovations to Emerson and Gilsum*

The concept for this option is to close Troy and Cutler which are considered the two schools in the most need and to consolidate them onto the Mt Caesar site. This affords some economy of scale and preserves Emerson and Gilsum as neighborhood schools which has been voiced as a priority.

The new Mt Caesar however would be very large for an elementary school and some of the expected economy of scale is lost due to being over-sized. Also, this ensures a dramatic increase in bussing with all of Troy needing transportation.

BUILDING PROJECT COST	=	\$22,137,000
STATE BUILDING AID	=	\$11,259,848
BOND AMOUNT	=	\$13,129,122
LIFE -CYCLE, 10YR COSTS	=	\$35,082,939

*Option 10 – Town Schools, Combine Cutler with Mt Caesar onto One Swanzey
School on the Mt Caesar Site*

This concept looks at keeping a school active in each town that currently has a school. The only school to be closed would be Cutler which has the most difficult site. This would be an easy transition since Cutler and Mt Caesar already take all Swanzey students but at different grades. Town identity and school pride would be preserved. There is the possibility that Troy could expect growth due to planned residential developments and this gives the ability to absorb additional students there.

There would be increased cost due to multiple buildings but also a reduced cost for bussing over other options that close more schools. Also, this ensures a dramatic increase in bussing with all of Troy needing transportation.

BUILDING PROJECT COST	=	\$22,433,000
STATE BUILDING AID	=	\$11,422,648
BOND AMOUNT	=	\$13,294,882
LIFE -CYCLE, 10YR COSTS	=	\$32,312,968

RECOMMENDATION

It is clear the cost of upgrading the Monadnock Regional School District facilities can be done cost effectively. The cost of doing nothing or trying to pay-as-you-go can be expensive and does not give the benefits of upgraded facilities right away. Which option is best can be a matter of opinion and subject to intangible influences.

In general, the concept of two schools, one North in the district and one South in the district meets the needs within a reasonable cost. However, where to put the South school is a difficult question to answer.

Worth considering is Option 10 that keeps a school open in each town. This addresses the need that has been voiced for local control and pride in the schools. It also reduces the amount of busing which saves costs and the amount of time students spend commuting.

End Report

APENDIX

**Monadnock Regional School District
Elementary School Improvements**

Student Enrollment per Option

	Student Capacity						Total
	Cutler	Emerson	Gilsum	Mt Caesar	Troy	New	
Option #1 Do Nothing	300	200	100	250	200		1,050
Option #2 Additions / Renovations Over Ten Years.	300	200	100	250	200		1,050
Option #3 Additions / Renovations District Wide in One Year	300	200	100	250	200		1,050
Option #4 New South Elementary, Additions / Renovations to North Schools	300		100	250		400	1,050
Option #5 New South Elementary, Add/Reno to Mt Caesar for Swanzey, Add/Reno to Gilsum			100	550		400	1,050
Option #6 Consolidate all Elementary onto Mt Caesar Site						1,050	1,050
Option #7 New South Elementary and Mt Caesar North with Redistricting				525		525	1,050
Option #8 Troy South Elementary and Mt Caesar North with Redistricting				525	525		1,050
Option #9 Mt Caesar Swanzey/Troy, Emerson and Gilsum Remain		200	100	750			1,050
Option #10 Town Schools		200	100	550	200		1,050

**Monadnock Regional School District
Elementary School Improvements**

Total Building Project Cost per Option

		Building Project Costs						Total
		Cutler	Emerson	Gilsum	Mt Caesar	Troy	New	
Option #1	Do Nothing							\$ -
Option #2	Renovations and Additions Over Ten Years.							\$ -
Option #3	Additions/Renovations District Wide in One Year	\$ 3,860,000	\$ 2,474,000	\$ 4,437,000	\$ 1,385,000	\$ 6,198,000		\$ 18,354,000
Option #4	New South Elementary, Additions/Renovations to North Schools	\$ 3,860,000		\$ 4,437,000	\$ 1,385,000		\$ 15,659,000	\$ 25,341,000
Option #5	New South Elementary, Mt Caesar North Elementary, Add/Reno to Gilsum			\$ 4,437,000	\$ 9,324,000		\$ 15,659,000	\$ 29,420,000
Option #6	Consolidate all Elementary onto Mt Caesar Site						\$ 31,860,000	\$ 31,860,000
Option #7	New South Elementary and Mt Caesar North with Redistricting				\$ 8,028,000		\$ 17,500,000	\$ 25,528,000
Option #8	Troy South Elementary and Mt Caesar North with Redistricting				\$ 8,028,000	\$ 14,547,000		\$ 22,575,000
Option #9	Mt Caesar Swanzey/Troy, Emerson and Gilsum Remain		\$ 2,474,000	\$ 4,437,000	\$ 15,226,000			\$ 22,137,000
Option #10	Town Schools		\$ 2,474,000	\$ 4,437,000	\$ 9,324,000	\$ 6,198,000		\$ 22,433,000

**Monadnock Regional School District
Elementary School Improvements**

State Building Aid per Option Comparison

		State Aid at 54%					Total	
		Cutler	Emerson	Gilsum	Mt Caesar	Troy	New	
Option #1	Do Nothing							\$ -
Option #2	Renovations and Additions Over Ten Years.							\$ -
Option #3	Additions/Renovations District Wide in One Year	\$ 2,123,000	\$ 1,360,700	\$ 1,524,848	\$ 761,750	\$ 3,408,900		\$ 9,179,198
Option #4	New South Elementary, Additions/Renovations to North Schools	\$ 2,123,000		\$ 1,524,848	\$ 761,750		\$ 5,801,349	\$ 10,210,947
Option #5	New South Elementary, Mt Caesar North Elementary, Add/Reno to Gilsum			\$ 1,524,848	\$ 5,128,200		\$ 5,801,349	\$ 12,454,397
Option #6	Consolidate all Elementary onto Mt Caesar Site						\$ 11,556,954	\$ 11,556,954
Option #7	New South Elementary and Mt Caesar North with Redistricting				\$ 4,415,400		\$ 6,960,309	\$ 11,375,709
Option #8	Troy South Elementary and Mt Caesar North with Redistricting				\$ 4,415,400	\$ 6,676,509		\$ 11,091,909
Option #9	Mt Caesar Swanzey/Troy, Emerson and Gilsum Remain		\$ 1,360,700	\$ 1,524,848	\$ 8,374,300			\$ 11,259,848
Option #10	Town Schools		\$ 1,360,700	\$ 1,524,848	\$ 5,128,200	\$ 3,408,900		\$ 11,422,648

**Monadnock Regional School District
Elementary School Improvements**

Bond Cost per Option Comparison

	Bond Amount						Total
	Cutler	Emerson	Gilsum	Mt Caesar	Troy	New	
Option #1 Do Nothing							\$ -
Option #2 Renovations and Additions Over Ten Years.							\$ -
Option #3 Additions/Renovations District Wide in One Year	\$ 2,161,600	\$ 1,385,440	\$ 3,217,122	\$ 775,600	\$ 3,470,880		\$ 11,010,642
Option #4 New South Elementary, Additions/Renovations to North Schools	\$ 2,161,600		\$ 3,217,122	\$ 775,600		\$ 11,017,920	\$ 17,172,242
Option #5 New South Elementary, Mt Caesar North Elementary, Add/Reno to Gilsum			\$ 3,217,122	\$ 5,221,440		\$ 11,017,920	\$ 19,456,482
Option #6 Consolidate all Elementary onto Mt Caesar Site						\$ 22,614,437	\$ 22,614,437
Option #7 New South Elementary and Mt Caesar North with Redistricting				\$ 4,495,680		\$ 11,931,752	\$ 16,427,432
Option #8 Troy South Elementary and Mt Caesar North with Redistricting				\$ 4,495,680	\$ 9,205,792		\$ 13,701,472
Option #9 Mt Caesar Swanzey/Troy, Emerson and Gilsum Remain		\$ 1,385,440	\$ 3,217,122	\$ 8,526,560			\$ 13,129,122
Option #10 Town Schools		\$ 1,385,440	\$ 3,217,122	\$ 5,221,440	\$ 3,470,880		\$ 13,294,882

**Monadnock Regional School District
Elementary School Improvements**

Life-Cycle Cost Comparisons

	Life-Cycle Costs (including 54% State Building Aid and Bond) over 10 years						Total
	Cutler	Emerson	Gilsum	Mt Caesar	Troy	New	
Option #1 Do Nothing	\$ 7,355,369	\$ 5,807,799	\$ 3,066,905	\$ 6,918,912	\$ 4,967,242		\$ 28,116,227
Option #2 Renovations and Additions Over Ten Years.	\$ 8,086,438	\$ 8,216,513	\$ 8,639,862	\$ 9,128,314	\$ 13,692,803		\$ 47,763,930
Option #3 Additions/Renovations District Wide in One Year	\$ 8,031,465	\$ 6,047,724	\$ 4,855,701	\$ 7,418,793	\$ 6,288,229		\$ 32,641,912
Option #4 New South Elementary, Additions/Renovations to North Schools	\$ 8,031,465		\$ 4,855,701	\$ 7,418,793		\$ 14,941,469	\$ 35,247,428
Option #5 New South Elementary, Mt Caesar North Elementary, Add/Reno to Gilsum			\$ 4,855,701	\$ 15,121,315		\$ 14,941,469	\$ 34,918,485
Option #6 Consolidate all Elementary onto Mt Caesar Site						\$ 37,221,168	\$ 37,221,168
Option #7 New South Elementary and Mt Caesar North with Redistricting				\$ 14,603,739		\$ 18,134,926	\$ 32,738,665
Option #8 Troy South Elementary and Mt Caesar North with Redistricting				\$ 14,603,739	\$ 17,502,271		\$ 32,106,010
Option #9 Mt Caesar Swanzey/Troy, Emerson and Gilsum Remain		\$ 6,047,724	\$ 4,855,701	\$ 24,179,515			\$ 35,082,939
Option #10 Town Schools		\$ 6,047,724	\$ 4,855,701	\$ 15,121,315	\$ 6,288,229		\$ 32,312,968

OPTION 1

DO NOTHING

Cutler Elementary School Option 1 - Do Nothing

Life-Cycle Cost Analysis

Student Capacity		300										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ 0.20	7,154	7,362	7,575	7,795	8,021	8,254	8,493	8,739	8,993	9,254
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.59	21,106	21,718	22,347	22,996	23,662	24,349	25,055	25,781	26,529	27,298
	On-Site	-	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.87	31,122	32,024	32,953	33,909	34,892	35,904	-	-	-	-
	Propane	\$ 0.80	-	-	-	-	-	-	33,972	34,958	35,971	37,015
	Wood	-	-	-	-	-	-	-	-	-	-	-
	Electricity	-	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ 0.02	715	736	758	780	802	825	849	874	899	925	
SUBTOTAL			60,097	61,840	63,633	65,479	67,378	69,332	68,370	70,352	72,393	74,492
HUMAN RESOURCES	Cleaning	\$ 3.00	107,316	110,429	113,631	116,926	120,317	123,806	127,397	131,091	134,893	138,805
	Repairs	\$ 0.30	10,732	11,043	11,363	11,693	12,032	12,381	12,740	13,109	13,489	13,880
	Productivity Loss	1.10%	14,756	15,184	15,624	16,077	16,544	17,023	17,517	18,025	18,548	19,086
	Bussing	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607
SUBTOTAL			585,564	602,545	620,019	638,000	656,502	675,540	695,131	715,290	736,033	757,378
PROPERTY & FINANCE	Principal	-	-	-	-	-	-	-	-	-	-	-
	Interest	-	-	-	-	-	-	-	-	-	-	-
	Tax Income	-	-	-	-	-	-	-	-	-	-	-
	Building Aid Reimbursement	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
TOTAL			645,661	664,386	683,653	703,479	723,880	744,872	763,501	785,642	808,426	831,870

GRAND TOTAL \$ 7,355,369

Bond Amt:	\$ -	Building Size:	34,764	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ -	State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Emerson Elementary

Option 1 - Do Nothing

Life-Cycle Cost Analysis

Student Capacity		200										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ 0.20	6,760	6,956	7,157	7,365	7,579	7,798	8,025	8,257	8,497	8,743
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.60	20,279	20,867	21,472	22,095	22,736	23,395	24,074	24,772	25,490	26,229
	On-Site	-	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.82	27,715	28,519	-	-	-	-	-	-	-	-
	Propane	\$ 0.80	-	-	28,630	29,460	30,314	31,194	32,098	33,029	33,987	34,972
	Wood	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			54,754	56,341	57,260	58,920	60,629	62,387	64,196	66,058	67,974	69,945
HUMAN RESOURCES	Cleaning	\$ 3.00	101,396	104,336	107,362	110,475	113,679	116,976	120,368	123,859	127,451	131,147
	Repairs	\$ 0.30	10,140	10,434	10,736	11,048	11,368	11,698	12,037	12,386	12,745	13,115
	Productivity Loss	1.10%	13,942	14,346	14,762	15,190	15,631	16,084	16,551	17,031	17,524	18,033
	Bussing	\$ 1,600	329,280	338,829	348,655	358,766	369,170	379,876	390,893	402,229	413,893	425,896
SUBTOTAL			454,757	467,945	481,515	495,479	509,848	524,634	539,848	555,504	571,613	588,190
PROPERTY & FINANCE	Principal	-	-	-	-	-	-	-	-	-	-	-
	Interest	-	-	-	-	-	-	-	-	-	-	-
	Tax Income	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
TOTAL			509,511	524,286	538,775	554,400	570,477	587,021	604,045	621,562	639,587	658,135

GRAND TOTAL \$ 5,807,799

Bond Amt:	\$ -	Building Size:	32,846	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsium STEAM Academy Option 1 - Do Nothing

Life-Cycle Cost Analysis

Student Capacity		100										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ 0.20	3,718	3,826	3,937	4,051	4,169	4,290	4,414	4,542	4,674	4,809
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.85	15,803	16,261	16,733	17,218	17,718	18,231	18,760	19,304	19,864	20,440
	On-Site	-	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.94	17,476	17,983	18,505	-	-	-	-	-	-	-
	Propane	\$ 0.80	-	-	-	16,205	16,675	17,159	17,657	18,169	18,696	19,238
	Wood	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL			36,998	38,071	39,175	37,475	38,562	39,680	40,831	42,015	43,233	44,487
HUMAN RESOURCES	Cleaning	\$ 3.00	55,776	57,393	59,058	60,771	62,533	64,346	66,212	68,133	70,108	72,141
	Repairs	\$ 0.30	5,578	5,739	5,906	6,077	6,253	6,435	6,621	6,813	7,011	7,214
	Productivity Loss	1.10%	7,669	7,892	8,120	8,356	8,598	8,848	9,104	9,368	9,640	9,919
	Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948
SUBTOTAL			233,663	240,439	247,412	254,587	261,970	269,567	277,384	285,428	293,706	302,223
PROPERTY & FINANCE	Principal	-	-	-	-	-	-	-	-	-	-	-
	Interest	-	-	-	-	-	-	-	-	-	-	-
	Tax Income	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
TOTAL			270,661	278,510	286,587	292,062	300,532	309,247	318,215	327,443	336,939	346,710

GRAND TOTAL \$ 3,066,905

Bond Amt:	\$ -	Building Size:	18,068	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ -	State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Caesar Elementary

Option 1 - Do Nothing

Life-Cycle Cost Analysis

Student Capacity		250										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ 0.20	7,921	8,151	8,387	8,630	8,880	9,138	9,403	9,676	9,956	10,245
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.75	29,703	30,565	31,451	32,363	33,301	34,267	35,261	36,284	37,336	38,418
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ -	-	-	-	-	-	-	-	-	-	-
	Propane	\$ 0.39	15,446	15,894	16,354	16,829	17,317	17,819	18,336	18,867	19,415	19,978
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL			53,070	54,609	56,192	57,822	59,499	61,224	63,000	64,827	66,707	68,641
HUMAN RESOURCES	Cleaning	\$ 2.00	79,208	81,505	83,869	86,301	88,804	91,379	94,029	96,756	99,562	102,449
	Repairs	\$ 0.20	7,921	8,151	8,387	8,630	8,880	9,138	9,403	9,676	9,956	10,245
	Productivity Loss	0.90%	13,366	13,754	14,153	14,563	14,986	15,420	15,867	16,328	16,801	17,288
	Bussing/Student	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607
SUBTOTAL			553,256	569,300	585,810	602,798	620,279	638,267	656,777	675,824	695,423	715,590
PROPERTY & FINANCE	Principal	5.00%	-	-	-	-	-	-	-	-	-	-
	Interest	1.67%	-	-	-	-	-	-	-	-	-	-
	Tax Income		-	-	-	-	-	-	-	-	-	-
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
TOTAL			606,325	623,909	642,002	660,620	679,778	699,491	719,777	740,650	762,129	784,231

GRAND TOTAL \$ 6,918,912

Bond Amt:	\$ -	Building Size:	38,488	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Troy Elementary

Option 1 - Do Nothing

Life-Cycle Cost Analysis

Student Capacity		200										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ -	-	-	-	-	-	-	-	-	-	
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	
	Grid	\$ 0.64	18,175	18,702	19,244	19,802	20,377	20,968	21,576	22,201	22,845	23,508
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	
	Oil	\$ -	-	-	-	-	-	-	-	-	-	
	Propane	\$ 0.83	23,571	24,254	24,958	25,681	26,426	27,192	27,981	28,792	29,627	30,487
	Wood	\$ -	-	-	-	-	-	-	-	-	-	
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	
	Other	\$ -	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-		
SUBTOTAL			41,746	42,956	44,202	45,484	46,803	48,160	49,557	50,994	52,473	53,994
HUMAN RESOURCES	Cleaning	\$ 3.00	85,195	87,666	90,208	92,824	95,516	98,286	101,136	104,069	107,087	110,193
	Repairs	\$ 0.30	8,520	8,767	9,021	9,282	9,552	9,829	10,114	10,407	10,709	11,019
	Productivity Loss	1.10%	11,714	12,054	12,404	12,763	13,133	13,514	13,906	14,310	14,724	15,151
	Bussing	\$ 1,400	288,120	296,475	305,073	313,920	323,024	332,392	342,031	351,950	362,157	372,659
SUBTOTAL			393,549	404,962	416,706	428,790	441,225	454,021	467,187	480,736	494,677	509,023
PROPERTY & FINANCE	Principal	-	-	-	-	-	-	-	-	-	-	
	Interest	-	-	-	-	-	-	-	-	-	-	
	Tax Income	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL			-	-	-	-	-	-	-	-	-	
TOTAL			435,294	447,918	460,908	474,274	488,028	502,181	516,744	531,729	547,150	563,017

GRAND TOTAL \$ 4,967,242

Bond Amt:	\$ -	Building Size:	27,598	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 2

ADDITIONS AND RENOVATIONS OVER 10 YEARS

Cutler Elementary

Option 2 - Upgrades Over Time

Life-Cycle Cost Analysis

Student Capacity		300										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	28,524	62,895	84,135	76,283	39,455	37,394	74,758	33,938	4,656	208,663	
	Division 1	102,900	-	-	-	-	-	-	-	-	1,159,236	
	Division 2	13,892	105,884	43,582	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	10,588	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	52,942	-	-	-	-	-	-	-	-	
	Division 8	29,841	-	-	336,343	-	-	-	-	-	-	
	Division 9	10,290	74,119	-	-	46,146	-	-	-	-	-	
	Division 10	-	-	19,612	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	26,471	-	-	-	-	-	-	-	-	
	Division 15	1,544	79,413	404,222	49,330	173,049	207,745	415,324	-	-	-	
	Division 16	-	-	-	38,119	-	-	-	-	188,545	25,868	-
SUBTOTAL		186,990	412,313	551,551	500,075	258,650	245,139	490,082	222,483	30,525	1,367,899	
UTILITIES	Water	\$ 0.20	7,911	8,140	8,376	8,619	8,869	9,126	9,391	9,663	9,944	10,232
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.59	23,337	24,014	24,710	25,427	26,164	26,923	27,704	28,507	29,334	30,184
	On-Site	\$ 0.70	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.87	34,412	35,410	36,437	37,494	38,581	39,700	-	-	-	-
	Propane	\$ 0.80	-	-	-	-	-	-	37,564	38,654	39,774	40,928
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ 0.02	791	814	838	862	887	913	939	966	994	1,023
SUBTOTAL		66,451	68,378	70,361	72,401	74,501	76,662	75,598	77,790	80,046	82,367	
HUMAN RESOURCES	Cleaning	\$ 2.50	98,885	101,753	104,704	107,740	110,865	114,080	117,388	120,792	124,295	127,900
	Repairs	\$ 0.25	9,889	10,175	10,470	10,774	11,086	11,408	11,739	12,079	12,430	12,790
	Productivity Loss	1.00%	14,833	15,263	15,706	16,161	16,630	17,112	17,608	18,119	18,644	19,185
	Bussing/Student	\$ 1,600	127,061	134,537	142,454	150,836	159,711	169,109	179,059	189,595	200,751	212,564
SUBTOTAL		250,667	261,728	273,333	285,511	298,292	311,708	325,794	340,585	356,120	372,438	
PROPERTY & FINANCE	Principal	5.00%	-	-	-	-	-	-	-	-	-	
	Interest	1.67%	-	-	-	-	-	-	-	-	-	
	Tax Income	-	-	-	-	-	-	-	-	-	-	
	Building Aid Reimbursement	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
TOTAL		504,108	742,419	895,245	857,987	631,443	633,509	891,474	640,858	466,691	1,822,704	

GRAND TOTAL \$ 8,086,438

Bond Amt:	\$ -	Building Size:	38,439	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Emerson Elementary

Option 2 - Upgrades Over Time

Life-Cycle Cost Analysis

Student Capacity		200										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	27,413	26,873	28,437	52,671	59,390	4,274	58,267	57,695	11,641	65,881	
	Division 1	102,900	6,353	-	-	-	-	-	-	64,671	299,458	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	8,232	-	-	-	138,439	-	-	-	-	-	
	Division 6	20,580	21,177	-	-	-	-	-	-	-	-	
	Division 7	-	10,588	-	56,057	-	-	-	62,848	-	-	
	Division 8	20,580	10,588	136,193	-	-	-	-	-	-	-	
	Division 9	-	-	-	44,846	28,841	-	61,077	62,848	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	23,544	64,605	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	79,413	21,791	-	23,073	23,742	262,631	157,121	-	-	
	Division 16	-	21,177	-	168,172	74,988	-	-	37,709	-	66,546	
SUBTOTAL		179,705	176,170	186,422	345,290	389,336	28,016	381,975	378,221	76,312	431,885	
UTILITIES	Water	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.60	20,968	21,576	22,202	22,846	23,508	24,190	24,892	25,614	26,356	27,121
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.82	28,657	29,488	-	-	-	-	-	-	-	-
	Propane	\$ 0.80	-	-	29,603	30,461	31,345	32,254	33,189	34,151	35,142	36,161
	Wood	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ 0.40	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		56,614	58,256	59,205	60,922	62,689	64,507	66,378	68,303	70,283	72,322	
HUMAN RESOURCES	Cleaning	\$ 2.50	87,368	89,901	92,508	95,191	97,952	100,792	103,715	106,723	109,818	113,003
	Repairs	\$ 0.25	8,737	8,990	9,251	9,519	9,795	10,079	10,372	10,672	10,982	11,300
	Productivity Loss	1.00%	13,105	13,485	13,876	14,279	14,693	15,119	15,557	16,008	16,473	16,950
	Bussing	\$ 1,600	329,280	338,829	348,655	358,766	369,170	379,876	390,893	402,229	413,893	425,896
SUBTOTAL		438,489	451,206	464,291	477,755	491,610	505,867	520,537	535,632	551,166	567,150	
PROPERTY & FINANCE	Principal	5.00%	-	-	-	-	-	-	-	-	-	
	Interest	1.67%	-	-	-	-	-	-	-	-	-	
	Tax Income	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
TOTAL		674,808	685,632	709,918	883,967	943,635	598,390	968,890	982,156	697,761	1,071,357	

GRAND TOTAL \$ 8,216,513

Bond Amt:	\$ -	Building Size:	33,962	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsun STEAM Academy Option 2 - Upgrades Over Time

Life-Cycle Cost Analysis

Student Capacity		100										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	37,785	47,838	50,991	57,515	48,592	69,446	54,969	27,150	11,641	401,753	
	Division 1	102,900	-	-	-	92,293	-	-	-	-	2,231,962	
	Division 2	-	-	43,582	168,172	-	-	122,154	-	64,671	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	4,116	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	28,841	-	-	-	-	-	
	Division 7	-	74,119	-	-	5,768	-	-	-	-	-	
	Division 8	-	-	32,686	-	13,844	-	-	-	-	-	
	Division 9	10,290	38,118	21,791	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	8,652	-	-	-	-	-	
	Division 11	-	-	-	-	1,730	-	-	-	-	-	
	Division 12	-	-	-	-	43,839	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	21,177	174,328	151,354	17,305	385,812	152,692	150,836	-	-	
	Division 16	-	92,610	132,355	10,895	-	57,683	-	30,538	-	-	
SUBTOTAL		247,701	313,608	334,273	377,041	318,548	455,258	360,354	177,986	76,312	2,633,715	
UTILITIES	Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-
	Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046	
HUMAN RESOURCES	Cleaning	\$ 2.50	68,044	70,018	72,048	74,138	76,288	78,500	80,776	83,119	85,529	88,010
	Repairs	\$ 0.25	6,804	7,002	7,205	7,414	7,629	7,850	8,078	8,312	8,553	8,801
	Productivity Loss	1.00%	10,207	10,503	10,807	11,121	11,443	11,775	12,116	12,468	12,829	13,201
	Bussing/Student	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948
SUBTOTAL		249,695	256,937	264,388	272,055	279,945	288,063	296,417	305,013	313,858	322,960	
PROPERTY & FINANCE	Principal	5.00%	-	-	-	-	-	-	-	-	-	
	Interest	1.67%	-	-	-	-	-	-	-	-	-	
	Tax Income	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
TOTAL		551,560	626,278	656,011	692,096	642,739	788,851	703,621	531,208	439,777	3,007,721	

GRAND TOTAL \$ 8,639,862

Bond Amt:	\$ -	Building Size:	26,451	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Caesar Elementary

Option 2 - Upgrades Over Time

Life-Cycle Cost Analysis

Student Capacity		250										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	21,300	4,765	4,903	5,045	5,191	5,342	5,497	-	-	258,971	
	Division 1	102,900	-	-	-	-	-	-	-	-	1,438,730	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	15,435	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	27,239	-	28,841	-	30,538	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	26,471	-	28,029	-	29,678	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		139,635	31,236	32,142	33,074	34,033	35,020	36,035	-	-	1,697,702	
UTILITIES	Water	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.75	32,594	33,539	34,511	35,512	36,542	37,602	38,692	39,814	40,969	42,157
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ -	-	-	-	-	-	-	-	-	-	-
	Propane	\$ 0.39	16,949	17,440	17,946	18,466	19,002	19,553	20,120	20,703	21,304	21,922
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		58,234	59,923	61,660	63,449	65,289	67,182	69,130	71,135	73,198	75,321	
HUMAN RESOURCES	Cleaning	\$ 2.00	86,916	89,437	92,030	94,699	97,446	100,272	103,179	106,172	109,251	112,419
	Repairs	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
	Productivity Loss	0.90%	14,667	15,092	15,530	15,981	16,444	16,921	17,412	17,916	18,436	18,971
	Bussing / Student	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607
SUBTOTAL		563,035	579,363	596,164	613,453	631,243	649,549	668,386	687,770	707,715	728,239	
PROPERTY & FINANCE	Principal	5.00%	-	-	-	-	-	-	-	-	-	
	Interest	1.67%	-	-	-	-	-	-	-	-	-	
	Tax Income	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
TOTAL		760,904	670,521	689,967	709,976	730,565	751,751	773,552	758,905	780,913	2,501,261	

GRAND TOTAL \$ 9,128,314

Bond Amt:	\$ -	Building Size:	42,233	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Troy Elementary

Option 2 - Upgrades Over Time

Life-Cycle Cost Analysis

Student Capacity

200

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS												
Division 0		64,827	83,860	63,150	67,605	57,314	78,207	72,559	175,347	86,142	558,669	
Division 1		-	127,061	-	-	-	296,778	-	942,723	-	3,103,718	
Division 2		-	-	-	-	28,841	-	-	-	-	-	
Division 3		-	105,884	-	-	-	-	79,400	-	-	-	
Division 4		-	-	-	-	-	-	-	-	-	-	
Division 5		-	-	-	56,057	-	-	-	-	-	-	
Division 6		-	-	-	67,269	34,610	-	-	-	-	-	
Division 7		-	52,942	-	-	-	-	-	-	-	-	
Division 8		-	-	326,864	-	-	-	-	-	-	-	
Division 9		-	-	-	-	-	71,227	109,939	31,424	129,342	-	
Division 10		-	-	-	-	-	-	-	-	-	-	
Division 11		-	-	-	-	-	-	-	-	-	-	
Division 12		-	-	-	-	24,227	66,478	-	-	25,868	-	
Division 13		-	-	-	-	-	-	-	-	323,354	-	
Division 14		-	-	-	-	-	-	213,769	-	-	-	
Division 15		360,150	158,826	-	-	201,890	-	-	-	-	-	
Division 16		-	21,177	23,970	252,257	28,841	-	-	-	-	-	
SUBTOTAL		424,977	549,750	413,984	443,188	375,723	512,691	475,668	1,149,494	564,706	3,662,388	
UTILITIES												
Water	\$	-	-	-	-	-	-	-	-	-	-	
Electricity	\$	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.64	22,366	23,015	23,682	24,369	25,076	25,803	26,551	27,321	28,113	28,929	
On-Site	\$	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$	-	-	-	-	-	-	-	-	-	-	
Oil	\$	-	-	-	-	-	-	-	-	-	-	
Propane	\$ 0.83	29,006	29,847	30,713	31,603	32,520	33,463	34,433	35,432	36,460	37,517	
Wood	\$	-	-	-	-	-	-	-	-	-	-	
Electricity	\$	-	-	-	-	-	-	-	-	-	-	
Other	\$	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		51,372	52,862	54,395	55,972	57,596	59,266	60,985	62,753	64,573	66,446	
HUMAN RESOURCES												
Cleaning	\$ 2.50	87,368	89,901	92,508	95,191	97,952	100,792	103,715	106,723	109,818	113,003	
Repairs	\$ 0.25	8,737	8,990	9,251	9,519	9,795	10,079	10,372	10,672	10,982	11,300	
Productivity Loss	1.00%	13,105	13,485	13,876	14,279	14,693	15,119	15,557	16,008	16,473	16,950	
Bussing	\$ 1,400	288,120	296,475	305,073	313,920	323,024	332,392	342,031	351,950	362,157	372,659	
SUBTOTAL		397,329	408,852	420,709	432,909	445,464	458,382	471,675	485,354	499,429	513,912	
PROPERTY & FINANCE												
Principal	5.00%	-	-	-	-	-	-	-	-	-	-	
Interest	1.67%	-	-	-	-	-	-	-	-	-	-	
Tax Income		-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
TOTAL		873,679	1,011,464	889,088	932,070	878,782	1,030,339	1,008,327	1,697,601	1,128,708	4,242,746	

GRAND TOTAL \$ 13,692,803

Bond Amt:	\$ -	Building Size:	33,962	Total Project Cost:	\$ -
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 3

ADDITIONS / RENOVATIONS IN ONE YEAR

Cutler Elementary**Project Cost Worksheet**

Student Capacity 300

1. Site Development Costs					\$200,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces		
Site Prep & Utilities				\$200,000	
2. General Construction - New					\$2,940,000
New Constuction	3,675	s.f.	\$ 182	per s.f.	\$669,000
Renovation					\$2,205,000
Construction Contingency	5.00%				\$33,000
Construction Manager Fee	5.00%				\$33,000
3. Design Fees					\$190,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$30,000
A&E Renovation	7.00%				\$150,000
4. Furniture, Equipment and Services					\$280,000
Loose Equipment	5.00%				\$150,000
Phone Service	1.00%				\$30,000
Computers	2.00%				\$60,000
Utility Charges	1.50%				\$40,000
5. Administrative Costs					\$50,000
Testing	0.25%				\$10,000
Survey, Borings	0.25%				\$10,000
Clerk of the Works	0.75%				\$20,000
Bonding/Legal	0.30%				\$10,000
6. Design Contingency	5%				\$200,000

Total Project Cost**\$3,860,000**

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Cutler Elementary

Bond Cost Worksheet

Student Capacity 300 Core Capacity 350

Square Foot Allowance

State Allowable Formula Previous < 35 y.o.	120 square feet / student :	42,000	based on core capacity
Original School	1900		Older than 35 years
3-Story Addition	1950's		Older than 35 years
Classroom Wing	1970's		Older than 35 years
Gym Addition	1990	11,382	
Pre-School			
	Total to Deduct	11,382	
Allowable Size		30,618	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$5,572,476
Site and Soft Cost			\$920,000
Allowable Cost			6,492,476

Reimbursement

Renovation Thresholds	Replacement Value	\$ 6,327,048	
	25% Renovation Min.	\$ 1,581,762	
	60% Renovation Max.	\$ 3,796,229	
State Aid	Allowed Project Cost	=	\$ 3,860,000
	55% State Aid Rate	\$2,123,000	
	80% At Start	\$1,698,400	
	20% At Completion	\$424,600	

Total Project Cost **\$3,860,000**

Total State Aid **\$2,123,000**

Total Bond Amount **\$2,161,600**

Table H

Barker Architects, PLLC

11/30/2020

Cutler Elementary

Student Capacity

275

Option 3 - Upgrades in One Year

Life-Cycle Cost Analysis

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS												
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
UTILITIES												
Water	\$ 0.20	7,911	8,140	8,376	8,619	8,869	9,126	9,391	9,663	9,944	10,232	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.75	29,666	30,526	31,411	32,322	33,259	34,224	35,216	36,238	37,289	38,370	
On-Site	-	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ 0.87	34,412	-	-	-	-	-	-	-	-	-	
Propane	\$ 0.80	-	32,561	33,505	34,477	35,477	36,505	37,564	38,654	39,774	40,928	
Wood	\$ 0.40	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ 0.40	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ 0.02	791	814	838	862	887	913	939	966	994	1,023	
SUBTOTAL		72,779	72,041	74,130	76,280	78,492	80,768	83,111	85,521	88,001	90,553	
HUMAN RESOURCES												
Cleaning	\$ 2.00	79,108	81,402	83,763	86,192	88,692	91,264	93,910	96,634	99,436	102,320	
Repairs	\$ 0.20	7,911	8,140	8,376	8,619	8,869	9,126	9,391	9,663	9,944	10,232	
Productivity Loss	0.90%	13,349	13,737	14,135	14,545	14,967	15,401	15,847	16,307	16,780	17,266	
Bussing / Student	\$ 1,200	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607	
SUBTOTAL		553,128	569,169	585,675	602,660	620,137	638,121	656,626	675,668	695,263	715,425	
PROPERTY & FINANCE												
Principal	5.00%	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	
Interest	1.67%	34,294	32,489	30,684	28,879	27,074	25,269	23,464	21,659	19,854	18,049	
Tax Income		-	-	-	-	-	-	-	-	-	-	
Building Aid Reimbursement		424,600	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(282,226)	140,569	138,764	136,959	135,154	133,349	131,544	129,739	127,934	126,129	
TOTAL		343,682	781,779	798,569	815,899	833,783	852,238	871,281	890,929	911,198	932,108	

GRAND TOTAL \$ 8,031,465

Bond Amt:	\$ 2,161,600	Building Size:	38,439	Total Project Cost:	\$ 3,860,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$2,123,000

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Emerson Elementary School

Project Cost Worksheet

Student Capacity 200

1. Site Development Costs					\$200,000
Land Acquisition					
Playfields	1	Field			
Paving	100	Spaces			
Site Prep & Utilities				\$200,000	
2. General Construction - New					\$1,844,000
New Constuction	1,116	s.f.	\$ 182	per s.f.	\$203,000
Renovation				\$	1,621,000
Construction Contingency	5.00%				\$10,000
Construction Manager Fee	5.00%				\$10,000
3. Design Fees					\$100,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$90,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$180,000
Loose Equipment	5.00%				\$90,000
Phone Service	1.00%				\$20,000
Computers	2.00%				\$40,000
Utility Charges	1.50%				\$30,000
5. Administrative Costs					\$50,000
Testing	0.25%				\$10,000
Survey, Borings	0.25%				\$10,000
Clerk of the Works	0.75%				\$20,000
Bonding/Legal	0.30%				\$10,000
6. Design Contingency					\$100,000
	5%				

Total Project Cost

\$2,474,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

10/29/2020

Emerson Elementary School

Bond Cost Worksheet

Student Capacity 200 Core Capacity 248

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Gym/CR Addition	144 square feet / student : 1990	35,712 based on core capacity 19,706
Pre-School		-
	Total to Deduct	19,706
Allowable Size		16,006

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,913,092 \$630,000
Allowable Cost		3,543,092

Reimbursement

Renovation Thresholds	Replacement Value	\$ 5,977,972
	25% Renovation Min.	\$ 1,494,493
	60% Renovation Max.	\$ 3,586,783
State Aid	Allowed Project Cost	= \$ 2,474,000
	55% State Aid Rate	\$1,360,700
	80% At Start	\$1,088,560
	20% At Completion	\$272,140

Total Project Cost **\$2,474,000**

Total State Aid **\$1,360,700**

Total Bond Amount **\$1,385,440**

Table H

Barker Architects, PLLC

11/30/2020

Emerson Elementary

Option 3 - Upgrades in One Year

Life-Cycle Cost Analysis

Student Capacity

200

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.60	26,210	26,970	27,753	28,557	29,386	30,238	31,115	32,017	32,945	33,901
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.80	27,958	28,768	29,603	30,461	31,345	32,254	33,189	34,151	35,142	36,161
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		61,157	62,931	64,756	66,634	68,566	70,555	72,601	74,706	76,873	79,102
HUMAN RESOURCES											
Cleaning	\$ 2.00	69,894	71,921	74,007	76,153	78,361	80,634	82,972	85,378	87,854	90,402
Repairs	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Productivity Loss	0.90%	11,795	12,137	12,489	12,851	13,223	13,607	14,002	14,408	14,825	15,255
Bussing/Student	\$ 1,600	329,280	338,829	348,655	358,766	369,170	379,876	390,893	402,229	413,893	425,896
SUBTOTAL		417,958	430,079	442,551	455,385	468,591	482,180	496,164	510,552	525,358	540,594
PROPERTY & FINANCE											
Principal	5.00%	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272
Interest	1.67%	21,980	20,823	19,666	18,509	17,353	16,196	15,039	13,882	12,725	11,568
Tax Income		-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		280,032	-	-	-	-	-	-	-	-	-
SUBTOTAL		(188,780)	90,095	88,938	87,781	86,625	85,468	84,311	83,154	81,997	80,840
TOTAL		290,335	583,105	596,245	609,800	623,782	638,203	653,075	668,413	684,228	700,536

GRAND TOTAL \$ 6,047,724

Bond Amt: \$ 1,385,440
 Bond Term: 20
 Bond Rate: 1.67% **

Building Size: \$ 33,962
 Inflation: 2.90% *
 Value Exist:

Total Project Cost: \$ 2,474,000
 State Aid Rate: 55% Nominal
 State Building Aid: \$ 1,360,700

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsum Elementary

Project Cost Worksheet

Student Capacity 100

1. Site Development Costs				\$0
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				
2. General Construction - New				\$3,657,000
New Constuction	8,383	s.f.	\$ 182 per s.f.	\$1,526,000
Renovation				\$1,979,000
Construction Contingency	5.00%			\$76,000
Construction Manager Fee	5.00%			\$76,000
3. Design Fees				\$180,000
Civil Engineering	6.00%			\$0
A&E New Construction	5.00%			\$180,000
A&E Renovation	7.00%			\$0
4. Furniture, Equipment and Services				\$340,000
Loose Equipment	5.00%			\$180,000
Phone Service	1.00%			\$40,000
Computers	2.00%			\$70,000
Utility Charges	1.50%			\$50,000
5. Administrative Costs				\$60,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$30,000
Bonding/Legal	0.30%			\$10,000
6. Design Contingency				\$200,000
	5%			

Total Project Cost

\$4,437,000

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Gilsum Elementary

Bond Cost Worksheet

Student Capacity 100 Core Capacity 160

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Original 1970's 1980's 1990's	144 square feet / student =	23,040	based on core capacity Older than 35 years Older than 35 years Older than 35 years
Pre-School			
	Total to Deduct	7,890	
Allowable Size		15,150	

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,757,300 \$780,000
Allowable Cost		\$2,772,450

Reimbursement

Renovation Thresholds	Replacement Value	\$ 3,288,376	
	25% Renovation Min.	\$ 822,094	
	60% Renovation Max.	\$ 1,973,026	
State Aid	Allowed Project Cost	=	\$ 2,772,450
	55% State Aid Rate	\$1,524,848	
	80% At Start	\$1,219,878	
	20% At Completion	\$304,970	

Total Project Cost **\$4,437,000**

Total State Aid **\$1,524,848**

Total Bond Amount **\$3,217,122**

Table H

Barker Architects, PLLC

11/30/2020

Gilsun STEAM Academy Option 3 - Upgrades in One Year

Life-Cycle Cost Analysis

Student Capacity		100										
		Year										
Task	Rates	1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-	
	Division 1	-	-	-	-	-	-	-	-	-	-	
	Division 2	-	-	-	-	-	-	-	-	-	-	
	Division 3	-	-	-	-	-	-	-	-	-	-	
	Division 4	-	-	-	-	-	-	-	-	-	-	
	Division 5	-	-	-	-	-	-	-	-	-	-	
	Division 6	-	-	-	-	-	-	-	-	-	-	
	Division 7	-	-	-	-	-	-	-	-	-	-	
	Division 8	-	-	-	-	-	-	-	-	-	-	
	Division 9	-	-	-	-	-	-	-	-	-	-	
	Division 10	-	-	-	-	-	-	-	-	-	-	
	Division 11	-	-	-	-	-	-	-	-	-	-	
	Division 12	-	-	-	-	-	-	-	-	-	-	
	Division 13	-	-	-	-	-	-	-	-	-	-	
	Division 14	-	-	-	-	-	-	-	-	-	-	
	Division 15	-	-	-	-	-	-	-	-	-	-	
	Division 16	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	
UTILITIES	Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923
	On-Site	-	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-
	Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046
HUMAN RESOURCES	Cleaning	\$ 2.00	54,435	56,014	57,639	59,310	61,030	62,800	64,621	66,495	68,423	70,408
	Repairs	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
	Productivity Loss	0.90%	9,186	9,452	9,726	10,009	10,299	10,597	10,905	11,221	11,546	11,881
	Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948
	SUBTOTAL			233,705	240,482	247,456	254,633	262,017	269,616	277,434	285,480	293,759
PROPERTY & FINANCE	Principal	5.00%	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856
	Interest	1.67%	51,040	48,353	45,667	42,981	40,294	37,608	34,922	32,236	29,549	26,863
	Tax Income	-	-	-	-	-	-	-	-	-	-	-
	Building Aid Reimbursement		304,970	-	-	-	-	-	-	-	-	-
	SUBTOTAL			(93,074)	209,209	206,523	203,837	201,151	198,464	195,778	193,092	190,405
TOTAL			194,795	505,426	511,330	501,469	507,414	513,610	520,063	526,781	533,771	541,043

GRAND TOTAL \$ 4,855,701

Bond Amt:	\$ 3,217,122	Building Size:	26,451	Total Project Cost:	\$ 4,437,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$1,524,848 ***

* Inflation based on current RS Means Historic Cost Index *** Limited by Previous Additions
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Ceasar Elementary

Project Cost Worksheet

Student Capacity 250

1. Site Development Costs					\$100,000
Land Acquisition					
Playfields	1	Field			
Paving	100	Spaces			
Site Prep & Utilities				\$100,000	
2. General Construction - New					\$1,015,000
New Constuction	3,745	s.f.	\$ 182	per s.f.	\$682,000
Renovation					\$265,000
Construction Contingency	5.00%				\$34,000
Construction Manager Fee	5.00%				\$34,000
3. Design Fees					\$60,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$30,000
A&E Renovation	7.00%				\$20,000
4. Furniture, Equipment and Services					\$100,000
Loose Equipment	5.00%				\$50,000
Phone Service	1.00%				\$10,000
Computers	2.00%				\$20,000
Utility Charges	1.50%				\$20,000
5. Administrative Costs					\$10,000
Testing	0.25%				\$0
Survey, Borings	0.25%				\$0
Clerk of the Works	0.75%				\$10,000
Bonding/Legal	0.30%				\$0
6. Design Contingency					\$100,000
	5%				

Total Project Cost

\$1,385,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 325 Core Capacity 290

Square Foot Allowance

State Allowable Formula	120 square feet / student =	34,800	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Pre-School		2,345	
	Total to Deduct	7,078	
Allowable Size		27,722	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$5,045,404
Site and Soft Cost			\$370,000
Allowable Cost			\$5,415,404

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 1,385,000
	55% State Aid Rate	\$761,750	
	80% At Start	\$609,400	
	20% At Completion	\$152,350	

Total Project Cost **\$1,385,000**

Total State Aid **\$761,750**

Total Bond Amount **\$775,600**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary

Option 3 - Upgrades in One Year

Life-Cycle Cost Analysis

Student Capacity

325

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	32,594	33,539	34,511	35,512	36,542	37,602	38,692	39,814	40,969	42,157
On-Site	-	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	16,949	17,440	17,946	18,466	19,002	19,553	20,120	20,703	21,304	21,922
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		58,234	59,923	61,660	63,449	65,289	67,182	69,130	71,135	73,198	75,321
HUMAN RESOURCES											
Cleaning	\$ 2.00	86,916	89,437	92,030	94,699	97,446	100,272	103,179	106,172	109,251	112,419
Repairs	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
Productivity Loss	0.90%	14,667	15,092	15,530	15,981	16,444	16,921	17,412	17,916	18,436	18,971
Bussing	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607
SUBTOTAL		563,035	579,363	596,164	613,453	631,243	649,549	668,386	687,770	707,715	728,239
PROPERTY & FINANCE											
Principal	5.00%	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780
Interest	1.67%	12,305	11,657	11,010	10,362	9,714	9,067	8,419	7,772	7,124	6,476
Tax Income	2.40%	-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		152,350	-	-	-	-	-	-	-	-	-
SUBTOTAL		(101,265)	50,437	49,790	49,142	48,494	47,847	47,199	46,552	45,904	45,256
TOTAL		520,004	689,723	707,615	726,044	745,026	764,578	784,716	805,456	826,817	848,816

GRAND TOTAL \$ 7,418,793

Bond Amt:	\$ 775,600	Building Size:	42,233	Total Project Cost:	\$ 1,385,000
Bond Term:	20	Inflation:	2.9% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$ 761,750

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Troy Elementary School

Project Cost Worksheet

Student Capacity 200

1. Site Development Costs				\$200,000
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				\$200,000
2. General Construction - New				\$4,838,000
New Constuction	6,364	s.f.	\$ 182 per s.f.	\$1,158,000
Renovation				\$3,564,000
Construction Contingency	5.00%			\$58,000
Construction Manager Fee	5.00%			\$58,000
3. Design Fees				\$320,000
Civil Engineering	6.00%			\$10,000
A&E New Construction	5.00%			\$60,000
A&E Renovation	7.00%			\$250,000
4. Furniture, Equipment and Services				\$460,000
Loose Equipment	5.00%			\$240,000
Phone Service	1.00%			\$50,000
Computers	2.00%			\$100,000
Utility Charges	1.50%			\$70,000
5. Administrative Costs				\$80,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$40,000
Bonding/Legal	0.30%			\$20,000
6. Design Contingency				\$300,000
	5%			

Total Project Cost

\$6,198,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Troy Elementary School

Bond Cost Worksheet

Student Capacity

200

Core Capacity

248

Square Foot Allowance

State Allowable Formula
Previous < 50 y.o.

144 square feet / student :

35,712 based on core capacity

All Troy additions
over 50 years old

Total to Deduct

-

Allowable Size

35,712

Construction Cost Allowance

State Allowable Formula
Site and Soft Cost

\$

182 per square foot =

\$6,499,584

\$1,360,000

Allowable Cost

7,859,584

Reimbursement

Renovation Thresholds

Replacement Value \$ 4,029,208

25% Renovation Min. \$ 1,007,302

60% Renovation Max. \$ 2,417,525

State Aid

Allowed Project Cost =

\$

6,198,000

55% State Aid Rate \$3,408,900

80% At Start \$2,727,120

20% At Completion \$681,780

Total Project Cost

\$6,198,000

Total State Aid

\$3,408,900

Total Bond Amount

\$3,470,880

Table H

Barker Architects, PLLC

11/30/2020

Troy Elementary
Student Capacity

Option 3 - Upgrades in One Year
200
Year

Life-Cycle Cost Analysis

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	26,210	26,970	27,753	28,557	29,386	30,238	31,115	32,017	32,945	33,901
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	13,629	14,025	14,431	14,850	15,280	15,724	16,180	16,649	17,132	17,628
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		46,829	48,187	49,584	51,022	52,502	54,025	55,591	57,204	58,862	60,569
HUMAN RESOURCES											
Cleaning	\$ 2.00	69,894	71,921	74,007	76,153	78,361	80,634	82,972	85,378	87,854	90,402
Repairs	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Productivity Loss	0.90%	11,795	12,137	12,489	12,851	13,223	13,607	14,002	14,408	14,825	15,255
Bussing	\$ 1,400	288,120	296,475	305,073	313,920	323,024	332,392	342,031	351,950	362,157	372,659
SUBTOTAL		376,798	387,725	398,969	410,539	422,445	434,696	447,302	460,274	473,622	487,357
PROPERTY & FINANCE											
Principal	5.00%	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544
Interest	1.67%	55,066	52,167	49,269	46,371	43,473	40,575	37,676	34,778	31,880	28,982
Tax Income	2.40%	-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		701,552	-	-	-	-	-	-	-	-	-
SUBTOTAL		(472,942)	225,711	222,813	219,915	217,017	214,119	211,220	208,322	205,424	202,526
TOTAL		(49,315)	661,624	671,367	681,477	691,964	702,839	714,114	725,800	737,908	750,452

GRAND TOTAL \$ 6,288,229

Bond Amt:	\$ 3,470,880	Building Size:	33,962	Total Project Cost:	\$ 6,198,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$3,408,900

* Inflation based on current RS Means Historic Cost Index
** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 4

NEW SOUTH ELEMENTARY
ADDITIONS / RENOVATIONS TO NORTH SCHOOLS

Cutler Elementary**Project Cost Worksheet**

Student Capacity 300

1. Site Development Costs					\$200,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces		
Site Prep & Utilities				\$200,000	
2. General Construction - New					\$2,940,000
New Constuction	3,675	s.f.	\$ 182	per s.f.	\$669,000
Renovation					\$2,205,000
Construction Contingency	5.00%				\$33,000
Construction Manager Fee	5.00%				\$33,000
3. Design Fees					\$190,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$30,000
A&E Renovation	7.00%				\$150,000
4. Furniture, Equipment and Services					\$280,000
Loose Equipment	5.00%				\$150,000
Phone Service	1.00%				\$30,000
Computers	2.00%				\$60,000
Utility Charges	1.50%				\$40,000
5. Administrative Costs					\$50,000
Testing	0.25%				\$10,000
Survey, Borings	0.25%				\$10,000
Clerk of the Works	0.75%				\$20,000
Bonding/Legal	0.30%				\$10,000
6. Design Contingency	5%				\$200,000

Total Project Cost**\$3,860,000**

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Cutler Elementary

Bond Cost Worksheet

Student Capacity 300 Core Capacity 350

Square Foot Allowance

State Allowable Formula Previous < 35 y.o.	120 square feet / student :	42,000	based on core capacity
Original School	1900		Older than 35 years
3-Story Addition	1950's		Older than 35 years
Classroom Wing	1970's		Older than 35 years
Gym Addition	1990	11,382	
Pre-School			
	Total to Deduct	11,382	
Allowable Size		30,618	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$5,572,476
Site and Soft Cost			\$920,000
Allowable Cost			6,492,476

Reimbursement

Renovation Thresholds	Replacement Value	\$ 6,327,048	
	25% Renovation Min.	\$ 1,581,762	
	60% Renovation Max.	\$ 3,796,229	
State Aid	Allowed Project Cost	=	\$ 3,860,000
	55% State Aid Rate	\$2,123,000	
	80% At Start	\$1,698,400	
	20% At Completion	\$424,600	

Total Project Cost **\$3,860,000**

Total State Aid **\$2,123,000**

Total Bond Amount **\$2,161,600**

Table H

Barker Architects, PLLC

11/30/2020

Cutler Elementary

Student Capacity

275

Option 4 - New South Elementary, Add/Reno North Schools

Life-Cycle Cost Analysis

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS												
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
UTILITIES												
Water	\$ 0.20	7,911	8,140	8,376	8,619	8,869	9,126	9,391	9,663	9,944	10,232	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.75	29,666	30,526	31,411	32,322	33,259	34,224	35,216	36,238	37,289	38,370	
On-Site	-	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ 0.87	34,412	-	-	-	-	-	-	-	-	-	
Propane	\$ 0.80	-	32,561	33,505	34,477	35,477	36,505	37,564	38,654	39,774	40,928	
Wood	\$ 0.40	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ 0.40	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ 0.02	791	814	838	862	887	913	939	966	994	1,023	
SUBTOTAL		72,779	72,041	74,130	76,280	78,492	80,768	83,111	85,521	88,001	90,553	
HUMAN RESOURCES												
Cleaning	\$ 2.00	79,108	81,402	83,763	86,192	88,692	91,264	93,910	96,634	99,436	102,320	
Repairs	\$ 0.20	7,911	8,140	8,376	8,619	8,869	9,126	9,391	9,663	9,944	10,232	
Productivity Loss	0.90%	13,349	13,737	14,135	14,545	14,967	15,401	15,847	16,307	16,780	17,266	
Bussing/Student	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607	
SUBTOTAL		553,128	569,169	585,675	602,660	620,137	638,121	656,626	675,668	695,263	715,425	
PROPERTY & FINANCE												
Principal	5.00%	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	108,080	
Interest	1.67%	34,294	32,489	30,684	28,879	27,074	25,269	23,464	21,659	19,854	18,049	
Tax Income		-	-	-	-	-	-	-	-	-	-	
Building Aid Reimbursement		424,600	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(282,226)	140,569	138,764	136,959	135,154	133,349	131,544	129,739	127,934	126,129	
TOTAL		343,682	781,779	798,569	815,899	833,783	852,238	871,281	890,929	911,198	932,108	

GRAND TOTAL \$ 8,031,465

Bond Amt:	\$ 2,161,600	Building Size:	38,439	Total Project Cost:	\$ 3,860,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$2,123,000

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsum Elementary**Project Cost Worksheet**

Student Capacity 100

1. Site Development Costs					\$0
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces		
Site Prep & Utilities					
2. General Construction - New					\$3,657,000
New Constuction	8,383	s.f.	\$ 182	per s.f.	\$1,526,000
Renovation					\$1,979,000
Construction Contingency	5.00%				\$76,000
Construction Manager Fee	5.00%				\$76,000
3. Design Fees					\$180,000
Civil Engineering	6.00%				\$0
A&E New Construction	5.00%				\$180,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$340,000
Loose Equipment	5.00%				\$180,000
Phone Service	1.00%				\$40,000
Computers	2.00%				\$70,000
Utility Charges	1.50%				\$50,000
5. Administrative Costs					\$60,000
Testing	0.25%				\$10,000
Survey, Borings	0.25%				\$10,000
Clerk of the Works	0.75%				\$30,000
Bonding/Legal	0.30%				\$10,000
6. Design Contingency	5%				\$200,000

Total Project Cost**\$4,437,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Gilsum Elementary

Bond Cost Worksheet

Student Capacity 100 Core Capacity 160

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Original 1970's 1980's 1990's	144 square feet / student =	23,040	based on core capacity Older than 35 years Older than 35 years Older than 35 years
Pre-School			
	Total to Deduct	7,890	
Allowable Size		15,150	

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,757,300 \$780,000
Allowable Cost		\$2,772,450

Reimbursement

Renovation Thresholds	Replacement Value	\$ 3,288,376	
	25% Renovation Min.	\$ 822,094	
	60% Renovation Max.	\$ 1,973,026	
State Aid	Allowed Project Cost	=	\$ 2,772,450
	55% State Aid Rate	\$1,524,848	
	80% At Start	\$1,219,878	
	20% At Completion	\$304,970	

Total Project Cost **\$4,437,000**

Total State Aid **\$1,524,848**

Total Bond Amount **\$3,217,122**

Table H

Barker Architects, PLLC

11/30/2020

Gilsun STEAM Academy Option 4 - New South Elementary, Add/Reno North Schools Life-Cycle Cost Analysis

Student Capacity 100

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS												
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
UTILITIES												
Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923	
On-Site	-	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-	
Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082	
Wood	\$ -	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046	
HUMAN RESOURCES												
Cleaning	\$ 2.00	54,435	56,014	57,639	59,310	61,030	62,800	64,621	66,495	68,423	70,408	
Repairs	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041	
Productivity Loss	0.90%	9,186	9,452	9,726	10,009	10,299	10,597	10,905	11,221	11,546	11,881	
Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948	
SUBTOTAL		233,705	240,482	247,456	254,633	262,017	269,616	277,434	285,480	293,759	302,278	
PROPERTY & FINANCE												
Principal	5.00%	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	
Interest	1.67%	51,040	48,353	45,667	42,981	40,294	37,608	34,922	32,236	29,549	26,863	
Tax Income		-	-	-	-	-	-	-	-	-	-	
Building Aid Reimbursement		304,970	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(93,074)	209,209	206,523	203,837	201,151	198,464	195,778	193,092	190,405	187,719	
TOTAL		194,795	505,426	511,330	501,469	507,414	513,610	520,063	526,781	533,771	541,043	

GRAND TOTAL \$ 4,855,701

Bond Amt:	\$ 3,217,122	Building Size:	26,451	Total Project Cost:	\$ 4,437,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$1,524,848 ***

* Inflation based on current RS Means Historic Cost Index *** Limited by Previous Additions

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 250

1. Site Development Costs					\$100,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces		
Site Prep & Utilities					\$100,000
2. General Construction - New					\$1,015,000
New Constuction	3,745	s.f.	\$ 182	per s.f.	\$682,000
Renovation					\$265,000
Construction Contingency	5.00%				\$34,000
Construction Manager Fee	5.00%				\$34,000
3. Design Fees					\$60,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$30,000
A&E Renovation	7.00%				\$20,000
4. Furniture, Equipment and Services					\$100,000
Loose Equipment	5.00%				\$50,000
Phone Service	1.00%				\$10,000
Computers	2.00%				\$20,000
Utility Charges	1.50%				\$20,000
5. Administrative Costs					\$10,000
Testing	0.25%				\$0
Survey, Borings	0.25%				\$0
Clerk of the Works	0.75%				\$10,000
Bonding/Legal	0.30%				\$0
6. Design Contingency	5%				\$100,000

Total Project Cost**\$1,385,000**

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 250 Core Capacity 290

Square Foot Allowance

State Allowable Formula	120 square feet / student =	34,800	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Pre-School		2,345	
	Total to Deduct	7,078	
Allowable Size		27,722	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$5,045,404
Site and Soft Cost			\$370,000
Allowable Cost			\$5,415,404

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 1,385,000
	55% State Aid Rate	\$761,750	
	80% At Start	\$609,400	
	20% At Completion	\$152,350	

Total Project Cost **\$1,385,000**

Total State Aid **\$761,750**

Total Bond Amount **\$775,600**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary Option 4 - New South Elementary, Add/Reno North Schools Life-Cycle Cost Analysis

Student Capacity

325

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	32,594	33,539	34,511	35,512	36,542	37,602	38,692	39,814	40,969	42,157
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	16,949	17,440	17,946	18,466	19,002	19,553	20,120	20,703	21,304	21,922
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		58,234	59,923	61,660	63,449	65,289	67,182	69,130	71,135	73,198	75,321
HUMAN RESOURCES											
Cleaning	\$ 2.00	86,916	89,437	92,030	94,699	97,446	100,272	103,179	106,172	109,251	112,419
Repairs	\$ 0.20	8,692	8,944	9,203	9,470	9,745	10,027	10,318	10,617	10,925	11,242
Productivity Loss	0.90%	14,667	15,092	15,530	15,981	16,444	16,921	17,412	17,916	18,436	18,971
Bussing	\$ 1,600	452,760	465,890	479,401	493,303	507,609	522,330	537,478	553,064	569,103	585,607
SUBTOTAL		563,035	579,363	596,164	613,453	631,243	649,549	668,386	687,770	707,715	728,239
PROPERTY & FINANCE											
Principal	5.00%	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780	38,780
Interest	1.67%	12,305	11,657	11,010	10,362	9,714	9,067	8,419	7,772	7,124	6,476
Tax Income	2.40%	-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		152,350	-	-	-	-	-	-	-	-	-
SUBTOTAL		(101,265)	50,437	49,790	49,142	48,494	47,847	47,199	46,552	45,904	45,256
TOTAL		520,004	689,723	707,615	726,044	745,026	764,578	784,716	805,456	826,817	848,816

GRAND TOTAL \$ 7,418,793

Bond Amt:	\$ 775,600	Building Size:	42,233	Total Project Cost:	\$ 1,385,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$ 761,750

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

New Elementary School

Project Cost Worksheet

Student Capacity 400

1. Site Development Costs					\$700,000
Land Acquisition				??	
Playfields	1		Field		\$300,000
Paving	100		Spaces		\$200,000
Site Prep & Utilities					\$200,000
2. General Construction - New					\$12,299,000
New Constuction	61,433	s.f.	\$ 182	per s.f.	\$11,181,000
Renovation					\$0
Construction Contingency	5.00%				\$559,000
Construction Manager Fee	5.00%				\$559,000
3. Design Fees					\$600,000
Civil Engineering	6.00%				\$40,000
A&E New Construction	5.00%				\$560,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$1,160,000
Loose Equipment	5.00%				\$610,000
Phone Service	1.00%				\$120,000
Computers	2.00%				\$250,000
Utility Charges	1.50%				\$180,000
5. Administrative Costs					\$200,000
Testing	0.25%				\$30,000
Survey, Borings	0.25%				\$30,000
Clerk of the Works	0.75%				\$100,000
Bonding/Legal	0.30%				\$40,000
6. Design Contingency					\$700,000
	5%				

Total Project Cost

\$15,659,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

9/22/2020

New Elementary School

Bond Cost Worksheet

Student Capacity 400 Core Capacity 510

Square Foot Allowance

State Allowable Formula Previous < 50 y.o. Emerson Gym/CR Add.	120 square feet / student = 1990	61,200 based on core capacity 19,706
Pre-School		2,000
	Total to Deduct	21,706
Allowable Size		39,494

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$7,187,908 \$3,360,000
Allowable Cost		10,547,908

Reimbursement

Renovation Thresholds	Replacement Value 25% Renovation Min. 60% Renovation Max.	
State Aid	Allowed Project Cost = \$ 10,547,908	
	55% State Aid Rate	\$5,801,349
	80% At Start	\$4,641,080
	20% At Completion	\$1,160,270

Total Project Cost **\$15,659,000**

Total State Aid **\$5,801,349**

Total Bond Amount **\$11,017,920**

Table H

Barker Architects, PLLC

11/30/2020

New South Elementary Option 4 - New South Elementary, Add/Reno North Schools Life-Cycle Cost Analysis

Student Capacity

400

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	12,643	13,010	13,387	13,775	14,175	14,586	15,009	15,444	15,892	16,353
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.60	37,929	39,029	40,161	41,325	42,524	43,757	45,026	46,332	47,675	49,058
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.30	18,964	19,514	20,080	20,663	21,262	21,879	22,513	23,166	23,838	24,529
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ 0.02	1,264	1,301	1,339	1,378	1,417	1,459	1,501	1,544	1,589	1,635
SUBTOTAL		70,801	72,854	74,967	77,141	79,378	81,680	84,049	86,486	88,994	91,575
HUMAN RESOURCES											
Cleaning	\$ 1.00	63,215	65,048	66,935	68,876	70,873	72,928	75,043	77,220	79,459	81,763
Repairs	\$ 0.10	6,321	6,505	6,693	6,888	7,087	7,293	7,504	7,722	7,946	8,176
Productivity Loss	0.70%	16,594	17,075	17,570	18,080	18,604	19,144	19,699	20,270	20,858	21,463
Bussing	\$ 1,800	740,880	762,366	784,474	807,224	830,633	854,722	879,509	905,014	931,260	958,266
SUBTOTAL		827,010	850,994	875,673	901,067	927,198	954,087	981,755	1,010,226	1,039,523	1,069,669
PROPERTY & FINANCE											
Principal	5.00%	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896
Interest	1.67%	174,799	165,599	156,399	147,199	137,999	128,799	119,600	110,400	101,200	92,000
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	86,436	88,943	91,522	94,176	96,907	99,718	102,609	105,585	108,647	111,798
Building Aid Reimbursement		1,160,270	-	-	-	-	-	-	-	-	-
SUBTOTAL		(521,011)	627,553	615,773	603,919	591,988	579,978	567,886	555,711	543,449	531,098
TOTAL		376,801	1,551,400	1,566,413	1,582,127	1,598,564	1,615,745	1,633,690	1,652,423	1,671,965	1,692,342

GRAND TOTAL \$ 14,941,469

Bond Amt: \$ 11,017,920
 Bond Term: 20
 Bond Rate: 1.67% **

Building Size: 61,433
 Inflation: 2.90% *
 Value Exist: \$ 3,500,000

Total Project Cost: \$ 15,659,000
 State Aid Rate: 55% Nominal
 State Building Aid: \$5,801,349

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 5

NEW SOUTH ELEMENTARY
ADDITIONS / RENOVATIONS TO MT CAESAR FOR
SWANZEY
ADDITIONS / RENOVATIONS TO GILSUM

Gilsum Elementary**Project Cost Worksheet**

Student Capacity 100

1. Site Development Costs				\$0
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				
2. General Construction - New				\$3,657,000
New Constuction	8,383	s.f.	\$ 182 per s.f.	\$1,526,000
Renovation				\$1,979,000
Construction Contingency	5.00%			\$76,000
Construction Manager Fee	5.00%			\$76,000
3. Design Fees				\$180,000
Civil Engineering	6.00%			\$0
A&E New Construction	5.00%			\$180,000
A&E Renovation	7.00%			\$0
4. Furniture, Equipment and Services				\$340,000
Loose Equipment	5.00%			\$180,000
Phone Service	1.00%			\$40,000
Computers	2.00%			\$70,000
Utility Charges	1.50%			\$50,000
5. Administrative Costs				\$60,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$30,000
Bonding/Legal	0.30%			\$10,000
6. Design Contingency				\$200,000
	5%			

Total Project Cost**\$4,437,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Gilsum Elementary

Bond Cost Worksheet

Student Capacity 100 Core Capacity 160

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Original 1970's 1980's 1990's	144 square feet / student =	23,040	based on core capacity Older than 35 years Older than 35 years Older than 35 years
Pre-School			
	Total to Deduct	7,890	
Allowable Size		15,150	

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,757,300 \$780,000
Allowable Cost		\$2,772,450

Reimbursement

Renovation Thresholds	Replacement Value	\$ 3,288,376	
	25% Renovation Min.	\$ 822,094	
	60% Renovation Max.	\$ 1,973,026	
State Aid	Allowed Project Cost	=	\$ 2,772,450
	55% State Aid Rate	\$1,524,848	
	80% At Start	\$1,219,878	
	20% At Completion	\$304,970	

Total Project Cost **\$4,437,000**

Total State Aid **\$1,524,848**

Total Bond Amount **\$3,217,122**

Table H

Barker Architects, PLLC

11/30/2020

Gilsum STEAM Academy

Option 5 - New South, Mt Caesar North and Gilsum

Life-Cycle Cost Analysis

Student Capacity 100
Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923
On-Site	-	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-
Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046
HUMAN RESOURCES											
Cleaning	\$ 2.00	54,435	56,014	57,639	59,310	61,030	62,800	64,621	66,495	68,423	70,408
Repairs	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
Productivity Loss	0.90%	9,186	9,452	9,726	10,009	10,299	10,597	10,905	11,221	11,546	11,881
Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948
SUBTOTAL		233,705	240,482	247,456	254,633	262,017	269,616	277,434	285,480	293,759	302,278
PROPERTY & FINANCE											
Principal	5.00%	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856
Interest	1.67%	51,040	48,353	45,667	42,981	40,294	37,608	34,922	32,236	29,549	26,863
Tax Income		-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		304,970	-	-	-	-	-	-	-	-	-
SUBTOTAL		(93,074)	209,209	206,523	203,837	201,151	198,464	195,778	193,092	190,405	187,719
TOTAL		194,795	505,426	511,330	501,469	507,414	513,610	520,063	526,781	533,771	541,043

GRAND TOTAL \$ 4,855,701

Bond Amt:	\$ 3,217,122	Building Size:	26,451	Total Project Cost:	\$ 4,437,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$1,524,848 ***

* Inflation based on current RS Means Historic Cost Index
** Bond Rate is last reported sale by the NH Municipal Bond Bank.
*** Limited by Previous Additions

Table I

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 550

1. Site Development Costs					\$400,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces	\$100,000	
Site Prep & Utilities				\$300,000	
2. General Construction - New					\$7,344,000
New Constuction	35,357	s.f.	\$ 182	per s.f.	\$6,435,000
Renovation					\$265,000
Construction Contingency	5.00%				\$322,000
Construction Manager Fee	5.00%				\$322,000
3. Design Fees					\$360,000
Civil Engineering	6.00%				\$20,000
A&E New Construction	5.00%				\$320,000
A&E Renovation	7.00%				\$20,000
4. Furniture, Equipment and Services					\$700,000
Loose Equipment	5.00%				\$370,000
Phone Service	1.00%				\$70,000
Computers	2.00%				\$150,000
Utility Charges	1.50%				\$110,000
5. Administrative Costs					\$120,000
Testing	0.25%				\$20,000
Survey, Borings	0.25%				\$20,000
Clerk of the Works	0.75%				\$60,000
Bonding/Legal	0.30%				\$20,000
6. Design Contingency	5%				\$400,000

Total Project Cost**\$9,324,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 550 Core Capacity 650

Square Foot Allowance

State Allowable Formula	120 square feet / student =	78,000	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Early Cutler Additions			Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Cutler Gym	1990's	11,382	
Pre-School			
	Total to Deduct	16,115	
Allowable Size		61,885	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$11,263,070
Site and Soft Cost			\$1,980,000
Allowable Cost			\$13,243,070

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 9,324,000
	55% State Aid Rate	\$5,128,200	
	80% At Start	\$4,102,560	
	20% At Completion	\$1,025,640	

Total Project Cost **\$9,324,000**

Total State Aid **\$5,128,200**

Total Bond Amount **\$5,221,440**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary

Option 5 - New South, Mt Caesar North and Gilsum

Life-Cycle Cost Analysis

Student Capacity

550

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	15,197	15,638	16,092	16,558	17,038	17,533	18,041	18,564	19,103	19,657
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	56,990	58,643	60,343	62,093	63,894	65,747	67,654	69,616	71,635	73,712
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	29,635	30,494	31,379	32,289	33,225	34,188	35,180	36,200	37,250	38,330
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		101,822	104,775	107,814	110,940	114,158	117,468	120,875	124,380	127,987	131,699
HUMAN RESOURCES											
Cleaning	\$ 1.50	113,980	117,286	120,687	124,187	127,788	131,494	135,308	139,231	143,269	147,424
Repairs	\$ 0.15	11,398	11,729	12,069	12,419	12,779	13,149	13,531	13,923	14,327	14,742
Productivity Loss	0.80%	22,796	23,457	24,137	24,837	25,558	26,299	27,062	27,846	28,654	29,485
Bussing/Student	\$ 1,600	905,520	931,780	958,802	986,607	1,015,219	1,044,660	1,074,955	1,106,129	1,138,206	1,171,214
SUBTOTAL		1,053,694	1,084,251	1,115,695	1,148,050	1,181,343	1,215,602	1,250,855	1,287,130	1,324,456	1,362,866
PROPERTY & FINANCE											
Principal	5.00%	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072
Interest	1.67%	82,838	78,478	74,118	69,758	65,399	61,039	56,679	52,319	47,959	43,599
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	24,696	25,412	26,149	26,907	27,688	28,491	29,317	30,167	31,042	31,942
Building Aid Reimbursement		1,025,640	-	-	-	-	-	-	-	-	-
SUBTOTAL		(706,426)	314,138	309,041	303,923	298,783	293,620	288,434	283,224	277,989	272,729
TOTAL		449,091	1,503,165	1,532,550	1,562,913	1,594,284	1,626,690	1,660,163	1,694,733	1,730,432	1,767,293

GRAND TOTAL \$ 15,121,315

Bond Amt: \$ 5,221,440

Building Size: 73,845

Total Project Cost: \$ 9,324,000

Bond Term: 20

Inflation: 2.90% *

State Aid Rate: 55% Nominal

Bond Rate: 1.67% **

Value Exist: \$ 1,000,000

State Building Aid: \$ 5,128,200

* Inflation based on current RS Means Historic Cost Index

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

New Elementary School

Project Cost Worksheet

Student Capacity 400

1. Site Development Costs					\$700,000
Land Acquisition				??	
Playfields	1		Field		\$300,000
Paving	100		Spaces		\$200,000
Site Prep & Utilities					\$200,000
2. General Construction - New					\$12,299,000
New Constuction	61,433	s.f.	\$ 182	per s.f.	\$11,181,000
Renovation					\$0
Construction Contingency	5.00%				\$559,000
Construction Manager Fee	5.00%				\$559,000
3. Design Fees					\$600,000
Civil Engineering	6.00%				\$40,000
A&E New Construction	5.00%				\$560,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$1,160,000
Loose Equipment	5.00%				\$610,000
Phone Service	1.00%				\$120,000
Computers	2.00%				\$250,000
Utility Charges	1.50%				\$180,000
5. Administrative Costs					\$200,000
Testing	0.25%				\$30,000
Survey, Borings	0.25%				\$30,000
Clerk of the Works	0.75%				\$100,000
Bonding/Legal	0.30%				\$40,000
6. Design Contingency					\$700,000
	5%				

Total Project Cost

\$15,659,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

9/22/2020

New Elementary School

Bond Cost Worksheet

Student Capacity 400 Core Capacity 510

Square Foot Allowance

State Allowable Formula Previous < 50 y.o. Emerson Gym/CR Add.	120 square feet / student = 1990	61,200 based on core capacity 19,706
Pre-School		2,000
	Total to Deduct	21,706
Allowable Size		39,494

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$7,187,908 \$3,360,000
Allowable Cost		10,547,908

Reimbursement

Renovation Thresholds	Replacement Value 25% Renovation Min. 60% Renovation Max.	
State Aid	Allowed Project Cost = \$ 10,547,908	
	55% State Aid Rate	\$5,801,349
	80% At Start	\$4,641,080
	20% At Completion	\$1,160,270

Total Project Cost **\$15,659,000**

Total State Aid **\$5,801,349**

Total Bond Amount **\$11,017,920**

Table H

Barker Architects, PLLC

11/30/2020

New South Elementary

Option 5 - New South, Mt Caesar North and Gilsum

Life-Cycle Cost Analysis

Student Capacity

400

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	12,643	13,010	13,387	13,775	14,175	14,586	15,009	15,444	15,892	16,353
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.60	37,929	39,029	40,161	41,325	42,524	43,757	45,026	46,332	47,675	49,058
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.30	18,964	19,514	20,080	20,663	21,262	21,879	22,513	23,166	23,838	24,529
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ 0.02	1,264	1,301	1,339	1,378	1,417	1,459	1,501	1,544	1,589	1,635
SUBTOTAL		70,801	72,854	74,967	77,141	79,378	81,680	84,049	86,486	88,994	91,575
HUMAN RESOURCES											
Cleaning	\$ 1.00	63,215	65,048	66,935	68,876	70,873	72,928	75,043	77,220	79,459	81,763
Repairs	\$ 0.10	6,321	6,505	6,693	6,888	7,087	7,293	7,504	7,722	7,946	8,176
Productivity Loss	0.70%	16,594	17,075	17,570	18,080	18,604	19,144	19,699	20,270	20,858	21,463
Bussing	\$ 1,800	740,880	762,366	784,474	807,224	830,633	854,722	879,509	905,014	931,260	958,266
SUBTOTAL		827,010	850,994	875,673	901,067	927,198	954,087	981,755	1,010,226	1,039,523	1,069,669
PROPERTY & FINANCE											
Principal	5.00%	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896	550,896
Interest	1.67%	174,799	165,599	156,399	147,199	137,999	128,799	119,600	110,400	101,200	92,000
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	86,436	88,943	91,522	94,176	96,907	99,718	102,609	105,585	108,647	111,798
Building Aid Reimbursement		1,160,270	-	-	-	-	-	-	-	-	-
SUBTOTAL		(521,011)	627,553	615,773	603,919	591,988	579,978	567,886	555,711	543,449	531,098
TOTAL		376,801	1,551,400	1,566,413	1,582,127	1,598,564	1,615,745	1,633,690	1,652,423	1,671,965	1,692,342

GRAND TOTAL \$ 14,941,469

Bond Amt: \$ 11,017,920

Building Size: 61,433

Total Project Cost: \$ 15,659,000

Bond Term: 20

Inflation: 2.90% *

State Aid Rate: 55% Nominal

Bond Rate: 1.67% **

Value Exist: 3500000

State Building Aid: \$5,801,349

* Inflation based on current RS Means Historic Cost Index

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 6

CONSOLIDATE ALL ELEMENTARY SCHOOLS ONTO A
NEW SCHOOL AT
MT CAESAR SITE

New Elementary School

Project Cost Worksheet

1. Site Development Costs					\$1,400,000
Land Acquisition					
Playfields	2	Field		\$600,000	
Paving	200	Spaces		\$400,000	
Site Prep & Utilities				\$400,000	
2. General Construction - New					\$24,960,000
New Constuction	124,668	s.f.	\$ 182	per s.f.	\$22,690,000
Renovation					
Construction Contingency	5.00%				\$1,135,000
Construction Manager Fee	5.00%				\$1,135,000
3. Design Fees					\$1,210,000
Civil Engineering	6.00%			\$80,000	
A&E New Construction	5.00%			\$1,130,000	
A&E Renovation	7.00%			\$0	
4. Furniture, Equipment and Services					\$2,370,000
Loose Equipment	5.00%			\$1,250,000	
Phone Service	1.00%			\$250,000	
Computers	2.00%			\$500,000	
Utility Charges	1.50%			\$370,000	
5. Administrative Costs					\$420,000
Testing	0.25%			\$70,000	
Survey, Borings	0.25%			\$70,000	
Clerk of the Works	0.75%			\$200,000	
Bonding/Legal	0.30%			\$80,000	
6. Design Contingency	5%				\$1,500,000

Total Project Cost

\$31,860,000

(Note: all numbers rounded to nearest \$10,000)

Table G
Barker Architects, Inc. 9/22/2020

New Elementary School

Bond Cost Worksheet

Student Capacity 1000 Core Capacity 1100

Square Foot Allowance

State Allowable Formula Previous < 35 y.o.	120 square feet / student =	132,000	based on core capacity
Cutler Gym Addition	1990	11,382	
Mt Ceasar Additions	2000	4,733	
Emerson Gym/CR Add.	1990	19,706	
Gilsum Additions		14,637	
Pre-School		4000	
	Total to Deduct	54,458	
Allowable Size		77,542	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$14,112,644
Site and Soft Cost			\$6,900,000
Allowable Cost			21,012,644

Reimbursement

Renovation Thresholds	Replacement Value 25% Renovation Min. 60% Renovation Max.		
State Aid	Allowed Project Cost	=	\$ 21,012,644
	55% State Aid Rate	\$11,556,954	
	80% At Start	\$9,245,563	
	20% At Completion	\$2,311,391	

Total Project Cost **\$31,860,000**

Total State Aid **\$11,556,954**

Total Bond Amount **\$22,614,437**

Table H

Barker Architects, PLLC

11/30/2020

New South Elementary

Option 6 - New Consolidated Elementary

Life-Cycle Cost Analysis

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
Water	\$ 0.20	24,089	24,788	25,507	26,246	27,008	27,791	28,597	29,426	30,279	31,158	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.60	72,268	74,364	76,520	78,739	81,023	83,373	85,790	88,278	90,838	93,473	
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ -	-	-	-	-	-	-	-	-	-	-	
Propane	\$ 0.30	36,134	37,182	38,260	39,370	40,511	41,686	42,895	44,139	45,419	46,736	
Wood	\$ -	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ 0.02	2,409	2,479	2,551	2,625	2,701	2,779	2,860	2,943	3,028	3,116	
SUBTOTAL		134,900	138,812	142,838	146,980	151,243	155,629	160,142	164,786	169,565	174,482	
Cleaning	\$ 1.00	120,447	123,940	127,534	131,232	135,038	138,954	142,984	147,130	151,397	155,788	
Repairs	\$ 0.10	12,045	12,394	12,753	13,123	13,504	13,895	14,298	14,713	15,140	15,579	
Productivity Loss	0.70%	31,617	32,534	33,478	34,448	35,447	36,475	37,533	38,622	39,742	40,894	
Bussing	\$ 2,000	2,058,000	2,117,682	2,179,095	2,242,289	2,307,315	2,374,227	2,443,080	2,513,929	2,586,833	2,661,851	
SUBTOTAL		2,222,109	2,286,550	2,352,860	2,421,093	2,491,304	2,563,552	2,637,895	2,714,394	2,793,111	2,874,112	
Principal	5.00%	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	1,130,722	
Interest	1.67%	358,778	339,895	321,012	302,129	283,246	264,363	245,480	226,597	207,714	188,831	
Tax Income	2.40%	123,480	127,061	130,746	134,537	138,439	142,454	146,585	150,836	155,210	159,711	
Building Aid Reimbursement		2,311,391	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(945,371)	1,343,556	1,320,988	1,298,313	1,275,529	1,252,631	1,229,617	1,206,483	1,183,225	1,159,841	
TOTAL		1,411,638	3,768,918	3,816,686	3,866,386	3,918,076	3,971,812	4,027,654	4,085,663	4,145,902	4,208,435	

GRAND TOTAL \$ 37,221,168

Bond Amt: \$ 22,614,437

Building Size: 117,052

Total Project Cost: \$ 31,860,000

Bond Term: 20

Inflation: 2.90% *

State Aid Rate: 55% Nominal

Bond Rate: 1.67% **

Value Exist: \$ 5,000,000

State Building Aid: \$11,556,954

* Inflation based on current RS Means Historic Cost Index

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 7

NEW SOUTH ELEMENTARY
ADDITIONS / RENOVATIONS TO CAESAR SITE AS NEW
NORTH ELEMENTARY

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 525

1. Site Development Costs					\$400,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces	\$100,000	
Site Prep & Utilities				\$300,000	
2. General Construction - New					\$6,228,000
New Constuction	29,785	s.f.	\$ 182 per s.f.	\$5,421,000	
Renovation				\$265,000	
Construction Contingency	5.00%			\$271,000	
Construction Manager Fee	5.00%			\$271,000	
3. Design Fees					\$310,000
Civil Engineering	6.00%			\$20,000	
A&E New Construction	5.00%			\$270,000	
A&E Renovation	7.00%			\$20,000	
4. Furniture, Equipment and Services					\$580,000
Loose Equipment	5.00%			\$310,000	
Phone Service	1.00%			\$60,000	
Computers	2.00%			\$120,000	
Utility Charges	1.50%			\$90,000	
5. Administrative Costs					\$110,000
Testing	0.25%			\$20,000	
Survey, Borings	0.25%			\$20,000	
Clerk of the Works	0.75%			\$50,000	
Bonding/Legal	0.30%			\$20,000	
6. Design Contingency	5%				\$400,000

Total Project Cost**\$8,028,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 525 Core Capacity 590

Square Foot Allowance

State Allowable Formula	120 square feet / student =	70,800	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Early Cutler Additions			Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Cutler Gym	1990's	11,382	
Pre-School			
	Total to Deduct	16,115	
Allowable Size		54,685	

Construction Cost Allowance

State Allowable Formula	\$ 182 per square foot =	\$9,952,670
Site and Soft Cost		\$1,800,000
Allowable Cost		\$ 11,752,670

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816
	25% Renovation Min.	\$ 1,751,204
	60% Renovation Max.	\$ 4,202,890
State Aid	Allowed Project Cost	= \$ 8,028,000
	55% State Aid Rate	\$4,415,400
	80% At Start	\$3,532,320
	20% At Completion	\$883,080

Total Project Cost **\$8,028,000**

Total State Aid **\$4,415,400**

Total Bond Amount **\$4,495,680**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary

Option 7 - New South / Mt Caesar North - Redistrict

Life-Cycle Cost Analysis

Student Capacity

525

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	14,051	14,458	14,877	15,309	15,753	16,210	16,680	17,163	17,661	18,173
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	52,690	54,218	55,790	57,408	59,073	60,786	62,549	64,363	66,229	68,150
On-Site	-	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	27,399	28,193	29,011	29,852	30,718	31,609	32,525	33,469	34,439	35,438
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		94,139	96,869	99,679	102,569	105,544	108,605	111,754	114,995	118,330	121,761
HUMAN RESOURCES											
Cleaning	\$ 1.50	105,380	108,436	111,581	114,816	118,146	121,572	125,098	128,726	132,459	136,300
Repairs	\$ 0.15	10,538	10,844	11,158	11,482	11,815	12,157	12,510	12,873	13,246	13,630
Productivity Loss	0.80%	21,076	21,687	22,316	22,963	23,629	24,314	25,020	25,745	26,492	27,260
Bussing/Student	\$ 1,700	918,383	945,016	972,421	1,000,621	1,029,639	1,059,499	1,090,224	1,121,841	1,154,374	1,187,851
SUBTOTAL		1,055,376	1,085,982	1,117,476	1,149,883	1,183,229	1,217,543	1,252,852	1,289,184	1,326,571	1,365,041
PROPERTY & FINANCE											
Principal	5.00%	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784
Interest	1.67%	71,324	67,570	63,816	60,062	56,308	52,554	48,801	45,047	41,293	37,539
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	37,044	38,118	39,224	40,361	41,532	42,736	43,975	45,251	46,563	47,913
Building Aid Reimbursement		883,080	-	-	-	-	-	-	-	-	-
SUBTOTAL		(624,016)	254,236	249,376	244,485	239,561	234,602	229,609	224,580	219,514	214,410
TOTAL		525,500	1,437,087	1,466,531	1,496,937	1,528,334	1,560,750	1,594,215	1,628,759	1,664,414	1,701,212

GRAND TOTAL \$ 14,603,739

Bond Amt:	\$ 4,495,680	Building Size:	68,273	Total Project Cost:	\$ 8,028,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ 1,500,000	State Building Aid:	\$ 4,415,400

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

New Elementary School

Project Cost Worksheet

Student Capacity 525

1. Site Development Costs					\$700,000
Land Acquisition				??	
Playfields	1		Field		\$300,000
Paving	100		Spaces		\$200,000
Site Prep & Utilities					\$200,000
2. General Construction - New					\$13,780,000
New Constuction	68,833	s.f.	\$ 182	per s.f.	\$12,528,000
Renovation					
Construction Contingency	5.00%				\$626,000
Construction Manager Fee	5.00%				\$626,000
3. Design Fees					\$670,000
Civil Engineering	6.00%				\$40,000
A&E New Construction	5.00%				\$630,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$1,320,000
Loose Equipment	5.00%				\$690,000
Phone Service	1.00%				\$140,000
Computers	2.00%				\$280,000
Utility Charges	1.50%				\$210,000
5. Administrative Costs					\$230,000
Testing	0.25%				\$40,000
Survey, Borings	0.25%				\$40,000
Clerk of the Works	0.75%				\$110,000
Bonding/Legal	0.30%				\$40,000
6. Design Contingency					\$800,000
	5%				

Total Project Cost

\$17,500,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

9/22/2020

New Elementary School

Bond Cost Worksheet

Student Capacity	525	Core Capacity	590
Square Foot Allowance			
State Allowable Formula Previous < 50 y.o.	120 square feet / student :	70,800	based on core capacity
Emerson Gym/CR Additic	1990	19,706	
		Total to Deduct	19,706
Allowable Size			51,094

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$9,299,108
Site and Soft Cost			\$6,900,000
Allowable Cost			16,199,108

Reimbursement

Renovation Thresholds	Replacement Value 25% Renovation Min. 60% Renovation Max.		
State Aid	Allowed Project Cost	=	\$ 16,199,108
	54%	\$8,747,518	
	80% At Start	\$6,998,015	
	20% At Completion	\$1,749,504	

Total Project Cost **\$17,500,000**

Total State Aid **\$8,747,518**

Total Bond Amount **\$10,501,985**

Table H

Barker Architects, PLLC

9/22/2020

New South Elementary

Option 7 - New South / Mt Caesar North - Redistrict

Life-Cycle Cost Analysis

Student Capacity

525

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
BUILDING NEEDS												
Water	\$ 0.20	14,166	14,577	14,999	15,434	15,882	16,343	16,817	17,304	17,806	18,322	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.60	42,498	43,730	44,998	46,303	47,646	49,028	50,450	51,913	53,418	54,967	
On-Site	-	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ -	-	-	-	-	-	-	-	-	-	-	
Propane	\$ 0.30	21,249	21,865	22,499	23,152	23,823	24,514	25,225	25,956	26,709	27,484	
Wood	\$ -	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ 0.02	1,417	1,458	1,500	1,543	1,588	1,634	1,682	1,730	1,781	1,832	
SUBTOTAL		79,329	81,630	83,997	86,433	88,939	91,519	94,173	96,904	99,714	102,605	
UTILITIES												
Cleaning	\$ 1.00	70,830	72,884	74,997	77,172	79,410	81,713	84,083	86,521	89,030	91,612	
Repairs	\$ 0.10	7,083	7,288	7,500	7,717	7,941	8,171	8,408	8,652	8,903	9,161	
Productivity Loss	0.70%	18,593	19,132	19,687	20,258	20,845	21,450	22,072	22,712	23,370	24,048	
Bussing	\$ 1,800	972,405	1,000,605	1,029,622	1,059,481	1,090,206	1,121,822	1,154,355	1,187,831	1,222,279	1,257,725	
SUBTOTAL		1,068,910	1,099,909	1,131,806	1,164,628	1,198,403	1,233,156	1,268,918	1,305,716	1,343,582	1,382,546	
HUMAN RESOURCES												
Principal	5.00%	596,588	596,588	596,588	596,588	596,588	596,588	596,588	596,588	596,588	596,588	
Interest	1.67%	189,297	179,334	169,371	159,408	149,445	139,482	129,519	119,556	109,593	99,630	
Tax Income	2.40%	86,436	88,943	91,522	94,176	96,907	99,718	102,609	105,585	108,647	111,798	
Building Aid Reimbursement		1,392,062	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(692,613)	686,979	674,437	661,820	649,126	636,352	623,497	610,559	597,534	584,420	
PROPERTY & FINANCE												
TOTAL		455,626	1,868,517	1,890,240	1,912,881	1,936,467	1,961,027	1,986,588	2,013,179	2,040,830	2,069,572	

GRAND TOTAL \$ 18,134,926

Bond Amt:	\$ 11,931,752	Building Size:	68,833	Total Project Cost:	\$ 17,500,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ 3,500,000	State Building Aid:	\$6,960,309

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 8

ADDITIONS / RENOVATIONS
TO TROY AS NEW
SOUTH ELEMENTARY
ADDITIONS / RENOVATIONS TO MT CAESAR AS NEW
NORTH ELEMENTARY

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 525

1. Site Development Costs					\$400,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces	\$100,000	
Site Prep & Utilities				\$300,000	
2. General Construction - New					\$6,228,000
New Constuction	29,785	s.f.	\$ 182	per s.f.	\$5,421,000
Renovation					\$265,000
Construction Contingency	5.00%				\$271,000
Construction Manager Fee	5.00%				\$271,000
3. Design Fees					\$310,000
Civil Engineering	6.00%				\$20,000
A&E New Construction	5.00%				\$270,000
A&E Renovation	7.00%				\$20,000
4. Furniture, Equipment and Services					\$580,000
Loose Equipment	5.00%				\$310,000
Phone Service	1.00%				\$60,000
Computers	2.00%				\$120,000
Utility Charges	1.50%				\$90,000
5. Administrative Costs					\$110,000
Testing	0.25%				\$20,000
Survey, Borings	0.25%				\$20,000
Clerk of the Works	0.75%				\$50,000
Bonding/Legal	0.30%				\$20,000
6. Design Contingency	5%				\$400,000

Total Project Cost**\$8,028,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 525 Core Capacity 590

Square Foot Allowance

State Allowable Formula	120 square feet / student =	70,800	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Early Cutler Additions			Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Cutler Gym	1990's	11,382	
Pre-School			
	Total to Deduct	16,115	
Allowable Size		54,685	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$9,952,670
Site and Soft Cost			\$1,800,000
Allowable Cost			\$ 11,752,670

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 8,028,000
	55% State Aid Rate	\$4,415,400	
	80% At Start	\$3,532,320	
	20% At Completion	\$883,080	

Total Project Cost **\$8,028,000**

Total State Aid **\$4,415,400**

Total Bond Amount **\$4,495,680**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary

Option 8 - Troy South and Mt Caesar North

Life-Cycle Cost Analysis

Student Capacity		525											
Rates/sf		Year											
Task		1	2	3	4	5	6	7	8	9	10		
BUILDING NEEDS	Division 0	-	-	-	-	-	-	-	-	-	-		
	Division 1	-	-	-	-	-	-	-	-	-	-		
	Division 2	-	-	-	-	-	-	-	-	-	-		
	Division 3	-	-	-	-	-	-	-	-	-	-		
	Division 4	-	-	-	-	-	-	-	-	-	-		
	Division 5	-	-	-	-	-	-	-	-	-	-		
	Division 6	-	-	-	-	-	-	-	-	-	-		
	Division 7	-	-	-	-	-	-	-	-	-	-		
	Division 8	-	-	-	-	-	-	-	-	-	-		
	Division 9	-	-	-	-	-	-	-	-	-	-		
	Division 10	-	-	-	-	-	-	-	-	-	-		
	Division 11	-	-	-	-	-	-	-	-	-	-		
	Division 12	-	-	-	-	-	-	-	-	-	-		
	Division 13	-	-	-	-	-	-	-	-	-	-		
	Division 14	-	-	-	-	-	-	-	-	-	-		
	Division 15	-	-	-	-	-	-	-	-	-	-		
	Division 16	-	-	-	-	-	-	-	-	-	-		
SUBTOTAL		-	-	-	-	-	-	-	-	-	-		
UTILITIES	Water	\$ 0.20	14,051	14,458	14,877	15,309	15,753	16,210	16,680	17,163	17,661	18,173	
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
	Grid	\$ 0.75	52,690	54,218	55,790	57,408	59,073	60,786	62,549	64,363	66,229	68,150	
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-	
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
	Oil	\$ -	-	-	-	-	-	-	-	-	-	-	
	Propane	\$ 0.39	27,399	28,193	29,011	29,852	30,718	31,609	32,525	33,469	34,439	35,438	
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-	
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
	Other	\$ -	-	-	-	-	-	-	-	-	-	-	
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL			94,139	96,869	99,679	102,569	105,544	108,605	111,754	114,995	118,330	121,761	
HUMAN RESOURCES	Cleaning	\$ 1.50	105,380	108,436	111,581	114,816	118,146	121,572	125,098	128,726	132,459	136,300	
	Repairs	\$ 0.15	10,538	10,844	11,158	11,482	11,815	12,157	12,510	12,873	13,246	13,630	
	Productivity Loss	0.80%	21,076	21,687	22,316	22,963	23,629	24,314	25,020	25,745	26,492	27,260	
	Bussing/Student	\$ 1,700	918,383	945,016	972,421	1,000,621	1,029,639	1,059,499	1,090,224	1,121,841	1,154,374	1,187,851	
	SUBTOTAL			1,055,376	1,085,982	1,117,476	1,149,883	1,183,229	1,217,543	1,252,852	1,289,184	1,326,571	1,365,041
PROPERTY & FINANCE	Principal	5.00%	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784	224,784	
	Interest	1.67%	71,324	67,570	63,816	60,062	56,308	52,554	48,801	45,047	41,293	37,539	
	Tax Income	2.40%	37,044	38,118	39,224	40,361	41,532	42,736	43,975	45,251	46,563	47,913	
	Building Aid Reimbursement		883,080	-	-	-	-	-	-	-	-	-	
	SUBTOTAL			(624,016)	254,236	249,376	244,485	239,561	234,602	229,609	224,580	219,514	214,410
TOTAL			525,500	1,437,087	1,466,531	1,496,937	1,528,334	1,560,750	1,594,215	1,628,759	1,664,414	1,701,212	

GRAND TOTAL \$ 14,603,739

Bond Amt:	\$ 4,495,680	Building Size:	68,273	Total Project Cost:	\$ 8,028,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ 1,500,000	State Building Aid:	\$ 4,415,400

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Troy Elementary School

Project Cost Worksheet

Student Capacity 525

1. Site Development Costs				\$200,000
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				\$200,000
2. General Construction - New				\$11,707,000
New Constuction	40,675	s.f.	\$ 182 per s.f.	\$7,403,000
Renovation				\$3,564,000
Construction Contingency	5.00%			\$370,000
Construction Manager Fee	5.00%			\$370,000
3. Design Fees				\$630,000
Civil Engineering	6.00%			\$10,000
A&E New Construction	5.00%			\$370,000
A&E Renovation	7.00%			\$250,000
4. Furniture, Equipment and Services				\$1,120,000
Loose Equipment	5.00%			\$590,000
Phone Service	1.00%			\$120,000
Computers	2.00%			\$230,000
Utility Charges	1.50%			\$180,000
5. Administrative Costs				\$190,000
Testing	0.25%			\$30,000
Survey, Borings	0.25%			\$30,000
Clerk of the Works	0.75%			\$90,000
Bonding/Legal	0.30%			\$40,000
6. Design Contingency				\$700,000
	5%			

Total Project Cost

\$14,547,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

9/22/2020

Troy Elementary School

Bond Cost Worksheet

Student Capacity 525 Core Capacity 590

Square Foot Allowance

State Allowable Formula Previous < 50 y.o. 120 square feet / student = 70,800 based on core capacity

All Troy additions over 50 years old

Emerson Gym/CR Add. 1990 19,706

Total to Deduct 19,706

Allowable Size 51,094

Construction Cost Allowance

State Allowable Formula Site and Soft Cost \$ 182 per square foot = \$9,299,108 \$2,840,000

Allowable Cost 12,139,108

Reimbursement

Renovation Thresholds Replacement Value \$ 4,029,208
25% Renovation Min. \$ 1,007,302
60% Renovation Max. \$ 2,417,525

State Aid Allowed Project Cost = \$ 12,139,108
55% State Aid Rate \$6,676,509
80% At Start \$5,341,208
20% At Completion \$1,335,302

Total Project Cost \$14,547,000

Total State Aid \$6,676,509

Total Bond Amount \$9,205,792

Table H

Barker Architects, PLLC

11/30/2020

Troy Elementary
Student Capacity

Option 8 - Troy South and Mt Caesar North
525
Year

Life-Cycle Cost Analysis

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	52,690	54,218	55,790	57,408	59,073	60,786	62,549	64,363	66,229	68,150
On-Site	-	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.40	28,101	28,916	29,755	30,618	31,506	32,419	33,359	34,327	35,322	36,347
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		80,791	83,134	85,545	88,026	90,579	93,205	95,908	98,690	101,552	104,497
HUMAN RESOURCES											
Cleaning	\$ 1.50	105,380	108,436	111,581	114,816	118,146	121,572	125,098	128,726	132,459	136,300
Repairs	\$ 0.15	10,538	10,844	11,158	11,482	11,815	12,157	12,510	12,873	13,246	13,630
Productivity Loss	0.80%	21,076	21,687	22,316	22,963	23,629	24,314	25,020	25,745	26,492	27,260
Bussing	\$ 1,800	972,405	1,000,605	1,029,622	1,059,481	1,090,206	1,121,822	1,154,355	1,187,831	1,222,279	1,257,725
SUBTOTAL		1,109,399	1,141,571	1,174,677	1,208,743	1,243,796	1,279,866	1,316,982	1,355,175	1,394,475	1,434,915
PROPERTY & FINANCE											
Principal	5.00%	460,290	460,290	460,290	460,290	460,290	460,290	460,290	460,290	460,290	460,290
Interest	1.67%	146,050	138,363	130,676	122,989	115,303	107,616	99,929	92,242	84,555	76,868
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	37,044	38,118	39,224	40,361	41,532	42,736	43,975	45,251	46,563	47,913
Building Aid Reimbursement		1,374,026	-	-	-	-	-	-	-	-	-
SUBTOTAL		(804,730)	560,534	551,742	542,918	534,061	525,169	516,243	507,281	498,282	489,245
TOTAL		385,460	1,785,240	1,811,964	1,839,686	1,868,435	1,898,241	1,929,134	1,961,146	1,994,308	2,028,656

GRAND TOTAL \$ 17,502,271

Bond Amt:	\$ 9,205,792	Building Size:	68,273	Total Project Cost:	\$ 14,547,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ 1,500,000	State Building Aid:	\$6,676,509

* Inflation based on current RS Means Historic Cost Index
** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 9

ADDITIONS / RENOVATIONS
TO MT CAESAR TROY AS NEW
CENTRAL ELEMENTARY
ADDITIONS / RENOVATIONS TO EMERSON AND
GILSUM

Emerson Elementary School**Project Cost Worksheet**

Student Capacity 200

1. Site Development Costs					\$200,000
Land Acquisition					
Playfields	1	Field			
Paving	100	Spaces			
Site Prep & Utilities				\$200,000	
2. General Construction - New					\$1,844,000
New Constuction	1,116	s.f.	\$ 182	per s.f.	\$203,000
Renovation				\$	1,621,000
Construction Contingency	5.00%				\$10,000
Construction Manager Fee	5.00%				\$10,000
3. Design Fees					\$100,000
Civil Engineering	6.00%				\$10,000
A&E New Construction	5.00%				\$90,000
A&E Renovation	7.00%				\$0
4. Furniture, Equipment and Services					\$180,000
Loose Equipment	5.00%				\$90,000
Phone Service	1.00%				\$20,000
Computers	2.00%				\$40,000
Utility Charges	1.50%				\$30,000
5. Administrative Costs					\$50,000
Testing	0.25%				\$10,000
Survey, Borings	0.25%				\$10,000
Clerk of the Works	0.75%				\$20,000
Bonding/Legal	0.30%				\$10,000
6. Design Contingency	5%				\$100,000

Total Project Cost**\$2,474,000**

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

10/29/2020

Emerson Elementary School

Bond Cost Worksheet

Student Capacity 200 Core Capacity 248

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Gym/CR Addition	144 square feet / student : 1990	35,712 based on core capacity 19,706
Pre-School		-
	Total to Deduct	19,706
Allowable Size		16,006

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,913,092 \$630,000
Allowable Cost		3,543,092

Reimbursement

Renovation Thresholds	Replacement Value	\$ 5,977,972
	25% Renovation Min.	\$ 1,494,493
	60% Renovation Max.	\$ 3,586,783
State Aid	Allowed Project Cost	= \$ 2,474,000
	55% State Aid Rate	\$1,360,700
	80% At Start	\$1,088,560
	20% At Completion	\$272,140

Total Project Cost **\$2,474,000**

Total State Aid **\$1,360,700**

Total Bond Amount **\$1,385,440**

Table H

Barker Architects, PLLC

11/30/2020

Emerson Elementary

Option 9 - Combine Swanzev and Troy

Life-Cycle Cost Analysis

Student Capacity

200

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.60	26,210	26,970	27,753	28,557	29,386	30,238	31,115	32,017	32,945	33,901
On-Site	-	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.80	27,958	28,768	29,603	30,461	31,345	32,254	33,189	34,151	35,142	36,161
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		61,157	62,931	64,756	66,634	68,566	70,555	72,601	74,706	76,873	79,102
HUMAN RESOURCES											
Cleaning	\$ 2.00	69,894	71,921	74,007	76,153	78,361	80,634	82,972	85,378	87,854	90,402
Repairs	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Productivity Loss	0.90%	11,795	12,137	12,489	12,851	13,223	13,607	14,002	14,408	14,825	15,255
Bussing	\$ 1,600	329,280	338,829	348,655	358,766	369,170	379,876	390,893	402,229	413,893	425,896
SUBTOTAL		417,958	430,079	442,551	455,385	468,591	482,180	496,164	510,552	525,358	540,594
PROPERTY & FINANCE											
Principal	5.00%	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272
Interest	1.67%	21,980	20,823	19,666	18,509	17,353	16,196	15,039	13,882	12,725	11,568
Tax Income	2.40%	-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		280,032	-	-	-	-	-	-	-	-	-
SUBTOTAL		(188,780)	90,095	88,938	87,781	86,625	85,468	84,311	83,154	81,997	80,840
TOTAL		290,335	583,105	596,245	609,800	623,782	638,203	653,075	668,413	684,228	700,536

GRAND TOTAL \$ 6,047,724

Bond Amount \$ 1,385,440

Building Size: 33,962

Total Project Cost: \$ 2,474,000

Bond Term: 20

Inflation Rate: 2.90% *

State Aid Rate: 55% Nominal

Bond Rate: 2.15% **

Value of Exist: 0

State Building Aid: \$1,360,700

* Inflation based on current RS Means Historic Cost Index

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsum Elementary**Project Cost Worksheet**

Student Capacity 100

1. Site Development Costs				\$0
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				
2. General Construction - New				\$3,657,000
New Constuction	8,383	s.f.	\$ 182 per s.f.	\$1,526,000
Renovation				\$1,979,000
Construction Contingency	5.00%			\$76,000
Construction Manager Fee	5.00%			\$76,000
3. Design Fees				\$180,000
Civil Engineering	6.00%			\$0
A&E New Construction	5.00%			\$180,000
A&E Renovation	7.00%			\$0
4. Furniture, Equipment and Services				\$340,000
Loose Equipment	5.00%			\$180,000
Phone Service	1.00%			\$40,000
Computers	2.00%			\$70,000
Utility Charges	1.50%			\$50,000
5. Administrative Costs				\$60,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$30,000
Bonding/Legal	0.30%			\$10,000
6. Design Contingency				\$200,000
	5%			

Total Project Cost**\$4,437,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Gilsum Elementary

Bond Cost Worksheet

Student Capacity 100 Core Capacity 160

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Original 1970's 1980's 1990's	144 square feet / student =	23,040	based on core capacity Older than 35 years Older than 35 years Older than 35 years
Pre-School			
	Total to Deduct	7,890	
Allowable Size		15,150	

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,757,300 \$780,000
Allowable Cost		\$2,772,450

Reimbursement

Renovation Thresholds	Replacement Value	\$ 3,288,376	
	25% Renovation Min.	\$ 822,094	
	60% Renovation Max.	\$ 1,973,026	
State Aid	Allowed Project Cost	=	\$ 2,772,450
	55% State Aid Rate	\$1,524,848	
	80% At Start	\$1,219,878	
	20% At Completion	\$304,970	

Total Project Cost **\$4,437,000**

Total State Aid **\$1,524,848**

Total Bond Amount **\$3,217,122**

Table H

Barker Architects, PLLC

11/30/2020

Gilsun STEAM Academy

Option 9 - Combine Swanzeay and Troy

Life-Cycle Cost Analysis

Student Capacity 100

Task	Rates	Year										
		1	2	3	4	5	6	7	8	9	10	
BUILDING NEEDS												
Division 0		-	-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-	-
UTILITIES												
Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923	
On-Site	-	-	-	-	-	-	-	-	-	-	-	
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-	
Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082	
Wood	\$ -	-	-	-	-	-	-	-	-	-	-	
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-	
Other	\$ -	-	-	-	-	-	-	-	-	-	-	
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-	
SUBTOTAL		54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046	
HUMAN RESOURCES												
Cleaning	\$ 2.00	54,435	56,014	57,639	59,310	61,030	62,800	64,621	66,495	68,423	70,408	
Repairs	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041	
Productivity Loss	0.90%	9,186	9,452	9,726	10,009	10,299	10,597	10,905	11,221	11,546	11,881	
Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948	
SUBTOTAL		233,705	240,482	247,456	254,633	262,017	269,616	277,434	285,480	293,759	302,278	
PROPERTY & FINANCE												
Principal		160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	
Interest		51,040	48,353	45,667	42,981	40,294	37,608	34,922	32,236	29,549	26,863	
Tax Income		-	-	-	-	-	-	-	-	-	-	
Building Aid Reimbursement		304,970	-	-	-	-	-	-	-	-	-	
SUBTOTAL		(93,074)	209,209	206,523	203,837	201,151	198,464	195,778	193,092	190,405	187,719	
TOTAL		194,795	505,426	511,330	501,469	507,414	513,610	520,063	526,781	533,771	541,043	

GRAND TOTAL \$ 4,855,701

Bond Amt:	\$ 3,217,122	Building Size:	26,451	Total Project Cost:	\$ 4,437,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$1,524,848 ***

* Inflation based on current RS Means Historic Cost Index *** Limited by Previous Additions

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 750

1. Site Development Costs					\$400,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces	\$100,000	
Site Prep & Utilities				\$300,000	
2. General Construction - New					\$12,206,000
New Constuction	59,643	s.f.	\$ 182 per s.f.	\$10,855,000	
Renovation				\$265,000	
Construction Contingency	5.00%			\$543,000	
Construction Manager Fee	5.00%			\$543,000	
3. Design Fees					\$580,000
Civil Engineering	6.00%			\$20,000	
A&E New Construction	5.00%			\$540,000	
A&E Renovation	7.00%			\$20,000	
4. Furniture, Equipment and Services					\$1,150,000
Loose Equipment	5.00%			\$610,000	
Phone Service	1.00%			\$120,000	
Computers	2.00%			\$240,000	
Utility Charges	1.50%			\$180,000	
5. Administrative Costs					\$190,000
Testing	0.25%			\$30,000	
Survey, Borings	0.25%			\$30,000	
Clerk of the Works	0.75%			\$90,000	
Bonding/Legal	0.30%			\$40,000	
6. Design Contingency	5%				\$700,000

Total Project Cost**\$15,226,000**

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 750 Core Capacity 880

Square Foot Allowance

State Allowable Formula	120 square feet / student =	105,600	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Early Cutler Additions			Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Cutler Gym	1990's	11,382	
Pre-School		655	
		Total to Deduct	16,770
Allowable Size			88,830

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$16,167,060
Site and Soft Cost			\$3,020,000
Allowable Cost			\$16,255,890

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 15,226,000
	55% State Aid Rate	\$8,374,300	
	80% At Start	\$6,699,440	
	20% At Completion	\$1,674,860	

Total Project Cost **\$15,226,000**

Total State Aid **\$8,374,300**

Total Bond Amount **\$8,526,560**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary

Option 9 - Combine Swanzey and Troy

Life-Cycle Cost Analysis

Student Capacity

750

Year

Task	Rates	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	20,195	20,781	21,384	22,004	22,642	23,298	23,974	24,669	25,385	26,121
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	75,732	77,929	80,189	82,514	84,907	87,369	89,903	92,510	95,193	97,953
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	39,381	40,523	41,698	42,907	44,152	45,432	46,750	48,105	49,500	50,936
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		135,308	139,232	143,270	147,425	151,700	156,100	160,626	165,285	170,078	175,010
HUMAN RESOURCES											
Cleaning	\$ 1.50	151,465	155,857	160,377	165,028	169,814	174,738	179,806	185,020	190,386	195,907
Repairs	\$ 0.15	15,146	15,586	16,038	16,503	16,981	17,474	17,981	18,502	19,039	19,591
Productivity Loss	0.80%	30,293	31,171	32,075	33,006	33,963	34,948	35,961	37,004	38,077	39,181
Bussing	\$ 2,000	1,543,500	1,588,262	1,634,321	1,681,716	1,730,486	1,780,670	1,832,310	1,885,447	1,940,125	1,996,388
SUBTOTAL		1,740,404	1,790,876	1,842,811	1,896,253	1,951,244	2,007,830	2,066,057	2,125,973	2,187,626	2,251,067
PROPERTY & FINANCE											
Principal	5.00%	426,328	426,328	426,328	426,328	426,328	426,328	426,328	426,328	426,328	426,328
Interest	1.67%	135,274	128,154	121,035	113,915	106,795	99,675	92,556	85,436	78,316	71,197
		-	-	-	-	-	-	-	-	-	-
Tax Income	2.40%	74,088	76,237	78,447	80,722	83,063	85,472	87,951	90,501	93,126	95,827
Building Aid Reimbursement		1,674,860	-	-	-	-	-	-	-	-	-
SUBTOTAL		(1,187,346)	478,246	468,915	459,520	450,060	440,531	430,933	421,263	411,518	401,698
TOTAL		688,366	2,408,354	2,454,996	2,503,198	2,553,004	2,604,461	2,657,617	2,712,520	2,769,222	2,827,776

GRAND TOTAL \$ 24,179,515

Bond Amount \$ 8,526,560
 Bond Term: 20
 Bond Rate: 1.67% **

Building Size: 98,131
 Inflation Rate: 2.90% *
 Value of Exist: \$ 3,000,000

Total Project Cost: \$ 15,226,000
 State Aid Rate: 55% Nominal
 State Building Aid: \$8,374,300

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

OPTION 10

TOWN SCHOOLS
CONSOLIDATE SWANZEY TO MT CEASAR
ADDITIONS/RENOVATIONS TO
EMERSON
TROY
GILSUM

Emerson Elementary School

Project Cost Worksheet

Student Capacity 200

1. Site Development Costs				\$200,000
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				\$200,000
2. General Construction - New				\$1,844,000
New Constuction	1,116	s.f.	\$ 182 per s.f.	\$203,000
Renovation				\$ 1,621,000
Construction Contingency	5.00%			\$10,000
Construction Manager Fee	5.00%			\$10,000
3. Design Fees				\$100,000
Civil Engineering	6.00%			\$10,000
A&E New Construction	5.00%			\$90,000
A&E Renovation	7.00%			\$0
4. Furniture, Equipment and Services				\$180,000
Loose Equipment	5.00%			\$90,000
Phone Service	1.00%			\$20,000
Computers	2.00%			\$40,000
Utility Charges	1.50%			\$30,000
5. Administrative Costs				\$50,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$20,000
Bonding/Legal	0.30%			\$10,000
6. Design Contingency				\$100,000
	5%			

Total Project Cost

\$2,474,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

10/29/2020

Emerson Elementary School

Bond Cost Worksheet

Student Capacity

200

Core Capacity

248

Square Foot Allowance

State Allowable Formula
Previous < 50 y.o.

144 square feet / student =

35,712 based on core capacity

Gym/CR Addition

1990

19,706

Total to Deduct

19,706

Allowable Size

16,006

Construction Cost Allowance

State Allowable Formula
Site and Soft Cost

\$

182 per square foot =

\$2,913,092

\$630,000

Allowable Cost

3,543,092

Reimbursement

Renovation Thresholds

Replacement Value \$ 6,207,894

25% Renovation Min. \$ 1,551,974

60% Renovation Max. \$ 3,724,736

State Aid

Allowed Project Cost =

\$

2,474,000

55%

\$1,360,700

80% At Start

\$1,088,560

20% At Completion

\$272,140

Total Project Cost

\$2,474,000

Total State Aid

\$1,360,700

Total Bond Amount

\$1,385,440

Table H

Barker Architects, PLLC

10/29/2020

Emerson Elementary

Student Capacity

Option 10 - Town Schools

200

Life-Cycle Cost Analysis

Task		Year	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS												
Division 0			-	-	-	-	-	-	-	-	-	-
Division 1			-	-	-	-	-	-	-	-	-	-
Division 2			-	-	-	-	-	-	-	-	-	-
Division 3			-	-	-	-	-	-	-	-	-	-
Division 4			-	-	-	-	-	-	-	-	-	-
Division 5			-	-	-	-	-	-	-	-	-	-
Division 6			-	-	-	-	-	-	-	-	-	-
Division 7			-	-	-	-	-	-	-	-	-	-
Division 8			-	-	-	-	-	-	-	-	-	-
Division 9			-	-	-	-	-	-	-	-	-	-
Division 10			-	-	-	-	-	-	-	-	-	-
Division 11			-	-	-	-	-	-	-	-	-	-
Division 12			-	-	-	-	-	-	-	-	-	-
Division 13			-	-	-	-	-	-	-	-	-	-
Division 14			-	-	-	-	-	-	-	-	-	-
Division 15			-	-	-	-	-	-	-	-	-	-
Division 16			-	-	-	-	-	-	-	-	-	-
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
UTILITIES												
Water	\$ 0.20		6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Electricity	\$ -		-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.60		26,210	26,970	27,753	28,557	29,386	30,238	31,115	32,017	32,945	33,901
On-Site	\$ -		-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -		-	-	-	-	-	-	-	-	-	-
Oil	\$ -		-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.80		27,958	28,768	29,603	30,461	31,345	32,254	33,189	34,151	35,142	36,161
Wood	\$ -		-	-	-	-	-	-	-	-	-	-
Electricity	\$ -		-	-	-	-	-	-	-	-	-	-
Other	\$ -		-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -		-	-	-	-	-	-	-	-	-	-
SUBTOTAL			61,157	62,931	64,756	66,634	68,566	70,555	72,601	74,706	76,873	79,102
HUMAN RESOURCES												
Cleaning	\$ 2.00		69,894	71,921	74,007	76,153	78,361	80,634	82,972	85,378	87,854	90,402
Repairs	\$ 0.20		6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Productivity Loss	0.9%		11,795	12,137	12,489	12,851	13,223	13,607	14,002	14,408	14,825	15,255
Bussing	\$ 1,600		329,280	338,829	348,655	358,766	369,170	379,876	390,893	402,229	413,893	425,896
SUBTOTAL			417,958	430,079	442,551	455,385	468,591	482,180	496,164	510,552	525,358	540,594
PROPERTY & FINANCE												
Principal	5.00%		69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272	69,272
Interest	1.67%		21,980	20,823	19,666	18,509	17,353	16,196	15,039	13,882	12,725	11,568
Tax Income	2.40%		-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement			280,032	-	-	-	-	-	-	-	-	-
SUBTOTAL			(188,780)	90,095	88,938	87,781	86,625	85,468	84,311	83,154	81,997	80,840
TOTAL			290,335	583,105	596,245	609,800	623,782	638,203	653,075	668,413	684,228	700,536

GRAND TOTAL \$ 6,047,724

Bond Amount \$ 1,385,440
 Bond Term: 20
 Bond Rate: 1.67% **

Building Size: 33962
 Inflation Rate: 2.90% *
 Value of Exist: 0

Total Project Cost: \$ 2,474,000
 State Aid Rate: 55% Nominal
 State Building Aid: \$1,360,700

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Gilsum Elementary**Project Cost Worksheet**

Student Capacity 100

1. Site Development Costs				\$0
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				
2. General Construction - New				\$3,657,000
New Constuction	8,383	s.f.	\$ 182 per s.f.	\$1,526,000
Renovation				\$1,979,000
Construction Contingency	5.00%			\$76,000
Construction Manager Fee	5.00%			\$76,000
3. Design Fees				\$180,000
Civil Engineering	6.00%			\$0
A&E New Construction	5.00%			\$180,000
A&E Renovation	7.00%			\$0
4. Furniture, Equipment and Services				\$340,000
Loose Equipment	5.00%			\$180,000
Phone Service	1.00%			\$40,000
Computers	2.00%			\$70,000
Utility Charges	1.50%			\$50,000
5. Administrative Costs				\$60,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$30,000
Bonding/Legal	0.30%			\$10,000
6. Design Contingency				\$200,000
	5%			

Total Project Cost**\$4,437,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Gilsum Elementary

Bond Cost Worksheet

Student Capacity 100 Core Capacity 160

Square Foot Allowance

State Allowable Formula Previous < 35 y.o. Original 1970's 1980's 1990's	144 square feet / student =	23,040	based on core capacity Older than 35 years Older than 35 years Older than 35 years
Pre-School			
	Total to Deduct	7,890	
Allowable Size		15,150	

Construction Cost Allowance

State Allowable Formula Site and Soft Cost	\$ 182 per square foot =	\$2,757,300 \$780,000
Allowable Cost		\$2,772,450

Reimbursement

Renovation Thresholds	Replacement Value	\$ 3,288,376	
	25% Renovation Min.	\$ 822,094	
	60% Renovation Max.	\$ 1,973,026	
State Aid	Allowed Project Cost	=	\$ 2,772,450
	55% State Aid Rate	\$1,524,848	
	80% At Start	\$1,219,878	
	20% At Completion	\$304,970	

Total Project Cost **\$4,437,000**

Total State Aid **\$1,524,848**

Total Bond Amount **\$3,217,122**

Table H

Barker Architects, PLLC

11/30/2020

Gilsun STEAM Academy Option 10 - Town Schools

Life-Cycle Cost Analysis

Student Capacity 100
Year

Task		1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS											
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
UTILITIES											
Water	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.85	23,135	23,806	24,496	25,207	25,938	26,690	27,464	28,260	29,080	29,923
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ 0.94	25,585	26,327	27,090	-	-	-	-	-	-	-
Propane	\$ 0.40	-	-	-	11,862	12,206	12,560	12,924	13,299	13,685	14,082
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		54,163	55,734	57,350	43,000	44,247	45,530	46,850	48,209	49,607	51,046
HUMAN RESOURCES											
Cleaning	\$ 2.00	54,435	56,014	57,639	59,310	61,030	62,800	64,621	66,495	68,423	70,408
Repairs	\$ 0.20	5,444	5,601	5,764	5,931	6,103	6,280	6,462	6,650	6,842	7,041
Productivity Loss	0.90%	9,186	9,452	9,726	10,009	10,299	10,597	10,905	11,221	11,546	11,881
Bussing	\$ 1,600	164,640	169,415	174,328	179,383	184,585	189,938	195,446	201,114	206,947	212,948
SUBTOTAL		233,705	240,482	247,456	254,633	262,017	269,616	277,434	285,480	293,759	302,278
PROPERTY & FINANCE											
Principal	5.00%	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856	160,856
Interest	1.67%	51,040	48,353	45,667	42,981	40,294	37,608	34,922	32,236	29,549	26,863
Tax Income		-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		304,970	-	-	-	-	-	-	-	-	-
SUBTOTAL		(93,074)	209,209	206,523	203,837	201,151	198,464	195,778	193,092	190,405	187,719
TOTAL		194,795	505,426	511,330	501,469	507,414	513,610	520,063	526,781	533,771	541,043

GRAND TOTAL \$ 4,855,701

Bond Amt:	\$ 3,217,122	Building Size:	26,451	Total Project Cost:	\$ 4,437,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:		State Building Aid:	\$1,524,848 ***

* Inflation based on current RS Means Historic Cost Index *** Limited by Previous Additions

** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Mt Ceasar Elementary**Project Cost Worksheet**

Student Capacity 550

1. Site Development Costs					\$400,000
Land Acquisition					
Playfields	1		Field		
Paving	100		Spaces	\$100,000	
Site Prep & Utilities				\$300,000	
2. General Construction - New					\$7,344,000
New Constuction	35,357	s.f.	\$ 182	per s.f.	\$6,435,000
Renovation					\$265,000
Construction Contingency	5.00%				\$322,000
Construction Manager Fee	5.00%				\$322,000
3. Design Fees					\$360,000
Civil Engineering	6.00%				\$20,000
A&E New Construction	5.00%				\$320,000
A&E Renovation	7.00%				\$20,000
4. Furniture, Equipment and Services					\$700,000
Loose Equipment	5.00%				\$370,000
Phone Service	1.00%				\$70,000
Computers	2.00%				\$150,000
Utility Charges	1.50%				\$110,000
5. Administrative Costs					\$120,000
Testing	0.25%				\$20,000
Survey, Borings	0.25%				\$20,000
Clerk of the Works	0.75%				\$60,000
Bonding/Legal	0.30%				\$20,000
6. Design Contingency	5%				\$400,000

Total Project Cost**\$9,324,000**

(Note: all numbers rounded to nearest \$10,000)

Barker Architects, Inc.

Table G

9/22/2020

Mt Ceasar Elementary

Bond Cost Worksheet

Student Capacity 550 Core Capacity 650

Square Foot Allowance

State Allowable Formula	120 square feet / student =	78,000	based on core capacity
Previous < 35 y.o.			
Original Schools	1900, 1950		Older than 35 years
1st Additions	1950's		Older than 35 years
Early Cutler Additions			Older than 35 years
Mt Ceasar Additions	1987		Older than 35 years
Mt Ceasar Additions	2000	4,733	
Cutler Gym	1990's	11,382	
Pre-School			
	Total to Deduct	16,115	
Allowable Size		61,885	

Construction Cost Allowance

State Allowable Formula	\$	182 per square foot =	\$11,263,070
Site and Soft Cost			\$1,980,000
Allowable Cost			\$13,243,070

Reimbursement

Renovation Thresholds	Replacement Value	\$ 7,004,816	
	25% Renovation Min.	\$ 1,751,204	
	60% Renovation Max.	\$ 4,202,890	
State Aid	Allowed Project Cost	=	\$ 9,324,000
	55% State Aid Rate	\$5,128,200	
	80% At Start	\$4,102,560	
	20% At Completion	\$1,025,640	

Total Project Cost **\$9,324,000**

Total State Aid **\$5,128,200**

Total Bond Amount **\$5,221,440**

Table H

Barker Architects, PLLC

11/30/2020

Mt Caesar Elementary Option 10 - Town Schools

Life-Cycle Cost Analysis

Student Capacity		550										
Rates/sf		Year	1	2	3	4	5	6	7	8	9	10
BUILDING NEEDS	Task											
	Division 0		-	-	-	-	-	-	-	-	-	-
	Division 1		-	-	-	-	-	-	-	-	-	-
	Division 2		-	-	-	-	-	-	-	-	-	-
	Division 3		-	-	-	-	-	-	-	-	-	-
	Division 4		-	-	-	-	-	-	-	-	-	-
	Division 5		-	-	-	-	-	-	-	-	-	-
	Division 6		-	-	-	-	-	-	-	-	-	-
	Division 7		-	-	-	-	-	-	-	-	-	-
	Division 8		-	-	-	-	-	-	-	-	-	-
	Division 9		-	-	-	-	-	-	-	-	-	-
	Division 10		-	-	-	-	-	-	-	-	-	-
	Division 11		-	-	-	-	-	-	-	-	-	-
	Division 12		-	-	-	-	-	-	-	-	-	-
	Division 13		-	-	-	-	-	-	-	-	-	-
	Division 14		-	-	-	-	-	-	-	-	-	-
	Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-	
SUBTOTAL			-	-	-	-	-	-	-	-	-	-
UTILITIES	Water	\$ 0.20	15,197	15,638	16,092	16,558	17,038	17,533	18,041	18,564	19,103	19,657
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Grid	\$ 0.75	56,990	58,643	60,343	62,093	63,894	65,747	67,654	69,616	71,635	73,712
	On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
	Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
	Oil	\$ -	-	-	-	-	-	-	-	-	-	-
	Propane	\$ 0.39	29,635	30,494	31,379	32,289	33,225	34,188	35,180	36,200	37,250	38,330
	Wood	\$ -	-	-	-	-	-	-	-	-	-	-
	Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
	Other	\$ -	-	-	-	-	-	-	-	-	-	-
	Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL			101,822	104,775	107,814	110,940	114,158	117,468	120,875	124,380	127,987	131,699
HUMAN RESOURCES	Cleaning	\$ 1.50	113,980	117,286	120,687	124,187	127,788	131,494	135,308	139,231	143,269	147,424
	Repairs	\$ 0.15	11,398	11,729	12,069	12,419	12,779	13,149	13,531	13,923	14,327	14,742
	Productivity Loss	0.80%	22,796	23,457	24,137	24,837	25,558	26,299	27,062	27,846	28,654	29,485
	Bussing/Student	\$ 1,600	905,520	931,780	958,802	986,607	1,015,219	1,044,660	1,074,955	1,106,129	1,138,206	1,171,214
SUBTOTAL			1,053,694	1,084,251	1,115,695	1,148,050	1,181,343	1,215,602	1,250,855	1,287,130	1,324,456	1,362,866
PROPERTY & FINANCE	Principal	5.00%	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072	261,072
	Interest	1.67%	82,838	78,478	74,118	69,758	65,399	61,039	56,679	52,319	47,959	43,599
	Tax Income	2.40%	24,696	25,412	26,149	26,907	27,688	28,491	29,317	30,167	31,042	31,942
	Building Aid Reimbursement		1,025,640	-	-	-	-	-	-	-	-	-
SUBTOTAL			(706,426)	314,138	309,041	303,923	298,783	293,620	288,434	283,224	277,989	272,729
TOTAL			449,091	1,503,165	1,532,550	1,562,913	1,594,284	1,626,690	1,660,163	1,694,733	1,730,432	1,767,293

GRAND TOTAL \$ 15,121,315

Bond Amt:	\$ 5,221,440	Building Size:	73,845	Total Project Cost:	\$ 9,324,000
Bond Term:	20	Inflation:	2.90% *	State Aid Rate:	55% Nominal
Bond Rate:	1.67% **	Value Exist:	\$ 1,000,000	State Building Aid:	\$5,128,200

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I

Troy Elementary School

Project Cost Worksheet

Student Capacity 200

1. Site Development Costs				\$200,000
Land Acquisition				
Playfields	1	Field		
Paving	100	Spaces		
Site Prep & Utilities				\$200,000
2. General Construction - New				\$4,838,000
New Constuction	6,364	s.f.	\$ 182 per s.f.	\$1,158,000
Renovation				\$3,564,000
Construction Contingency	5.00%			\$58,000
Construction Manager Fee	5.00%			\$58,000
3. Design Fees				\$320,000
Civil Engineering	6.00%			\$10,000
A&E New Construction	5.00%			\$60,000
A&E Renovation	7.00%			\$250,000
4. Furniture, Equipment and Services				\$460,000
Loose Equipment	5.00%			\$240,000
Phone Service	1.00%			\$50,000
Computers	2.00%			\$100,000
Utility Charges	1.50%			\$70,000
5. Administrative Costs				\$80,000
Testing	0.25%			\$10,000
Survey, Borings	0.25%			\$10,000
Clerk of the Works	0.75%			\$40,000
Bonding/Legal	0.30%			\$20,000
6. Design Contingency				\$300,000
	5%			

Total Project Cost

\$6,198,000

(Note: all numbers rounded to nearest \$10,000)

Table G

Barker Architects, Inc.

11/30/2020

Troy Elementary School

Bond Cost Worksheet

Student Capacity

200

Core Capacity

248

Square Foot Allowance

State Allowable Formula
Previous < 50 y.o.

144 square feet / student :

35,712 based on core capacity

All Troy additions
over 50 years old

Total to Deduct

-

Allowable Size

35,712

Construction Cost Allowance

State Allowable Formula \$
Site and Soft Cost

182 per square foot =

\$6,499,584

\$1,360,000

Allowable Cost

7,859,584

Reimbursement

Renovation Thresholds

Replacement Value \$ 4,029,208

25% Renovation Min. \$ 1,007,302

60% Renovation Max. \$ 2,417,525

State Aid

Allowed Project Cost = \$ 6,198,000

55% State Aid Rate \$3,408,900

80% At Start \$2,727,120

20% At Completion \$681,780

Total Project Cost

\$6,198,000

Total State Aid

\$3,408,900

Total Bond Amount

\$3,470,880

Table H

Barker Architects, PLLC

11/30/2020

Troy Elementary

Option 10 - Town Schools

Life-Cycle Cost Analysis

Student Capacity

200

Rates/sf Year

Task		1	2	3	4	5	6	7	8	9	10
Division 0		-	-	-	-	-	-	-	-	-	-
Division 1		-	-	-	-	-	-	-	-	-	-
Division 2		-	-	-	-	-	-	-	-	-	-
Division 3		-	-	-	-	-	-	-	-	-	-
Division 4		-	-	-	-	-	-	-	-	-	-
Division 5		-	-	-	-	-	-	-	-	-	-
Division 6		-	-	-	-	-	-	-	-	-	-
Division 7		-	-	-	-	-	-	-	-	-	-
Division 8		-	-	-	-	-	-	-	-	-	-
Division 9		-	-	-	-	-	-	-	-	-	-
Division 10		-	-	-	-	-	-	-	-	-	-
Division 11		-	-	-	-	-	-	-	-	-	-
Division 12		-	-	-	-	-	-	-	-	-	-
Division 13		-	-	-	-	-	-	-	-	-	-
Division 14		-	-	-	-	-	-	-	-	-	-
Division 15		-	-	-	-	-	-	-	-	-	-
Division 16		-	-	-	-	-	-	-	-	-	-
SUBTOTAL		-	-	-	-	-	-	-	-	-	-
Water	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Grid	\$ 0.75	26,210	26,970	27,753	28,557	29,386	30,238	31,115	32,017	32,945	33,901
On-Site	\$ -	-	-	-	-	-	-	-	-	-	-
Heating Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
Oil	\$ -	-	-	-	-	-	-	-	-	-	-
Propane	\$ 0.39	13,629	14,025	14,431	14,850	15,280	15,724	16,180	16,649	17,132	17,628
Wood	\$ -	-	-	-	-	-	-	-	-	-	-
Electricity	\$ -	-	-	-	-	-	-	-	-	-	-
Other	\$ -	-	-	-	-	-	-	-	-	-	-
Cooking Fuel	\$ -	-	-	-	-	-	-	-	-	-	-
SUBTOTAL		46,829	48,187	49,584	51,022	52,502	54,025	55,591	57,204	58,862	60,569
Cleaning	\$ 2.00	69,894	71,921	74,007	76,153	78,361	80,634	82,972	85,378	87,854	90,402
Repairs	\$ 0.20	6,989	7,192	7,401	7,615	7,836	8,063	8,297	8,538	8,785	9,040
Productivity Loss	0.90%	11,795	12,137	12,489	12,851	13,223	13,607	14,002	14,408	14,825	15,255
Bussing	\$ 1,400	288,120	296,475	305,073	313,920	323,024	332,392	342,031	351,950	362,157	372,659
SUBTOTAL		376,798	387,725	398,969	410,539	422,445	434,696	447,302	460,274	473,622	487,357
Principal	5.00%	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544	173,544
Interest	1.67%	55,066	52,167	49,269	46,371	43,473	40,575	37,676	34,778	31,880	28,982
Tax Income	2.40%	-	-	-	-	-	-	-	-	-	-
Building Aid Reimbursement		701,552	-	-	-	-	-	-	-	-	-
SUBTOTAL		(472,942)	225,711	222,813	219,915	217,017	214,119	211,220	208,322	205,424	202,526
TOTAL		(49,315)	661,624	671,367	681,477	691,964	702,839	714,114	725,800	737,908	750,452

GRAND TOTAL \$ 6,288,229

Bond Amt: \$ 3,470,880
 Bond Term: 20
 Bond Rate: 1.67% **

Building Size: 33,962
 Inflation: 2.90% *
 Value Exist: \$ -

Total Project Cost: \$ 6,198,000
 State Aid Rate: 55% Nominal
 State Building Aid: \$3,408,900

* Inflation based on current RS Means Historic Cost Index
 ** Bond Rate is last reported sale by the NH Municipal Bond Bank.

Table I