

TOTAL PROJECT COST SUMMARY

Missoula County Public Schools
Missoula, Montana



BUILDING NAME	SIZE	ACRES	TOTAL PROJECT COSTS	REPLACEMENT VALUE	RATIO		
ADMINISTRATION BUILDING	38,792	1.9	\$2,401,864	\$8,940,623	26.9%	POOR	0%-10% Good
BIG SKY HIGH SCHOOL	255,873	37.8	\$4,299,590	\$58,972,575	7.3%	GOOD	11%-25% Fair
BUSINESS BUILDING	10,000	1	\$596,620	\$1,511,692	39.5%	POOR	26%-50% Poor
CASALOMA	9,000	2	\$359,267	\$2,074,284	17.3%	FAIR	>50% Replace
CENTRAL KITCHEN	11,578	1	\$131,655	\$2,668,451	4.9%	GOOD	
CHIEF CHARLO	61,150	14	\$323,257	\$14,093,605	2.3%	GOOD	
COLD SPRINGS	51,382	6	\$1,222,813	\$11,842,316	10.3%	FAIR	
DICKINSON	43,078	4.5	\$2,686,130	\$9,928,443	27.1%	POOR	
FRANKLIN	40,738	1.9	\$2,797,990	\$9,389,130	29.8%	POOR	
HAWTHORNE	50,045	4.6	\$2,110,268	\$11,534,169	18.3%	FAIR	
HELLGATE HIGH SCHOOL	245,694	3.7	\$7,400,414	\$56,626,561	13.1%	FAIR	
JEFFERSON	29,767	5.5	\$1,797,233	\$6,860,578	26.2%	POOR	
LEWIS & CLARK	60,413	10	\$3,614,967	\$13,923,744	26.0%	POOR	
LOWELL	39,503	3.8	\$1,618,829	\$9,104,492	17.8%	FAIR	
MAINTENANCE	7,010	1	\$57,632	\$1,615,636	3.6%	GOOD	
MEADOW HILL	82,424	9	\$2,256,755	\$18,996,751	11.9%	FAIR	
MISSOULA COUNTY STADIUM	21,210	5	\$25,356	\$4,888,395	0.5%	GOOD	
MOUNT JUMBO	40,304	5.3	\$1,141,404	\$9,289,103	12.3%	FAIR	
PAXSON	52,049	2.1	\$227,863	\$11,996,043	1.9%	GOOD	
PORTER	92,989	6.4	\$3,125,796	\$21,431,729	14.6%	FAIR	
PRESCOTT	25,033	2.3	\$2,197,544	\$5,769,505	38.1%	POOR	
RATTLESNAKE	61,455	7	\$2,156,181	\$14,163,900	15.2%	FAIR	
RUSSELL	42,993	5	\$1,627,230	\$9,908,853	16.4%	FAIR	
RUSSELL EAST ANNEX	2,892	0.5	\$242,257	\$666,536	36.3%	POOR	
RUSSELL WEST ANNEX	2,892	0.5	\$279,247	\$666,536	41.9%	POOR	
SEELEY SWAN	46,072	52.5	\$2,240,202	\$10,618,488	21.1%	FAIR	
SENTINEL HIGH SCHOOL	240,476	50	\$9,144,442	\$55,423,937	16.5%	FAIR	
SENTINEL BUILDING 300 MUSIC	9,840	0.5	\$618,529	\$2,267,883	27.3%	POOR	
SENTINEL BUILDING 400 TECH	8,059	0.5	\$348,935	\$1,857,406	18.8%	FAIR	
SENTINEL BUILDING 500 WAREHOUSE	20,984	1	\$835,648	\$4,836,308	17.3%	FAIR	
VOCATIONAL AGRICULTURE FARM	17,411	79.9	\$303,653	\$4,012,817	7.6%	GOOD	
WASHINGTON	82,787	4.5	\$2,611,080	\$19,080,413	13.7%	FAIR	
WHITTIER	23,096	1.16	\$2,358,023	\$5,323,073	44.3%	POOR	
WILLARD	23,096	1.5	\$2,080,315	\$5,323,073	39.1%	POOR	
	1,850,085	333	\$65,238,989	\$425,607,049	15.3%		

ENERGY SAVINGS SUMMARY

Missoula County Public Schools
Missoula, Montana



BUILDING NAME	TOTAL POTENTIAL ENERGY SAVINGS	CURRENT UTILITY COSTS	RATIO
ADMINISTRATION BUILDING	\$8,089	\$36,114	22.4%
BIG SKY HIGH SCHOOL	\$37,350	\$328,420	11.4%
BUSINESS BUILDING	\$5,393	\$19,705	27.4%
CASALOMA	\$1,100	N/A	N/A
CENTRAL KITCHEN	\$2,973	\$29,420	10.1%
CHIEF CHARLO	\$6,276	\$62,850	10.0%
COLD SPRINGS	\$7,513	\$46,571	16.1%
DICKINSON	\$16,537	\$40,403	40.9%
FRANKLIN	\$14,137	\$45,253	31.2%
HAWTHORNE	\$14,467	\$50,511	28.6%
HELLGATE HIGH SCHOOL	\$40,859	\$243,334	16.8%
JEFFERSON	\$10,584	\$31,565	33.5%
LEWIS & CLARK	\$13,745	\$58,473	23.5%
LOWELL	\$5,331	\$37,060	14.4%
MAINTENANCE	\$1,324	\$5,437	24.4%
MEADOW HILL	\$22,725	\$78,959	28.8%
MISSOULA COUNTY STADIUM	\$0	NA NA	
MOUNT JUMBO	\$5,917	\$28,215	21.0%
PAXSON	\$4,753	\$45,564	10.4%
PORTER	\$16,628	\$72,374	23.0%
PRESCOTT	\$8,179	\$21,767	37.6%
RATTLESNAKE	\$15,061	\$63,775	23.6%
RUSSELL	\$22,203	\$43,814	50.7%
RUSSELL EAST ANNEX	\$552	\$2,694	20.5%
RUSSELL WEST ANNEX	\$627	\$2,694	23.3%
SEELEY SWAN	\$18,133	\$97,135	18.7%
SENTINEL HIGH SCHOOL	\$56,394	\$255,253	22.1%
SENTINEL BUILDING 300 MUSIC	\$1,767	NA NA	
SENTINEL BUILDING 400 TECH	\$1,920	\$12,671	15.2%
SENTINEL BUILDING 500 WAREHOUSE	\$4,380	\$16,393	26.7%
VOCATIONAL AGRICULTURE FARM	\$504	\$11,843	4.3%
WASHINGTON	\$10,170	\$74,372	13.7%
WHITTIER	\$7,171	\$18,471	38.8%
WILLARD	\$7,757	\$19,352	40.1%
	\$390,519	\$1,900,462	20.5%

NOTES:

Concessions receives heat from Big Sky High School

Music receives heat from Sentinel High School

Energy model is within 10% of annual energy consumption

ROOF SUMMARY
Missoula County Public Schools
Missoula, Montana



BUILDING NAME	ROOF Square Footage	Year Installed	Projected Replacement Year	Condition	A	B	C	D	NOTES
ADMINISTRATION BUILDING									
Asphalt Shingles	13,497	2011	2041	A	13,497				CONDITION A Very Good, replace in 20 years+ B Good, replace in 10 years C Fair, replace in 1-5 years D Poor, replace in 1 year
Metal	6,026	1968	2068	A	6,026				
BIG SKY HIGH SCHOOL									
BUR	312	1980	2010	D				312	
Hypalon/BUR	32,969	1999	2029	A	32,969				
Hypalon	159,519	1980	2010	D				159,519	
TPO	38,202	2003	2033	A	38,202				
Skylight	9,000	1980	2010	D				9,000	
Metal	104	1980	2080	A	104				
BUSINESS BUILDING									
Hypalon/BUR	10,000	1999	2029	A	10,000				
CASALOMA									
Asphalt Roll Roofing	11,700	2010	2040	A	11,700				
CENTRAL KITCHEN									
Metal	12,104	1998	2098	A	12,104				
CHIEF CHARLO									
Asphalt Shingles	22,386	1995	2035	A	22,386				
TPO	15,439	1995	2025	A	15,439				
Metal	1,436	1995	2095	A	1,436				
COLD SPRINGS									
Asphalt Shingles	3,051	2006	2046	A	3,051				
Hypalon/BUR	4,315	1989	2019	C			4,315		
Hypalon/BUR	13,505	1998	2028	A	13,505				
Hypalon/BUR	19,782	2003	2033	A	19,782				
EPDM	1,075	1989	2019	C			1,075		
Metal	7,866	1989	2089	A	7,866				
Fiberglass	617	1989	2014	D				617	
DICKINSON									
Ballasted Hypalon/BUR	22,534	1985	2015	C			22,534		
Hypalon/BUR (Gym)	6,887	1985	2010	D				6,887	
Hypalon/BUR (Additions)	14,501	1985	2015	C			14,501		
FRANKLIN									
Asphalt Shingles	15,569	1992	2032	A	15,569				
BUR	662	1952	2010	D				662	
Hypalon/BUR	4,421	1986	2016	C			4,421		
Hypalon/BUR	7,747	1993	2023	B		7,747			
Hypalon/BUR	753	1998	2028	A	753				
TPO/BUR	297	2007	2037	A	297				
TPO	3,400	2008	2038	A	3,400				
HAWTHORNE									
BUR	47	1952	2010	D				47	
Hypalon/BUR	7,746	1986	2016	C			7,746		
Hypalon/BUR	24,724	1996	2026	B		24,724			
TPO/BUR	2,510	2000	2030	A	2,510				
TPO/BUR	4,618	2007	2037	A	4,618				
TPO	3,500	2008	2038	A	3,500				
HELLGATE HIGH SCHOOL									
BUR	2,645	1908	2010	D				2,645	
Hypalon/BUR	29,229	1980	2010	D				29,229	
Ballasted Hypalon	3,688	1980	2010	D				3,688	
Hypalon	34,094	1980	2010	D				34,094	
Ballasted TPO	7,758	2003	2033	A	7,758				
TPO	832	2003	2033	A	832				
JEFFERSON									
BUR	500	1951	2010	D				500	
Metal	10,722	1980	2080	A	10,722				
Hypalon/BUR	5,000	2000	2030	A	5,000				
LEWIS & CLARK									
Metal	14,815	1980	2080	A	14,815				
TPO/BUR	8,214	1998	2028	B		8,214			
TPO/Hypalon	19,041	2008	2038	A	19,041				
TPO	2,480	2008	2038	A	2,480				
LOWELL									
Asphalt Shingles	14,703	1988	2028	B		14,703			
Metal	466	1908	2010	D				466	
Asphalt Shingles	100	1908	2010	D				100	
Ballasted Hypalon/BUR	4,694	1990	2020	B		4,694			
Metal	580	1990	2090	A	580				
Asphalt Shingles	2,290	2012	2042	A	2,290				
MAINTENANCE									
Metal	7,500	1992	2092	A	7,500				
MEADOW HILL									
BUR	8,978	1967	2010	D				8,978	
Hypalon/BUR	9,749	1989	2010	D				9,749	
Hypalon/BUR	51,846	1999	2029	B		51,846			
Hypalon/BUR	8,366	1998	2028	B		8,366			
MISSOULA COUNTY STADIUM									
Asphalt Shingles	4,420	1998	2028	B		4,420			
Metal	1,099	2000	2100	A	1,099				
MOUNT JUMBO									
Metal	39,057	1979	2079	A	39,057				
PAXSON									
Hypalon	23,149	1992	2022	B		23,149			
Metal	7,566	1992	2092	A	7,566				
Skylight	550	1992	2022	B		550			
PORTER									
BUR	9,710	1966	2010	D				9,710	
Hypalon/BUR	40,033	1986	2016	C			40,033		
Hypalon	27,460	1995	2025	B		27,460			
Metal	16,273	1995	2095	A	16,273				
PRESCOTT									
BUR	153	1951	2010	D				153	
Metal	7,683	1980	2080	A	7,683				
Asphalt Shingles	971	1993	2010	D				971	
Hypalon/BUR	7,682	1993	2023	B		7,682			
RATTLESNAKE									
Hypalon/BUR	30,587	1985	2015	C			30,587		
Hypalon	22,338	1989	2019	C			22,338		
Metal	2,483	1989	2089	A	2,483				
Asphalt Shingles	2,290	2012	2042	A	2,290				
RUSSELL									
Ballasted Hypalon/BUR	2,698	1989	2019	B		2,698			
Hypalon/BUR	34,935	1989	2019	B		34,935			
Hypalon	3,437	1989	2019	B		3,437			
RUSSELL EAST ANNEX									
Asphalt Shingles	3,470	1972	2010	D				3,470	
RUSSELL WEST ANNEX									
Asphalt Shingles	3,470	1972	2010	D				3,470	
SEELEY SWAN									
Hypalon/BUR	39,520	1984	2014	C			39,520		
Metal	3,522	1999	2099	A	3,522				
Metal	2,249	1976	2076	A	2,249				
TPO	3,843	2003	2033	A	3,843				
SENTINEL HIGH SCHOOL									
Ballasted Hypalon/BUR	120,445	1980	2010	B		120,445			
Ballasted TPO	9,946	2003	2033	A	9,946				
TPO	20,071	2003	2033	A	20,071				
SENTINEL BUILDING 300 MUSIC									
Metal	10,000	1960	2060	A	10,000				
SENTINEL BUILDING 400 TECH									
Metal	8,100	1960	2060	A	8,100				
SENTINEL BUILDING 500 WAREHOUSE									
TPO	20,984	2007	2037	A	20,984				
VOCATIONAL AGRICULTURE FARM									
Metal	3,575	1970	2070	A	3,575				
Metal	1,600	1996	2096	A	1,600				
Plastic	1,500	1996	2010	C			1,500		
Metal	2,700	1997	2097	A	2,700				
Metal	8,036	2003	2103	A	8,036				
WASHINGTON									
Metal	11,851	1980	2080	A	11,851				
Hypalon/BUR	6,519	1986	2016	C			6,519		
Hypalon	22,546	1989	2019	B		22,546			
Hypalon/BUR	7,848	1990	2020	B		7,848			
Hypalon/BUR	4,059	2004	2034	B		4,059			
Metal	923	1986	2086	A	923				
WHITTIER									
EPDM/BUR	8,233	1999	2029	A	8,233				
WILLARD									
Hypalon/BUR	8,233	2001	2031	A	8,233				
TOTAL SQUARE FOOTAGE	1,368,927				510,049	379,523	195,089	284,267	
					37%	28%	14%	21%	



BUILDING NAME	STEAM/ HOT WATER	Year Installed	Projected Replacement Year	Condition	A	B	C	D	NOTES
ADMINISTRATION BUILDING									CONDITION
Boiler #1	ST	1965	2015	D				1	A Very Good, replace in 20 years or
BIG SKY HIGH SCHOOL									B Good, replace in 10 years
Boiler #1	HW	1980	2020	B		1			C Fair, replace in 1-5 years
Boiler #2	HW	1980	2020	B		1			D Poor, replace in 1 year
Boiler #3	HW	1980	2020	B		1			E Not Operational
Boiler #4	HW	1980	2020	B		1			
Boiler #5	HW	2003	2043	B		1			
BUSINESS BUILDING									
Boiler #1	HW	1966	2016	C			1		
CASALOMA									
Boiler #1	ST	1940	2010	E					
CENTRAL KITCHEN									
Boiler #1	ST	1998	2038	A	1				
Boiler #2	HW	1998	2038	A	1				
CHIEF CHARLO									
Boiler #1	HW	1995	2035	A	1				
Boiler #2	HW	1995	2035	A	1				
Boiler #3	HW	1995	2035	A	1				
COLD SPRINGS									
Boiler #1	HW	1965	2015	C			1		
Boiler #2	HW	1965	2015	C			1		
Boiler #3	HW	1965	2015	C			1		
DICKINSON									
Boiler #1	ST	1960	2010	D				1	
FRANKLIN									
Boiler #1	ST	1952	2012	D				1	
HAWTHORNE									
Boiler #1	ST	1952	2012	D				1	
HELLGATE HIGH SCHOOL									
Boiler #1	ST	1941	2011	D				1	
Boiler #2	ST	1941	2011	D				1	
Boiler #3	ST	1994	2044	B		1			
Boiler #4	HW	1994	2034	B		1			
Boiler #5	HW	1998	2038	B		1			
Boiler #6	HW	2003	2043	B		1			
Boiler #7	HW	2003	2043	B		1			
JEFFERSON									
Boiler #1	ST	1951	2011	D				1	
LEWIS & CLARK									
Boiler #1	ST	2013	2053	A	1				
LOWELL									
Boiler #1	ST	2000	2050	A	1				
MAINTENANCE									
Boiler #1	HW	1992	2032	A	1				
Boiler #1	HW	1992	2032	A	1				
MEADOW HILL									
Boiler #1	HW	1967	2017	C			1		
Boiler #2	HW	1998	2038	A	1				
MISSOULA COUNTY STADIUM									
Boiler #1	NA	NA	NA	NA					
MOUNT JUMBO									
Boiler #1	HW	1979	2019	C			1		
PAXSON									
Boiler #1	HW	1992	2032	A	1				
Boiler #2	HW	1992	2032	A	1				
PORTER									
Boiler #1	ST	1966	2016	C			1		
Boiler #2	ST	1966	2016	C			1		
Boiler #3	HW	1995	2035	A	1				
Boiler #3	HW	2008	2048	A	1				
PRESCOTT									
Boiler #1	ST	1951	2011	D				1	
RATTLESNAKE									
Boiler #1	ST	1960	2010	D				1	
RUSSELL									
Boiler #1	ST	1960	2010	D				1	
RUSSELL EAST ANNEX									
N/A	NA	NA	NA	NA					
RUSSELL WEST ANNEX									
N/A	NA	NA	NA	NA					
SEELEY SWAN									
Boiler #1	HW	1964	2014	D				1	
SENTINEL HIGH SCHOOL									
Boiler #1	ST	1956	2016	C			1		
Boiler #2	ST	1956	2016	C			1		
Boiler #3	ST	1971	2021	B		1			
Boiler #4	ST	1994	2044	A	1				
Boiler #5	HW	2003	2043	A	1				
Boiler #6	HW	2003	2043	A	1				
SENTINEL BUILDING 300 MUSIC									
N/A	NA	NA	NA	NA					
SENTINEL BUILDING 400 TECH									
N/A	NA	NA	NA	NA					
SENTINEL BUILDING 500 WAREHOUSE									
N/A	NA	NA	NA	NA					
VOCATIONAL AGRICULTURE FARM									
N/A	NA	NA	NA	NA					
N/A	NA	NA	NA	NA					
N/A	NA	NA	NA	NA					
N/A	NA	NA	NA	NA					
N/A	NA	NA	NA	NA					
WASHINGTON									
Boiler #1	ST	1951	2011	D				1	
Boiler #2	HW	1989	2029	C			1		
Boiler #3	HW	1989	2029	C			1		
Boiler #4	HW	1989	2029	C			1		
Boiler #5	HW	1995	2035	C			1		
Boiler #6	HW	1995	2035	C			1		
Boiler #7	HW	1995	2035	C			1		
WHITTIER									
Boiler #1	ST	1960	2010	D				1	
WILLARD									
Boiler #1	ST	2013	2053	A	1				
TOTAL NUMBER OF BOILERS		58			18 31%	11 19%	16 28%	13 22%	

more

FACILITY AGE		2013
WILLARD	1922	91
WHITTIER	1922	91
WASHINGTON	1951	62
	1954	59
	1986	27
	1989	24
	2004	9
VOCATIONAL AGRICULTURE FARM	1970	43
	1996	17
	1996	17
	1997	16
	2003	10
SENTINEL BUILDING 500 WAREHOUSE	1970	43
SENTINEL BUILDING 400 TECH	1960	53
SENTINEL BUILDING 300 MUSIC	1960	53
SENTINEL HIGH SCHOOL	1956	57
	2003	10
SEELEY SWAN	1964	49
	1975	38
	1976	37
	1999	14
	2003	10
RUSSELL WEST ANNEX	1950	63
RUSSELL EAST ANNEX	1950	63
RUSSELL	1960	53
	1979	34
RATTLESNAKE	1960	53
	1989	24
	2012	1
PRESCOTT	1951	62
	1970	43
PORTER	1966	47
	1995	18
PAXSON	1992	21
MOUNT JUMBO	1979	34
MISSOULA COUNTY STADIUM	2000	13
	2000	13
	2000	13
	1998	15
MEADOW HILL	1967	46
	1979	34
	1989	24
	1989	24
MAINTENANCE	1992	21
LOWELL	1909	104
	1935	78
	1960	53
	1990	23
	1990	23
	2012	1
LEWIS & CLARK	1954	59
	1967	46
	2008	5
JEFFERSON	1951	62
	1954	59
HELLGATE HIGH SCHOOL	1908	105
	1921	92
	1931	82
	1941	72
	1980	33
	2003	10
HAWTHORNE	1952	61
	1977	36
	2000	13
	2008	5
FRANKLIN	1916	97
	1928	85
	1939	74
	1952	61
	1973	40
	2008	5
DICKINSON	1960	53
	1966	47
COLD SPRINGS	1930	83
	1958	55
	1962	51
	1966	47
	1974	39
	1989	24
CHIEF CHARLO	1995	18
CENTRAL KITCHEN	1998	15
CASALOMA	1940	73
BUSINESS BUILDING	1966	47
	1977	36
BIG SKY HIGH SCHOOL	1977	36
	1980	33
	2003	10
ADMINISTRATION BUILDING	1897	116
	1968	45
		43

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana



BUILDING INFORMATION

ADMINISTRATION BUILDING

AUDIT DATE: 8/19/2009
Current Year: 2013

STAFF: 44
ACRES: 1.9

SF/STAFF: 882
STAFF/AC: 23.158
EUI: 65.25 kBTU/SF/yr

Total Project Cost: \$2,401,864
Replacement Value: \$8,940,623
Total Project Cost/Replacement Value: 26.9%

General Contractor Gen. Cond. OH & P: 20%
MT Gross Receipts Tax: 1%
Escalation: 11%
AE Design Fees (Renovation/Remodel): 12%
Permit Fees: 2%
Contingency: 20%
AE Design Fees (New Construction): 8%

CONSTRUCTION DATE: 1897 116
ADDITION #1: 1968 45
ADDITION #2: 0 0
ADDITION #3: 0 0
ADDITION #4: 0 0
ADDITION #5: 0 0

BUILDING AREA: 29,268 SF
BUILDING AREA: 9,524 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
TOTAL: 38,792 SF

ASPHALT: 13,497 SF
METAL: 6,026 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
TOTAL: 19,523 SF

Age: 2011 2
1968 45
0 0
0 0

WINDOW: 2,372 SF
WINDOW: 347 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 67 SF
WINDOW: 0 SF
TOTAL: 2,786 SF

SINGLE PANE -INDIVIDUAL WINDOWS
DOUBLE PANE -INDIVIDUAL WINDOWS
SINGLE PANE -WINDOW WALL
DOUBLE PANE -WINDOW WALL
GLASS BLOCK/INFILL
FIBERGLASS PANEL

BOILER DATE: 1965 48
BOILER DATE: 0 0

PLUMBING FIXTURES:
WC: 6
U: 0
S: 5
WS: 0
TOTAL: 11

Age: 1965 48
0 0

DOOR: 82 UNITS INTERIOR
DOOR: 13 UNITS EXTERIOR
TOTAL: 95 UNITS

PERIMETER: 643 LF

5308 EUI 10/2013

COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
1	1	A	1	Foundation Wall Insulation	643	LF	\$1.00	\$643	\$5.00	\$3,215	\$3,858	\$772	\$39	\$4,668	4771	1.11	\$513	\$5,182	\$622	\$104	\$5,907	\$1,181	\$7,089	\$100	70.9
2	1	B	1	Exterior Steps/Retaining Walls	1,000	SF	\$3.00	\$3,000	\$6.00	\$6,000	\$9,000	\$1,800	\$90	\$10,890	4771	1.11	\$1,198	\$12,088	\$1,451	\$242	\$13,780	\$2,756	\$16,536	N/A	0.0
3	1	B	2	Exterior Steps/Retaining Walls	1,000	SF	\$0.00	\$0	\$2.50	\$2,500	\$2,500	\$500	\$25	\$3,025	4771	1.11	\$333	\$3,358	\$403	\$67	\$3,828	\$766	\$4,593	N/A	0.0
4	2	A	1	Exterior Walls	1,286	SF	\$5.00	\$6,430	\$10.00	\$12,860	\$19,290	\$3,858	\$193	\$23,341	4771	1.11	\$2,567	\$25,908	\$3,109	\$518	\$29,536	\$5,907	\$35,443	N/A	0.0
5	2	A	2	Exterior Walls	480	SF	\$5.00	\$2,400	\$10.00	\$4,800	\$7,200	\$1,440	\$72	\$8,712	4771	1.11	\$958	\$9,670	\$1,160	\$193	\$11,024	\$2,205	\$13,229	N/A	0.0
6	2	B	1	Window replacement	2,786	SF	\$45.00	\$125,370	\$15.00	\$41,790	\$167,160	\$33,432	\$1,672	\$202,264	4771	1.11	\$22,249	\$224,513	\$26,942	\$4,490	\$255,944	\$51,189	\$307,133	\$4,379	70.1
7	2	C	1	Exterior Door Replacement	13	EA	\$1,300.00	\$16,900	\$750.00	\$9,750	\$26,650	\$5,330	\$267	\$32,247	4771	1.11	\$3,547	\$35,794	\$4,295	\$716	\$40,805	\$8,161	\$48,966	\$500	97.9
8	2	D	1	Interior Columns/Beams	0	LF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
9	3	A	1	Floor Structure	0	LF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
10	3	B	1	Stair Treads/Risers	20	LF	\$10.00	\$200	\$10.00	\$200	\$400	\$80	\$4	\$484	4771	1.11	\$53	\$537	\$64	\$11	\$612	\$122	\$735	N/A	0.0
11	4	A	1	Roof structure	1	LS	\$2,000.00	\$2,000	\$3,000.00	\$3,000	\$5,000	\$1,000	\$50	\$6,050	4771	1.11	\$666	\$6,716	\$5,000	\$134	\$11,850	\$2,370	\$14,220	N/A	0.0
12	4	A	2	Roof structure	150	SF	\$40.00	\$6,000	\$40.00	\$6,000	\$12,000	\$2,400	\$120	\$14,520	4771	1.11	\$1,597	\$16,117	\$1,934	\$322	\$18,374	\$3,675	\$22,048	N/A	0.0
13	4	B	1	Roof Covering	13,497	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	4	B	2	Roof Covering	1,003	LF	\$2.50	\$16,006	\$5.00	\$5,815	\$21,821	\$4,364	\$218	\$26,403	4771	1.11	\$2,904	\$29,308	\$3,517	\$586	\$33,411	\$6,682	\$40,093	N/A	0.0
15	4	B	3	Roof Covering	2,572	SF	\$3.00	\$7,716	\$5.00	\$12,860	\$20,576	\$4,115	\$206	\$24,897	4771	1.11	\$2,739	\$27,636	\$3,316	\$553	\$31,505	\$6,301	\$37,806	N/A	0.0
16	4	C	1	Roof Insulation	9,641	SF	\$0.50	\$4,821	\$0.50	\$4,821	\$9,641	\$1,928	\$96	\$11,666	4771	1.11	\$1,283	\$12,949	\$1,554	\$259	\$14,762	\$2,952	\$17,714	\$4,003	4.4
17	5	A	1	Interior Walls	3,000	SF	\$0.00	\$0	\$3.00	\$9,000	\$9,000	\$1,800	\$90	\$10,890	4771	1.11	\$1,198	\$12,088	\$1,451	\$242	\$13,780	\$2,756	\$16,536	N/A	0.0
18	5	B	1	Ceilings	1,000	SF	\$2.00	\$2,000	\$2.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0
19	5	C	1	Interior Doors/Hardware/Windows	82	EA	\$200.00	\$16,400	\$50.00	\$4,100	\$20,500	\$4,100	\$205	\$24,805	4771	1.11	\$2,729	\$27,534	\$3,304	\$551	\$31,388	\$6,278	\$37,666	N/A	0.0
20	5	D	1	Floor Finishes	0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
21	5	E	1	Paint	0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
22	6	A	1	Toilet Partitions	4	EA	\$595.00	\$2,380	\$142.00	\$568	\$2,948	\$590	\$29	\$3,567	4771	1.11	\$392	\$3,959	\$475	\$79	\$4,514	\$903	\$5,417	N/A	0.0
23	6	B	1	Signage/Directories	0	EA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
24	6	C	1	Fixed Seating/Risers	0	EA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
25	6	D	1	Chalk/Tack boards/Cabinets	0	EA	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
26	6	E	1	Fume Hoods		0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0										
27	6	F	1	Lockers		0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
28	6	G	1	Cells and Visitor Cubicles		0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
29	6	H	1	Ansul Hoods		0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
30	6	I	1	Swimming Pools		0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
31	7	A	1	Heating	The boiler is approximately 40 years old and is past it's expected service life. Replace boiler with new boiler.	1	EA	\$65,000.00	\$65,000	\$35,000.00	\$35,000	\$100,000	\$20,000	\$1,000	\$121,000	4771	1.11	\$13,310	\$134,310	\$16,117	\$2,686	\$153,113	\$30,623	\$183,736	\$1,008	182.3																				
32	7	A	2	HVAC	Replace HVAC system. Assume new system is a heat pump system.	38,792	SF	\$6.50	\$252,148	\$6.50	\$252,148	\$504,296	\$100,859	\$5,043	\$610,198	4771	1.11	\$67,122	\$677,320	\$81,278	\$13,546	\$772,145	\$154,429	\$926,574		N/A	0.0																			
33	7	D	1	Temperature Controls			SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
34	7	E	1	Commissioning			SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
35	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	11	EA	\$500.00	\$5,500	\$100.00	\$1,100	\$6,600	\$1,320	\$66	\$7,986	4771	1.11	\$878	\$8,864	\$1,064	\$177	\$10,105	\$2,021	\$12,127		N/A	0.0																			
36	8	B	1	Plumbing Supply		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
37	8	C	1	Plumbing Waste		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
38	9	A	1	Building Service		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
39	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps.	1	LS	\$6,026.00	\$6,026	\$8,605.00	\$8,605	\$14,631	\$2,926	\$146	\$17,704	4771	1.11	\$1,947	\$19,651	\$2,358	\$393	\$22,402	\$4,480	\$26,882	\$2,902	9.3																				
40	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$1,175.00	\$1,175	\$1,075.00	\$1,075	\$2,250	\$450	\$23	\$2,723	4771	1.11	\$299	\$3,022	\$363	\$60	\$3,445	\$689	\$4,134		N/A	0.0																			
41	9	D	1	Voice/Data		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
42	10	A	1	Elevator/Lift	Provide elevator serving all floors of facility.	1	EA	\$150,000.00	\$150,000	\$50,000.00	\$50,000	\$200,000	\$40,000	\$2,000	\$242,000	4771	1.11	\$26,620	\$268,620	\$32,234	\$5,372	\$306,227	\$61,245	\$367,472		N/A	0.0																			
43	11	A	1	Egress	Provide exit stairs with adequate headroom to basement level and replace exterior fire escapes.	1,200	SF	\$45.00	\$54,000	\$45.00	\$54,000	\$108,000	\$21,600	\$1,080	\$130,680	4771	1.11	\$14,375	\$145,055	\$17,407	\$2,901	\$165,362	\$33,072	\$198,435		N/A	0.0																			
44	11	B	1	Extinguishing System	Provide fire suppression	38,792	SF	\$2.00	\$77,584	\$4.00	\$155,168	\$232,752	\$46,550	\$2,328	\$281,630	4771	1.11	\$30,979	\$312,609	\$37,513	\$6,252	\$356,375	\$71,275	\$427,649		N/A	0.0																			
45	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs. Provide illuminated exit signs.	1	LS	\$360.00	\$360	\$240.00	\$240	\$600	\$120	\$6	\$726	4771	1.11	\$80	\$806	\$97	\$16	\$919	\$184	\$1,102	\$176	6.3																				
46	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas and lower mounting height of pull stations to conform to current fire code and ADA.	38792	SF	\$0.38	\$14,741	\$0.38	\$14,741	\$29,482	\$5,896	\$295	\$35,673	4771	1.11	\$3,924	\$39,597	\$4,752	\$792	\$45,141	\$9,028	\$54,169		N/A	0.0																			
47	11	C	4	Security		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
48	11	C	5	Clock Bell		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
49	11	D	1	Asbestos/Hazardous Materials		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
50	11	E	1	Handicap Accessibility Missing Program Elements	Provide elevator serving all floors of facility as noted above.	0	EA		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
51	12	A	1	Handicap Accessibility Missing Program Elements		0	SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
TOTAL PROJECT COSTS																																					\$2,401,864									
REPLACEMENT VALUE																																						\$8,940,623								
TOTAL POTENTIAL ENERGY SAVINGS:																																						\$8,089								
CURRENT UTILITY COSTS																																						\$36,114								
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																							22%							

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
32	7	C	1	Cooling	Insulate exterior duct serving board room and computer room. Or relocate to interior and insulate.	400	SF	\$12.00	\$4,800	\$9.00	\$3,600	\$8,400	\$1,680	\$84	\$10,164	4771	1.11	\$1,118	\$11,282	\$1,354	\$226	\$12,862	\$2,572	\$15,434	\$250	61.7																				
33	7	D	1	Temperature Controls			SF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0																			
34	7	E	1	Commissioning			SF		\$0		\$0	\$0	\$0	\$0	\$0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0																			
35	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	6	EA	\$600.00	\$3,600	\$600.00	\$3,600	\$7,200	\$1,440	\$72	\$8,712	4771	1.11	\$958	\$9,670	\$1,160	\$193	\$11,024	\$2,205	\$13,229	\$0	0.0																				
36	8	B	1	Plumbing Supply		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
37	8	C	1	Plumbing Waste		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
38	9	A	1	Building Service		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
39	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps.	1	LS	\$2,576.00	\$2,576	\$2,915.00	\$2,915	\$5,491	\$1,098	\$55	\$6,644	4771	1.11	\$731	\$7,375	\$885	\$147	\$8,407	\$1,681	\$10,089	\$619	16.3																				
40	9	C	1	Distribution	Replace obsolete electrical panel in the boiler room with new panel.	1	LS	\$1,175.00	\$1,175	\$1,075.00	\$1,075	\$2,250	\$450	\$23	\$2,723	4771	1.11	\$299	\$3,022	\$363	\$60	\$3,445	\$689	\$4,134	N/A	0.0																				
41	9	D	1	Voice/Data		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
42	10	A	1	Elevator/Lift		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
43	11	A	1	Egress		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
44	11	B	1	Extinguishing System	Provide fire suppression	10,000	SF	\$1.50	\$15,000	\$2.50	\$25,000	\$40,000	\$8,000	\$400	\$48,400	4771	1.11	\$5,324	\$53,724	\$6,447	\$1,074	\$61,245	\$12,249	\$73,494	N/A	0.0																				
45	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs. Provide illuminated exit signs.	1	LS	\$135.00	\$135	\$90.00	\$90	\$225	\$45	\$2	\$272	4771	1.11	\$30	\$302	\$36	\$6	\$345	\$69	\$413	\$66	6.3																				
46	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	10,000	SF	\$0.38	\$3,800	\$0.38	\$3,800	\$7,600	\$1,520	\$76	\$9,196	4771	1.11	\$1,012	\$10,208	\$1,225	\$204	\$11,637	\$2,327	\$13,964	N/A	0.0																				
47	11	D	1	Asbestos/Hazardous Materials		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
48	11	E	1	Handicap Accessibility Missing Program Elements	Reconfigure restroom to accessible configuration.	1	LS	\$1,000.00	\$1,000	\$500.00	\$500	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0																				
49	12	A	1			0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
TOTAL PROJECT COSTS																											\$596,620																			
REPLACEMENT VALUE						6,559	SF	\$85.00	\$557,515	\$45.00	\$295,155	\$852,670	\$170,534	\$8,527	\$1,031,731	4771	1.11	\$113,490	\$1,145,221	\$91,618	\$22,904	\$1,259,743	\$251,949	\$1,511,692																						
TOTAL POTENTIAL ENERGY SAVINGS:																												\$5,393																		
CURRENT UTILITY COSTS																												\$19,705																		
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																													27%																	

A	B	C	D	E	F		G		H		I		J		K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
					QUANTITY		MATERIAL		LABOR																					
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL	SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)					
42	11	A	1	Egress	1	LS	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0					
43	11	B	1	Extinguishing System	9,000	SF	\$1.50	\$13,500	\$2.50	\$22,500	\$36,000	\$7,200	\$360	\$43,560	4771	1.11	\$4,792	\$48,352	\$5,802	\$967	\$55,121	\$11,024	\$66,145	N/A	0.0					
44	11	C	1	Exit Signs/Emergency Lighting/Alarms	6	EA	\$100.00	\$600	\$50.00	\$300	\$900	\$180	\$9	\$1,089	4771	1.11	\$120	\$1,209	\$145	\$24	\$1,378	\$276	\$1,654	N/A	0.0					
45	11	C	2	Exit Signs/Emergency Lighting/Alarms	6	EA	\$100.00	\$600	\$50.00	\$300	\$900	\$180	\$9	\$1,089	4771	1.11	\$120	\$1,209	\$145	\$24	\$1,378	\$276	\$1,654	N/A	0.0					
46	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0					
47	11	E	1	Handicap Accessibility Missing Program	0		\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0				
48	12	A	1	Elements	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0				
TOTAL PROJECT COSTS REPLACEMENT VALUE					9,000	SF	\$85.00	\$765,000	\$45.00	\$405,000	\$1,170,000	\$234,000	\$11,700	\$1,415,700	4771	1.11	\$155,727	\$1,571,427	\$125,714	\$31,429	\$1,728,570	\$345,714	\$2,074,284	\$359,267						
TOTAL POTENTIAL ENERGY SAVINGS:																								\$1,100						
CURRENT UTILITY COSTS																								\$0						
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																									N/A					

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana



BUILDING INFORMATION

CENTRAL KITCHEN

STAFF 20
ACRES: 1
AUDIT DATE: 8/17/2009
Current Year 2013

SF/STAFF 579
STAFF/AC 20
EUI 181.33 kBtu/SF/yr

Total Project Cost: \$131,655
Replacement Value: \$2,668,451
Total Project Cost/Replacement Value: 4.9%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: 1998 15
ADDITION #1 0 2013
ADDITION #2 0 2013
ADDITION #3 0 2013
ADDITION #4 0 2013
ADDITION #5 0 2013

BUILDING AREA 11,578 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
TOTAL 11,578 SF

METAL: 12,104 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
TOTAL 12,104 SF

Age 1998 15
WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 179 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 0 SF SINGLE PANE -WINDOW WALL
WINDOW: 0 SF DOUBLE PANE -WINDOW WALL
WINDOW: 0 SF GLASS BLOCK
WINDOW: 0 SF FIBERGLASS PANEL
TOTAL 179 SF

BOILER DATE: 1998 15
BOILER DATE: 1998 15
BOILER DATE:
BOILER DATE:

PLUMBING FIXTURES:
WC 2
U 1
S 2
WS 0
TOTAL 5

DOOR: 8 UNITS INTERIOR
DOOR: 2 UNITS EXTERIOR
TOTAL 10 UNITS
5308 EUI 10/2013

PERIMETER 420 LF

Table with columns A-Z (COMP, SUB, ECM, ECM Name, ECM DESCRIPTION, QUANTITY, MATERIAL, LABOR, SUB-TOTAL, General Contractor Overhead Profit Bonds & Insurance, Montana Gross Receipts Tax, Subtotal-Construction Costs, ENR at Time of Estimate, ENR Adjustment, Escalation, SUB-TOTAL, A/E Design Services, printing, travel, misc., Building Permits, SUB-TOTAL, Contingency, TOTAL PROJECT COSTS, YEAR ONE SAVINGS, SIMPLE PAYBACK (YRS)) and rows 1-33.

A	B	C	D	E	F		G		H		I		J		K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z											
					QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs																	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																															
34	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	5	EA	\$500.00	\$2,500	\$100.00	\$500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	\$0	0.0															
35	8	B	1	Plumbing Supply		0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	0.0															
36	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
37	9	A	1	Building Service		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
38	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace fixtures with T-12 HO lamps with fixtures using T-8 HO lamps.	1	LS	\$1,405.00	\$1,405	\$1,520.00	\$1,520	\$2,925	\$585	\$29	\$3,539	4771	1.11	\$389	\$3,929	\$471	\$79	\$4,479	\$896	\$5,374	\$598	9.0															
39	9	C	1	Distribution	Replace GFI covers on exterior of building to prevent moisture intrusion and degradation of exterior wall assembly.	5	EA	\$10.00	\$50	\$10.00	\$50	\$100	\$20	\$1	\$121	4771	1.11	\$13	\$134	\$16	\$3	\$153	\$31	\$184	N/A	0.0															
40	9	C	2	Distribution	Turn off heat trace in gutters April-November.	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
41	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
42	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
43	11	A	1	Egress		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
44	11	B	1	Extinguishing System	Provide fire suppression system.	11,578	SF	\$1.50	\$17,367	\$2.50	\$28,945	\$46,312	\$9,262	\$463	\$56,038	4771	1.11	\$6,164	\$62,202	\$7,464	\$1,244	\$70,910	\$14,182	\$85,092	N/A	0.0															
45	11	C	1	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	11,578	SF	\$0.38	\$4,400	\$0.38	\$4,400	\$8,799	\$1,760	\$88	\$10,647	4771	1.11	\$1,171	\$11,818	\$1,418	\$236	\$13,473	\$2,695	\$16,167	N/A	0.0															
46	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
47	11	E	1	Handicap Accessibility Missing Program Elements	Provide ramp at entry	200	SF	\$3.00	\$600	\$6.00	\$1,200	\$1,800	\$360	\$18	\$2,178	4771	1.11	\$240	\$2,418	\$290	\$48	\$2,756	\$551	\$3,307	N/A	0.0															
48	12	A	1	Elements		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0														
TOTAL PROJECT COSTS																																				\$131,655					
REPLACEMENT VALUE						11,578	SF	\$85.00	\$984,130	\$45.00	\$521,010	\$1,505,140	\$301,028	\$15,051	\$1,821,219	4771	1.11	\$200,334	\$2,021,554	\$161,724	\$40,431	\$2,223,709	\$444,742	\$2,668,451																	
TOTAL POTENTIAL ENERGY SAVINGS:																														\$2,973											
CURRENT UTILITY COSTS																														\$29,420											
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																														10%											

A COMP	B SUB	C ECM	D ECM Name	E ECM DESCRIPTION	F QUANTITY		G MATERIAL		H LABOR		I SUB-TOTAL	J General Contractor Over Head Profit Bonds & Insurance	K Montana Gross Receipts Tax	L Subtotal- Construction Costs	M ENR at Time of Estimate	N ENR Adjustment	O Escalation	P SUB-TOTAL	Q A/E Design Services, printing, travel, misc.	R Building Permits	S SUB-TOTAL	T Contingency	U TOTAL PROJECT COSTS	V YEAR ONE SAVINGS	W SIMPLE PAYBACK (YRS)	
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
35	7	E	1	Commissioning	61,150	SF	\$0.00	\$0	\$0.50	\$30,575	\$30,575	\$6,115	\$306	\$36,996	4771	1.11	\$4,070	\$41,065	\$4,928	\$821	\$46,814	\$9,363	\$56,177	\$3,000	18.7	
36	8	A	1	Plumbing Fixtures	82	EA	\$500.00	\$41,000	\$100.00	\$8,200	\$49,200	\$9,840	\$492	\$59,532	4771	1.11	\$6,549	\$66,081	\$7,930	\$1,322	\$75,332	\$15,066	\$90,398	N/A	0.0	
37	8	B	1	Plumbing Supply	26	LF	\$3.27	\$85	\$8.90	\$231	\$316	\$63	\$3	\$383	4771	1.11	\$42	\$425	\$51	\$8	\$484	\$97	\$581	\$39	14.9	
38	8	C	1	Plumbing Waste	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	0.0	
39	9	A	1	Building Service	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	0.0	
40	9	B	1	Lighting	23	EA	\$100.00	\$2,300	\$50.00	\$1,150	\$3,450	\$690	\$35	\$4,175	4771	1.11	\$459	\$4,634	\$556	\$93	\$5,282	\$1,056	\$6,339	\$1,100	5.5	
41	9	C	1	Distribution	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
42	9	D	1	Voice/Data	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
43	10	A	1	Elevator/Lift	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
44	11	A	1	Egress	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
45	11	B	1	Extinguishing System	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
46	11	C	1	Exit Signs/Emergency Lighting/Alarm	61,150	SF	\$0.38	\$23,237	\$0.38	\$23,237	\$46,474	\$9,295	\$465	\$56,234	4771	1.11	\$6,186	\$62,419	\$7,490	\$1,248	\$71,158	\$14,232	\$85,390	N/A	0.0	
47	11	D	1	Asbestos/Hazardous Materials	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
48	11	E	1	Handicap Accessibility	8	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
49	12	A	1	Missing Program Elements	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
TOTAL PROJECT COSTS																										
REPLACEMENT VALUE					61,150	SF	\$85.00	\$5,197,750	\$45.00	\$2,751,750	\$7,949,500	\$1,589,900	\$79,495	\$9,618,895	4771	1.11	\$1,058,078	\$10,676,973	\$854,158	\$213,539	\$11,744,671	\$2,348,934	\$14,093,605			
TOTAL POTENTIAL ENERGY SAVINGS:																										
CURRENT UTILITY COSTS																										\$6,276
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																										10%

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
33	7	A	1	Heating	The boilers are approximately 40 years old and are past their expected service life. Replace boilers with new boilers.	1	LS	\$60,000.00	\$60,000	\$35,000.00	\$35,000	\$95,000	\$19,000	\$950	\$114,950	4771	1.11	\$12,645	\$127,595	\$15,311	\$2,552	\$145,458	\$29,092	\$174,549	\$1,012	172.5																				
34	7	A	2	Heating	Insulate bare piping to reduce the energy loss in boiler room of original building.	45	LF	\$4.41	\$198	\$10.75	\$484	\$682	\$136	\$7	\$825	4771	1.11	\$91	\$916	\$110	\$18	\$1,045	\$209	\$1,253	\$426	2.9																				
35	7	B	1	Ventilating	Provide ventilation in classrooms in east wing.	11,879	SF	\$3.25	\$38,607	\$3.25	\$38,607	\$77,214	\$15,443	\$772	\$93,428	4771	1.11	\$10,277	\$103,705	\$12,445	\$2,074	\$118,224	\$23,645	\$141,869	N/A	0.0																				
36	7	C	1	Cooling	Provide cooling in computer room 105 (4 ton split system)	1	EA	\$5,000.00	\$5,000	\$2,500.00	\$2,500	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0																				
37	7	D	1	Temperature Controls		0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
38	7	E	1	Commissioning	Provide retrocommissioning of existing mechanical systems in gym.	1	LS	\$0.00	\$0	\$3,000.00	\$3,000	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	N/A	0.0																				
39	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	62	EA	\$500.00	\$31,000	\$1.00	\$62	\$31,062	\$6,212	\$311	\$37,585	4771	1.11	\$4,134	\$41,719	\$5,006	\$834	\$47,560	\$9,512	\$57,072	N/A	0.0																				
40	8	B	1	Plumbing Supply		0		\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
41	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
42	9	A	1	Building Service	Provide labels on service disconnect switches to identify loads that they serve.	1	LS	\$25.00	\$25	\$50.00	\$50	\$75	\$15	\$1	\$91	4771	1.11	\$10	\$101	\$12	\$2	\$115	\$23	\$138	N/A	0.0																				
43	9	A	2	Building Service	Two electrical services serve the building. This ECM proposes to remove the east side overhead service and connect to the west service that was installed in 1989	1	EA	\$11,375.00	\$11,375	\$8,050.00	\$8,050	\$19,425	\$3,885	\$194	\$23,504	4771	1.11	\$2,585	\$26,090	\$3,131	\$522	\$29,742	\$5,948	\$35,691	N/A	0.0																				
44	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors and replace incandescent lamps with CFL	1	LS	\$1,472.00	\$1,472	\$1,715.00	\$1,715	\$3,187	\$637	\$32	\$3,856	4771	1.11	\$424	\$4,280	\$514	\$86	\$4,880	\$976	\$5,856	\$702	8.3																				
45	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$11,900.00	\$11,900	\$10,300.00	\$10,300	\$22,200	\$4,440	\$222	\$26,862	4771	1.11	\$2,955	\$29,817	\$3,578	\$596	\$33,991	\$6,798	\$40,789	N/A	0.0																				
46	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
47	9	D	2	Clock/Bell		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
48	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
49	11	A	1	Egress		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	0.0																				
50	11	B	1	Extinguishing System	Provide fire suppression.	51,382	SF	\$1.50	\$77,073	\$2.50	\$128,455	\$205,528	\$41,106	\$2,055	\$248,689	4771	1.11	\$27,356	\$276,045	\$33,125	\$5,521	\$314,691	\$62,938	\$377,629	\$3,000	125.9																				
51	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	14	EA	\$45.00	\$630	\$30.00	\$420	\$1,050	\$210	\$11	\$1,271	4771	1.11	\$140	\$1,410	\$169	\$28	\$1,608	\$322	\$1,929	\$308	6.3																				
52	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	51,382	SF	\$0.38	\$19,525	\$0.38	\$19,525	\$39,050	\$7,810	\$391	\$47,251	4771	1.11	\$5,198	\$52,448	\$6,294	\$1,049	\$59,791	\$11,958	\$71,750	N/A	0.0																				
53	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
54	11	E	1	Handicap Accessibility Missing Program Elements	Replace corridor ramp and provide exterior ramp to gym.	300	SF	\$6.00	\$1,800	\$12.00	\$3,600	\$5,400	\$1,080	\$54	\$6,534	4771	1.11	\$719	\$7,253	\$870	\$145	\$8,268	\$1,654	\$9,922	N/A	0.0																				
55	12	A	1	Elements		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
TOTAL PROJECT COSTS																							\$1,222,813																							
REPLACEMENT VALUE						51,382	SF	\$85.00	\$4,367,470	\$45.00	\$2,312,190	\$6,679,660	\$1,335,932	\$66,797	\$8,082,389	4771	1.11	\$889,063	\$8,971,451	\$717,716	\$179,429	\$9,868,596	\$1,973,719	\$11,842,316																						
TOTAL POTENTIAL ENERGY SAVINGS:																							\$7,513																							
CURRENT UTILITY COSTS																							\$46,571																							
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																							16%																							

A	B	C	D	E	F		G		H		I		J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z													
					QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance																		Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																																
35	8	C	1	Plumbing Waste	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
36	9	A	1	Building Service	1	LS	\$24,600.00	\$24,600	\$12,200.00	\$12,200		\$36,800	\$7,360	\$368	\$44,528	4771	1.11	\$4,898	\$49,426	\$5,931	\$989	\$56,346	\$11,269	\$67,615								N/A	0.0									
37	9	B	1	Lighting	1	LS	\$10,954.00	\$10,954	\$19,040.00	\$19,040		\$29,994	\$5,999	\$300	\$36,293	4771	1.11	\$3,992	\$40,285	\$4,834	\$806	\$45,925	\$9,185	\$55,110	\$5,415								10.2									
38	9	C	1	Distribution	1	LS	\$8,225.00	\$8,225	\$7,525.00	\$7,525		\$15,750	\$3,150	\$158	\$19,058	4771	1.11	\$2,096	\$21,154	\$2,538	\$423	\$24,115	\$4,823	\$28,938								N/A	0.0									
39	9	D	1	Voice/Data	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
40	9	D	2	Clock/Bell/Intercom	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
41	10	A	1	Elevator/Lift	0	EA		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
42	11	A	1	Egress	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
43	11	B	1	Extinguishing System	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
44	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$495.00	\$495	\$330.00	\$330		\$825	\$165	\$8	\$998	4771	1.11	\$110	\$1,108	\$133	\$22	\$1,263	\$253	\$1,516	\$242								6.3									
45	11	C	2	Exit Signs/Emergency Lighting/Alarms	43,078	SF	\$0.38	\$16,370	\$0.38	\$16,370		\$32,739	\$6,548	\$327	\$39,615	4771	1.11	\$4,358	\$43,972	\$5,277	\$879	\$50,128	\$10,026	\$60,154								N/A	0.0									
46	11	C	3	Security	0	SF	\$0.00	\$0	\$0.00	\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
47	11	D	1	Asbestos/Hazardous Materials	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
48	11	E	1	Handicap Accessibility Missing Program Elements	1	LS	\$5,000.00	\$5,000	\$2,500.00	\$2,500		\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780								N/A	0.0									
49	12	A	1	Handicap Accessibility Missing Program Elements	0	SF		\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0									
TOTAL PROJECT COSTS					\$2,686,130																																					
REPLACEMENT VALUE					43,078	SF	\$85.00	\$3,661,630	\$45.00	\$1,938,510	\$5,600,140	\$1,120,028	\$56,001	\$6,776,169	4771	1.11	\$745,379	\$7,521,548	\$601,724	\$150,431	\$8,273,703	\$1,654,741	\$9,928,443																			
TOTAL POTENTIAL ENERGY SAVINGS:					\$16,537																																					
CURRENT UTILITY COSTS					\$40,403																																					
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:					41%																																					

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana



BUILDING INFORMATION

FRANKLIN

ENROLLMENT 261
ACRES: 1.9
AUDIT DATE: 8/5/2009
Current Year 2013

SF/STUDENT 156
STUDENTS/AC 137.37
EUI 98.72 kBtu/SF/yr

Total Project Cost: \$2,797,990
Replacement Value: \$9,389,130
Total Project Cost/Replacement Value: 29.8%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

Age
CONSTRUCTION DATE: 1916 97
ADDITION #1 1928 85
ADDITION #2 1939 74
ADDITION #3 1952 61
ADDITION #4 1973 40
ADDITION #5 2008 5

BUILDING AREA	13,616 SF	ASPHALT:	15,569 SF	ROOF DATE	1992 21
BUILDING AREA	1,176 SF	HYP/BUR-C:	4,421 SF	ROOF DATE	1986 27
BUILDING AREA	2,091 SF	BUR	662 SF	ROOF DATE	1952 61
BUILDING AREA	20,091 SF	HYP/BUR-G:	7,747 SF	ROOF DATE	1993 20
BUILDING AREA	753 SF	HYP/BUR-R:	753 SF	ROOF DATE	1998 15
BUILDING AREA	3,011 SF	TPO/BUR:	297 SF	ROOF DATE	2007 6
		TPO:	3,400 SF	ROOF DATE	2008 5
TOTAL	40,738 SF	TOTAL	29,449 SF		

WINDOW:	0 SF	SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW:	826 SF	DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW:	1,612 SF	SINGLE PANE -WINDOW WALL
WINDOW:	1,640 SF	DOUBLE PANE -WINDOW WALL
WINDOW:	800 SF	GLASS BLOCK
WINDOW:	360 SF	FIBERGLASS PANEL
TOTAL	5,238 SF	

Age
BOILER DATE: 1952 61

PLUMBING FIXTURES:
WC 20
U 7
S 18
WS 0
TOTAL 45

DOOR: 55 UNITS INTERIOR
DOOR: 9 UNITS EXTERIOR
TOTAL 64 UNITS

5308 EUI 10/2013

PERIMETER 1318 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
																										COMP
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	1,318	LF	\$1.00	\$1,318	\$5.00	\$6,590	\$7,908	\$1,582	\$79	\$9,569	4771	1.11	\$1,053	\$10,621	\$1,275	\$212	\$12,108	\$2,422	\$14,530	\$100	145.3
2	1	B	1	Exterior Steps/Retaining Walls		0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
3	2	A	1	Exterior Walls	Install 2-inch Insulated metal panel system on exterior walls of gymnasium.	7,680	SF	\$7.00	\$53,760	\$5.00	\$38,400	\$92,160	\$18,432	\$922	\$111,514	4771	1.11	\$12,266	\$123,780	\$14,854	\$2,476	\$141,109	\$28,222	\$169,331	\$2,000	84.7
4	2	A	2	Exterior Walls	Flash concrete projection on east and west sides of gym to prevent moisture intrusion. Flash parapet caps and joints between parapet caps and adjacent walls to prevent moisture intrusion.	150	LF	\$12.00	\$1,800	\$10.00	\$1,500	\$3,300	\$660	\$33	\$3,993	4771	1.11	\$439	\$4,432	\$532	\$89	\$5,053	\$1,011	\$6,063	N/A	0.0
5	2	A	3	Exterior Walls	Restore top of concrete wall on original building, replace T-111 siding and restore stucco, repaint high soffits to prevent moisture intrusion.	1,000	SF	\$12.00	\$12,000	\$10.00	\$10,000	\$22,000	\$4,400	\$220	\$26,620	4771	1.11	\$2,928	\$29,548	\$3,546	\$591	\$33,685	\$6,737	\$40,422	N/A	0.0
6	2	B	1	Window replacement	Replace broken window in room 102 to prevent moisture intrusion.	10	SF	\$10.00	\$100	\$10.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	\$50	7.3
7	2	B	2	Window replacement	Replace single & double pane window systems with thermally broken windows.	826	SF	\$45.00	\$37,170	\$15.00	\$12,390	\$49,560	\$9,912	\$496	\$59,968	4771	1.11	\$6,596	\$66,564	\$7,988	\$1,331	\$75,883	\$15,177	\$91,060	\$1,170	77.8
8	2	B	3	Window replacement	The building has large amounts of single pane windows with glass block above. Replace glass block with insulated metal panel and operable windows with 2 fixed and one operable window.	2,412	SF	\$24.00	\$57,888	\$21.00	\$50,652	\$108,540	\$21,708	\$1,085	\$131,333	4771	1.11	\$14,447	\$145,780	\$17,494	\$2,916	\$166,189	\$33,238	\$199,427	\$1,107	180.2
9	2	B	4	Window replacement	Replace fiber glass panel windows on west wall of gymnasium.	360	SF	\$35.00	\$12,600	\$7.00	\$2,520	\$15,120	\$3,024	\$151	\$18,295	4771	1.11	\$2,012	\$20,308	\$2,437	\$406	\$23,151	\$4,630	\$27,781	\$250	111.1
10	2	C	1	Exterior Door Replacement	Replace exterior doors with thermally broken SFAL	9	EA	\$1,300.00	\$11,700	\$650.00	\$5,850	\$17,550	\$3,510	\$176	\$21,236	4771	1.11	\$2,336	\$23,571	\$2,829	\$471	\$26,871	\$5,374	\$32,246	N/A	0.0
11	2	D	1	Interior Columns/Beams		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
12	3	A	1	Floor Structure		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
13	3	B	1	Stair Treads/Risers		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	4	A	1	Roof structure		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	4	B	1	Roof Covering	Replace BUR above south entry to gymnasium. Re-roof entry canopy to improve slope to drain to prevent moisture intrusion.	662	SF	\$4.50	\$2,979	\$2.50	\$1,655	\$4,634	\$927	\$46	\$5,607	4771	1.11	\$617	\$6,224	\$747	\$124	\$7,095	\$1,419	\$8,514	\$100	85.1
16	4	B	2	Roof Covering	Provide access ladders to gym roof and from gym roof to locker room roof.	3	EA	\$1,000.00	\$3,000	\$500.00	\$1,500	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0
17	4	B	3	Roof Covering	Flash edge of asphalt roof along north and south edges of second story of original building to prevent moisture intrusion.	50	LF	\$12.00	\$600	\$10.00	\$500	\$1,100	\$220	\$11	\$1,331	4771	1.11	\$146	\$1,477	\$177	\$30	\$1,684	\$337	\$2,021	N/A	0.0
18	4	B	4	Roof Covering	Extend membrane roof up sloped surface of asphalt roof to prevent moisture intrusion.	828	SF	\$2.00	\$1,657	\$1.00	\$828	\$2,485	\$497	\$25	\$3,007	4771	1.11	\$331	\$3,337	\$400	\$67	\$3,805	\$761	\$4,566	N/A	0.0
19	4	C	1	Roof Insulation	Add an additional 3-inches of polyisocyanurate insulation to the 2 inch of existing insulation in the 1950's roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	13,583	SF	\$1.40	\$19,016	\$1.00	\$13,583	\$32,599	\$6,520	\$326	\$39,445	4771	1.11	\$4,339	\$43,784	\$5,254	\$876	\$49,914	\$9,983	\$59,896	\$2,021	29.6
20	5	A	1	Interior Walls		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
21	5	B	1	Ceilings		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
22	5	C	1	Interior Doors/Hardware/Windows		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
23	5	D	1	Floor Finishes		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
24	5	E	1	Paint		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																										
																										COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																															No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
25	6	A	1	Toilet Partitions		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
26	6	B	1	Signage/Directories		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
27	6	C	1	Fixed Seating/Risers		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
28	6	D	1	Chalk/Tack boards/Cabinets		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
29	6	E	1	Fume Hoods		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
30	6	F	1	Lockers		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
31	6	G	1	Cells and Visitor Cubicles		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
32	6	H	1	Ansul Hoods		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
33	6	I	1	Swimming Pools		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
34	7	A	1	Heating	Boiler is over 50 years old and is past it's useful service life. Replace boiler with new boiler.	1	EA	\$85,000.00	\$85,000	\$35,000.00	\$35,000	\$120,000	\$24,000	\$1,200	\$145,200	4771	1.11	\$15,972	\$161,172	\$19,341	\$3,223	\$183,736	\$36,747	\$220,483	\$1,002	220.0																									
35	7	A	2	Heating	Unit ventilators are in poor condition should be replaced. Replace with new HVAC system.	40,738	SF	\$6.50	\$264,797	\$6.50	\$264,797	\$529,594	\$105,919	\$5,296	\$640,809	4771	1.11	\$70,489	\$711,298	\$85,356	\$14,226	\$810,879	\$162,176	\$973,055	\$0	0.0																									
36	7	B	1	Ventilating	Replace original ventilation system. Provide VFD fan.	1	EA	\$7,500.00	\$7,500	\$2,500.00	\$2,500	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	\$0	0.0																									
37	7	C	1	Cooling	Provide cooling in computer labs.	2	EA	\$5,000.00	\$10,000	\$2,500.00	\$5,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	\$0	0.0																									
38	7	D	1	Temperature Controls	Replace pneumatic controls with DDC if building system is upgraded.	40,738	SF	\$0.75	\$30,554	\$0.75	\$30,554	\$61,107	\$12,221	\$611	\$73,939	4771	1.11	\$8,133	\$82,073	\$9,849	\$1,641	\$93,563	\$18,713	\$112,276	\$2,000	56.1																									
39	7	E	1	Commissioning	Provide retrocommissioning of existing mechanical systems.	40,738	SF	\$0.00	\$0	\$0.50	\$20,369	\$20,369	\$4,074	\$204	\$24,646	4771	1.11	\$2,711	\$27,358	\$3,283	\$547	\$31,188	\$6,238	\$37,425	\$0	0.0																									
40	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	45	EA	\$500.00	\$22,500	\$1.00	\$45	\$22,545	\$4,509	\$225	\$27,279	4771	1.11	\$3,001	\$30,280	\$3,634	\$606	\$34,519	\$6,904	\$41,423	\$0	0.0																									
41	8	B	1	Plumbing Supply	Insulate domestic hot water piping.	35	LF	\$3.34	\$117	\$9.04	\$316	\$433	\$87	\$4	\$524	4771	1.11	\$58	\$582	\$70	\$12	\$663	\$133	\$796	\$60	13.3																									
42	8	C	1	Plumbing Waste		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
43	9	A	1	Building Service	Install new electrical service with pad mount transformer and additional capacity.	1	LS	\$20,700.00	\$20,700	\$10,800.00	\$10,800	\$31,500	\$6,300	\$315	\$38,115	4771	#VALUE!	\$4,193	\$42,308	\$5,077	\$846	\$48,231	\$9,646	\$57,877	N/A	0.0																									
44	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps.	1	LS	\$10,176.00	\$10,176	\$11,640.00	\$11,640	\$21,816	\$4,363	\$218	\$26,397	4771	#VALUE!	\$2,904	\$29,301	\$3,516	\$586	\$33,403	\$6,681	\$40,084	\$3,781	10.6																									
45	9	C	1	Distribution	Replace main distribution panel and obsolete electrical panels with new panels.	1	LS	\$4,700.00	\$4,700	\$4,300.00	\$4,300	\$9,000	\$1,800	\$90	\$10,890	4771	#VALUE!	\$1,198	\$12,088	\$1,451	\$242	\$13,780	\$2,756	\$16,536	N/A	0.0																									
46	9	D	1	Voice/Data	Provide cooling to voice/data system to closet in library.	100	SF	\$10.00	\$1,000	\$5.00	\$500	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	\$100	27.6																									
47	10	A	1	Elevator/Lift	Provide elevator serving all three floors of original building and second elevator serving two floors of 1951 addition.	2	EA	\$100,000.00	\$200,000	\$25,000.00	\$50,000	\$250,000	\$50,000	\$2,500	\$302,500	4771	1.11	\$33,275	\$335,775	\$40,293	\$6,716	\$382,784	\$76,557	\$459,340	N/A	0.0																									
48	11	A	1	Egress		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
49	11	B	1	Extinguishing System		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
50	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs. Provide illuminated exit signs.	1	LS	\$810.00	\$810	\$540.00	\$540	\$1,350	\$270	\$14	\$1,634	4771	#VALUE!	\$180	\$1,813	\$218	\$36	\$2,067	\$413	\$2,480	\$396	6.3																									
51	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas and lower mounting height of pull stations to conform to current fire code and ADA.	40,738	SF	\$0.38	\$15,480	\$0.38	\$15,480	\$30,961	\$6,192	\$310	\$37,463	4771	#VALUE!	\$4,121	\$41,584	\$4,990	\$832	\$47,405	\$9,481	\$56,886	N/A	0.0																									
52	11	D	1	Asbestos/Hazardous Materials		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
53	11	E	1	Handicap Accessibility	Provide accessible route to original building via courtyard, reconfigure steep ramps in hallway and in gymnasium to meet accessibility requirements. Infill floor in room 305 to provide consistent floor elevation on lower level.	2,000	SF	\$6.00	\$12,000	\$12.00	\$24,000	\$36,000	\$7,200	\$360	\$43,560	4771	1.11	\$4,792	\$48,352	\$5,802	\$967	\$55,121	\$11,024	\$66,145	N/A	0.0																									
54	12	A	1	Missing Program Elements		0	SF		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
TOTAL PROJECT COSTS																									\$2,797,990																										
REPLACEMENT VALUE						40,738	SF	\$85.00	\$3,462,730	\$45.00	\$1,833,210	\$5,295,940	\$1,059,188	\$52,959	\$6,408,087	4771	1.11	\$704,890	\$7,112,977	\$569,038	\$142,260	\$7,824,275	\$1,564,855	\$9,389,130																											
TOTAL POTENTIAL ENERGY SAVINGS:																											\$14,137																								
CURRENT UTILITY COSTS																										\$45,253																									
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																											31%																								



BUILDING INFORMATION

HAWTHORNE

ENROLLMENT 327
ACRES: 4.6
AUDIT DATE: 8/19/2009
Current Year 2013

SF/STUDENT 153
STUDENTS/AC 71.087
EUI 77.14 kBTU/SF/yr

Total Project Cost: \$2,110,268
Replacement Value: \$11,534,169
Total Project Cost/Replacement Value 18.3%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

Age
CONSTRUCTION DATE: 1952 61
ADDITION #1 1977 36
ADDITION #2 2000 13
ADDITION #3 2008 5
ADDITION #4 0 0
ADDITION #5 0 0

BUILDING AREA	16,779 SF	BUR:	47 SF	ROOF DATE	1952 61
BUILDING AREA	24,467 SF	HYP/BUR:	7,746 SF	ROOF DATE	1986 27
BUILDING AREA	2,510 SF	HYP/BUR:	24,724 SF	ROOF DATE	1996 17
BUILDING AREA	6,289 SF	TPO/BUR:	2,510 SF	ROOF DATE	2000 13
BUILDING AREA	0 SF	TPO/BUR:	4,618 SF	ROOF DATE	2007 6
BUILDING AREA	0 SF	TPO:	3,500 SF	ROOF DATE	2008 5
TOTAL	50,045 SF	TOTAL	43,145 SF		

WINDOW:	0 SF	SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW:	133 SF	DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW:	583 SF	SINGLE PANE -WINDOW WALL
WINDOW:	2,152 SF	DOUBLE PANE -WINDOW WALL
WINDOW:	764 SF	GLASS BLOCK
WINDOW:	0 SF	FIBERGLASS PANEL
TOTAL	3,632 SF	

Age
BOILER DATE: 1952 61
BOILER DATE: 1977

PLUMBING FIXTURES:
WC 10
U 5
S 6
WS 2
TOTAL 23

DOOR: 74 UNITS INTERIOR
DOOR: 13 UNITS EXTERIOR
TOTAL 87 UNITS 5308 EUI 10/2013

PERIMETER 1444 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
																										COMP	SUB
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	1,444	LF	\$1.00	\$1,444	\$5.00	\$7,220	\$8,664	\$1,733	\$87	\$10,483	4771	1.11	\$1,153	\$11,637	\$1,396	\$233	\$13,266	\$2,653	\$15,919	\$100	159.2	
2	1	B	1	Exterior Steps/Retaining Walls		0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
3	1	B	1	Exterior Walls	Trim and remove trees on west side of building to prevent moisture intrusion and degradation of exterior envelope.	500	SF	\$0.00	\$0	\$2.50	\$1,250	\$1,250	\$250	\$13	\$1,513	4771	1.11	\$166	\$1,679	\$201	\$34	\$1,914	\$383	\$2,297	N/A	0.0	
4	1	B	2	Exterior Walls	Replace expansion joint near room 119.	20	LF	\$1.00	\$20	\$4.00	\$80	\$100	\$20	\$1	\$121	4771	1.11	\$13	\$134	\$16	\$3	\$153	\$31	\$184	N/A	0.0	
5	1	B	3	Exterior Walls	Relocate dryer vent in glass in room 118 and replace glazing.	1	LS	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0	
6	1	B	4	Exterior Walls	Repoint masonry above window in room 121, room 217, room 111, east side of 1953, 108/109, 116, 214, 201 expansion joint, north entry	500	SF	\$5.00	\$2,500	\$10.00	\$5,000	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0	
7	1	B	5	Exterior Walls	Paint lintels on new addition.	200	LF	\$0.50	\$100	\$0.50	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0	
8	2	A	1	Exterior Wall Insulation	Install 2-inch insulated metal panel system on exterior walls of gymnasium.	3,600	SF	\$7.00	\$25,200	\$5.00	\$18,000	\$43,200	\$8,640	\$432	\$52,272	4771	1.11	\$5,750	\$58,022	\$6,963	\$1,160	\$66,145	\$13,229	\$79,374	\$1,000	79.4	
9	2	B	1	Window replacement	The building has large amounts of single pane windows with glass block above. Replace glass block with insulated metal panel and operable windows with 2 fixed and one operable window.	1,347	SF	\$21.00	\$28,287	\$15.00	\$20,205	\$48,492	\$9,698	\$485	\$58,675	4771	1.11	\$6,454	\$65,130	\$7,816	\$1,303	\$74,248	\$14,850	\$89,097	\$1,917	46.5	
10	2	B	2	Window replacement	Replace damaged double pane windows in room 110, 111, 108, 221A and operable windows in 1977 addition to prevent moisture intrusion and degradation of exterior envelope.	952	SF	\$10.00	\$9,520	\$10.00	\$9,520	\$19,040	\$3,808	\$190	\$23,038	4771	1.11	\$2,534	\$25,573	\$3,069	\$511	\$29,153	\$5,831	\$34,983	N/A	0.0	
11	2	B	3	Window replacement	Replace fixed glazing in library windows	600	SF	\$21.00	\$12,600	\$15.00	\$9,000	\$21,600	\$4,320	\$216	\$26,136	4771	1.11	\$2,875	\$29,011	\$3,481	\$580	\$33,072	\$6,614	\$39,687	N/A	0.0	
12	2	C	1	Exterior Door Replacement	Replace exterior doors with insulated hollow metal doors with double pane glazing.	13	EA	\$1,300.00	\$16,900	\$750.00	\$9,750	\$26,650	\$5,330	\$267	\$32,247	4771	1.11	\$3,547	\$35,794	\$4,295	\$716	\$40,805	\$8,161	\$48,966	\$2,493	0.0	
13	2	C	2	Exterior Door Replacement	Repair gaps in west exit door from 2008 addition. Provide door seals on boiler room & cold storage doors.	1	EA	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0	
14	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
15	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
16	3	B	1	Stair Treads/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
17	4	A	1	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
18	4	B	1	Roof Covering	Replace roof membrane over gymnasium.	7,746	SF	\$2.00	\$15,492	\$1.00	\$7,746	\$23,238	\$4,648	\$232	\$28,118	4771	1.11	\$3,093	\$31,211	\$3,745	\$624	\$35,580	\$7,116	\$42,697	N/A	0.0	
19	4	B	2	Roof Covering	Cover concrete parapet caps with metal to prevent moisture intrusion and degradation of exterior envelope.	300	LF	\$12.00	\$3,600	\$10.00	\$3,000	\$6,600	\$1,320	\$66	\$7,986	4771	1.11	\$878	\$8,864	\$1,064	\$177	\$10,105	\$2,021	\$12,127	N/A	0.0	
20	4	B	3	Roof Covering	Terminate TPO roof membrane on masonry surface.	100	LF	\$5.00	\$500	\$5.00	\$500	\$1,000	\$200	\$10	\$1,210	4771	1.11	\$133	\$1,343	\$161	\$27	\$1,531	\$306	\$1,837	N/A	0.0	
21	4	B	4	Roof Covering	Provide gutters, downspouts and drywells on north and south side of 1977 addition & room 111.	300	LF	\$2.50	\$750	\$5.00	\$1,500	\$2,250	\$450	\$23	\$2,723	4771	1.11	\$299	\$3,022	\$363	\$60	\$3,445	\$689	\$4,134	N/A	0.0	
22	4	B	5	Roof Covering	Provide downspouts and splash blocks on either side of gymnasium air handling mezzanine & at north entry.	40	LF	\$70.00	\$2,800	\$4.00	\$160	\$2,960	\$592	\$30	\$3,582	4771	1.11	\$394	\$3,976	\$477	\$80	\$4,532	\$906	\$5,439	N/A	0.0	
23	4	B	6	Roof Covering	Cover wood fascia on 1953 building with metal to prevent moisture intrusion and degradation of building envelope.	120	LF	\$12.00	\$1,440	\$10.00	\$1,200	\$2,640	\$528	\$26	\$3,194	4771	1.11	\$351	\$3,546	\$425	\$71	\$4,042	\$808	\$4,851	N/A	0.0	
24	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the 1950's roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	32,517	SF	\$2.00	\$65,034	\$1.00	\$32,517	\$97,551	\$19,510	\$976	\$118,037	4771	1.11	\$12,984	\$131,021	\$15,722	\$2,620	\$149,364	\$29,873	\$179,236	\$1,162	154.2	

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																													
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)																													
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																																												
25	5	A	1	Interior Walls	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
26	5	B	1	Ceilings	4,500	SF	\$2.00	\$9,000	\$2.00	\$9,000	\$18,000	\$3,600	\$180	\$21,780	4771	1.11	\$2,396	\$24,176	\$2,901	\$484	\$27,560	\$5,512	\$33,072	N/A	0.0																													
27	5	C	1	Interior Doors/Hardware/Windows	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
28	5	D	1	Floor Finishes	24,467	SF	\$3.50	\$85,635	\$1.50	\$36,701	\$122,335	\$24,467	\$1,223	\$148,025	4771	1.11	\$16,283	\$164,308	\$19,717	\$3,286	\$187,311	\$37,462	\$224,774	N/A	0.0																													
29	5	E	1	Paint	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
30	6	A	1	Toilet Partitions	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
31	6	B	1	Signage/Directories	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
32	6	C	1	Fixed Seating/Risers	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
33	6	D	1	Chalk/Tack boards/Cabinets	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
34	6	E	1	Fume Hoods	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
35	6	F	1	Lockers	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
36	6	G	1	Cells and Visitor Cubicles	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
37	6	H	1	Ansul Hoods	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
38	6	I	1	Swimming Pools	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
39	7	A	1	Heating	1	EA	\$85,000.00	\$85,000	\$35,000.00	\$35,000	\$120,000	\$24,000	\$1,200	\$145,200	4771	1.11	\$15,972	\$161,172	\$19,341	\$3,223	\$183,736	\$36,747	\$220,483	\$1,162	189.7																													
40	7	A	2	Heating	12,000	SF	\$6.50	\$78,000	\$6.50	\$78,000	\$156,000	\$31,200	\$1,560	\$188,760	4771	1.11	\$20,764	\$209,524	\$25,143	\$4,190	\$238,857	\$47,771	\$286,628	N/A	0.0																													
41	7	B	1	Ventilating	1	EA	\$2,500.00	\$2,500	\$1,000.00	\$1,000	\$3,500	\$700	\$35	\$4,235	4771	1.11	\$466	\$4,701	\$564	\$94	\$5,359	\$1,072	\$6,431	\$100	64.3																													
42	7	C	1	Cooling	1	EA	\$5,000.00	\$5,000	\$2,500.00	\$2,500	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0																													
43	7	D	1	Temperature Controls	50,045	SF	\$0.75	\$37,534	\$0.75	\$37,534	\$75,068	\$15,014	\$751	\$90,832	4771	1.11	\$9,991	\$100,823	\$12,099	\$2,016	\$114,938	\$22,988	\$137,926	\$2,500	55.2																													
44	7	E	1	Commissioning	50,045	SF	\$0.00	\$0	\$0.50	\$25,023	\$25,023	\$5,005	\$250	\$30,277	4771	1.11	\$3,330	\$33,608	\$4,033	\$672	\$38,313	\$7,663	\$45,975	\$2,500	18.4																													
45	8	A	1	Plumbing Fixtures	20	EA	\$500.00	\$10,000	\$100.00	\$2,000	\$12,000	\$2,400	\$120	\$14,520	4771	1.11	\$1,597	\$16,117	\$1,934	\$322	\$18,374	\$3,675	\$22,048	N/A	0.0																													
46	8	B	1	Plumbing Supply	0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
47	8	C	1	Plumbing Waste	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
48	9	A	1	Building Service	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
49	9	B	1	Lighting	1	LS	\$4,942.00	\$4,942	\$5,985.00	\$5,985	\$10,927	\$2,185	\$109	\$13,222	4771	1.11	\$1,454	\$14,676	\$1,761	\$294	\$16,731	\$3,346	\$20,077	\$2,523	8.0																													
50	9	C	1	Distribution	1	LS	\$8,550.00	\$8,550	\$7,800.00	\$7,800	\$16,350	\$3,270	\$164	\$19,784	4771	1.11	\$2,176	\$21,960	\$2,635	\$439	\$25,034	\$5,007	\$30,041	N/A	0.0																													
51	9	D	1	Voice/Data	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
52	9	E	1	Clock/Bell/intercom	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
53	9	F	1	Security	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
54	10	A	1	Elevator/Lift	1	EA	\$100,000.00	\$100,000	\$25,000.00	\$25,000	\$125,000	\$25,000	\$1,250	\$151,250	4771	1.11	\$16,638	\$167,888	\$20,147	\$3,358	\$191,392	\$38,278	\$229,670	N/A	0.0																													
55	11	A	1	Egress	200	SF	\$10.00	\$2,000	\$10.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0																													
56	11	B	1	Extinguishing System	2,000	SF	\$2.00	\$4,000	\$2.00	\$4,000	\$8,000	\$1,600	\$80	\$9,680	4771	1.11	\$1,065	\$10,745	\$1,289	\$215	\$12,249	\$2,450	\$14,699	N/A	0.0																													
57	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$225.00	\$225	\$150.00	\$150	\$375	\$75	\$4	\$454	4771	1.11	\$50	\$504	\$60	\$10	\$574	\$115	\$689	\$110	6.3																													
58	11	C	2	Exit Signs/Emergency Lighting/Alarms	50,045	SF	\$0.38	\$19,017	\$0.38	\$19,017	\$38,034	\$7,607	\$380	\$46,021	4771	1.11	\$5,062	\$51,084	\$6,130	\$1,022	\$58,235	\$11,647	\$69,883	N/A	0.0																													
59	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
60	11	E	1	Handicap Accessibility	74	EA	\$1,000.00	\$74,000	\$500.00	\$37,000	\$111,000	\$22,200	\$1,110	\$134,310	4771	1.11	\$14,774	\$149,084	\$17,890	\$2,982	\$169,956	\$33,991	\$203,947	N/A	0.0																													
61	12	A	1	Missing Program Elements	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																												
TOTAL PROJECT COSTS																							\$2,110,268																															
REPLACEMENT VALUE					50,045	SF	\$85.00	\$4,253,825	\$45.00	\$2,252,025	\$6,505,850	\$1,301,170	\$65,059	\$7,872,079	4771	1.11	\$865,929	\$8,738,007	\$699,041	\$174,760	\$9,611,808	\$1,922,362	\$11,534,169																															
TOTAL POTENTIAL ENERGY SAVINGS:																							\$14,467																															
CURRENT UTILITY COSTS																							\$50,511																															
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																							29%																															

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana



BUILDING INFORMATION

HELLGATE HIGH SCHOOL

ENROLLMENT 1259
ACRES: 3.7
AUDIT DATE: 8/10-11/2009
Current Year 2013

SF/STUDENT 195
STUDENTS/AC 340.27
EUI 71.78 kBTU/SF/yr

Total Project Cost: \$7,400,414
Replacement Value: \$56,626,561
Total Project Cost/Replacement Value: 13.1%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: 1908 105 Age
ADDITION #1 1921 92
ADDITION #2 1931 82
ADDITION #3 1941 72
ADDITION #4 1980 33
ADDITION #5 2003 10

BUILDING AREA 28,261 SF BUR: 2,645 SF ROOF DATE 1908 105 Age
BUILDING AREA 32,606 SF HYP/BUR: 29,229 SF ROOF DATE 1980 33
BUILDING AREA 32,950 SF BALLAST HYP 3,688 SF ROOF DATE 1980 33
BUILDING AREA 59,360 SF HYP 34,094 SF ROOF DATE 1980 33
BUILDING AREA 67,773 SF BALLAST TPO 7,758 SF ROOF DATE 2003 10
BUILDING AREA 24,744 SF TPO: 832 SF ROOF DATE 2003 10
TOTAL 245,694 SF TOTAL 78,246 SF

WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 13,971 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 805 SF SINGLE PANE -WINDOW WALL
WINDOW: 3,000 SF DOUBLE PANE -WINDOW WALL
WINDOW: 379 SF GLASS BLOCK
WINDOW: 0 SF FIBERGLASS PANEL
TOTAL 18,155 SF

BOILER DATE: 1941 72 Age
BOILER DATE: 1941 72
BOILER DATE: 1994 19
BOILER DATE: 1994 19
BOILER DATE: 1998 15
BOILER DATE: 2003 10
BOILER DATE: 2003 10

PLUMBING FIXTURES:
WC 44
U 24
S 43
WS 0
TOTAL 111

DOOR: 347 UNITS INTERIOR
DOOR: 72 UNITS EXTERIOR
TOTAL 419 UNITS 5308 EUI 10/2013

PERIMETER 2792 LF

COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)	
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	2,792	LF	\$1.00	\$2,792	\$5.00	\$13,960	\$16,752	\$3,350	\$168	\$20,270	4771	1.11	\$2,230	\$22,500	\$2,700	\$450	\$25,650	\$5,130	\$30,779	\$200	153.9
2	1	B	1	Exterior Steps/Retaining Walls	Repair west entry stairs to prevent moisture intrusion.	500	SF	\$3.00	\$1,500	\$6.00	\$3,000	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0
3	1	B	2	Exterior Steps/Retaining Walls	Re-grade south courtyard to prevent moisture intrusion to boiler room below, provide loading dock for kitchen and janitorial area, landing for west exit door from locker room and west exit from music.	5,000	SF	\$5.00	\$25,000	\$5.00	\$25,000	\$50,000	\$10,000	\$500	\$60,500	4771	1.11	\$6,655	\$67,155	\$8,059	\$1,343	\$76,557	\$15,311	\$91,868	N/A	0.0
4	1	B	3	Exterior Steps/Retaining Walls	exposed walkway between 2003 addition and 1908 building to prevent moisture intrusion into both buildings and damage to walkway.	800	SF	\$20.00	\$16,000	\$20.00	\$16,000	\$32,000	\$6,400	\$320	\$38,720	4771	1.11	\$4,259	\$42,979	\$5,158	\$860	\$48,996	\$9,799	\$58,796	N/A	0.0
5	2	A	1	Exterior Wall Insulation		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
6	2	B	1	Window replacement	Replace window in room 132. Replace single pane glazing in east entry to 1941 addition. Remove ticket booth and provide additional exit doors in this location.	805	SF	\$21.00	\$16,905	\$15.00	\$12,075	\$28,980	\$5,796	\$290	\$35,066	4771	1.11	\$3,857	\$38,923	\$4,671	\$778	\$44,372	\$8,874	\$53,247	\$4,459	11.9
7	2	B	2	Window replacement	Replace seals in operable windows and operable windows with moisture between panes in 1980 addition. Replace windows that won't close.	3,000	SF	\$21.00	\$63,000	\$15.00	\$45,000	\$108,000	\$21,600	\$1,080	\$130,680	4771	1.11	\$14,375	\$145,055	\$17,407	\$2,901	\$165,362	\$33,072	\$198,435	NA	0.0
8	2	B	3	Window replacement	Repaint exterior window trim to prevent moisture intrusion.	12,000	LF	\$0.50	\$6,000	\$0.50	\$6,000	\$12,000	\$2,400	\$120	\$14,520	4771	1.11	\$1,597	\$16,117	\$1,934	\$322	\$18,374	\$3,675	\$22,048	N/A	0.0
9	2	C	1	Exterior Door Replacement	Replace un-insulated overhead doors to room 407C & 402.	200	SF	\$16.00	\$3,200	\$4.00	\$800	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	\$250	29.4
10	2	C	2	Exterior Door Replacement	Replace exterior doors with thermally broken storefront aluminum doors with double pane glazing.	72	EA	\$1,300.00	\$93,600	\$750.00	\$54,000	\$147,600	\$29,520	\$1,476	\$178,596	4771	1.11	\$19,646	\$198,242	\$23,789	\$3,965	\$225,995	\$45,199	\$271,194	\$500	542.4
11	2	C	1	Exterior Walls	Reconstruct exterior walls and roof of original boiler room to prevent moisture intrusion.	100	LF	\$45.00	\$4,500	\$45.00	\$4,500	\$9,000	\$1,800	\$90	\$10,890	4771	1.11	\$1,198	\$12,088	\$1,451	\$242	\$13,780	\$2,756	\$16,536	N/A	0.0
12	2	C	2	Exterior Walls	of epoxy material, replace missing bricks in 1908, 1921, 1932, 1941 buildings where exterior exit stairs and exit doors have been removed to prevent moisture intrusion.	931	SF	\$5.00	\$4,653	\$10.00	\$9,307	\$13,960	\$2,792	\$140	\$16,892	4771	1.11	\$1,858	\$18,750	\$2,250	\$375	\$21,375	\$4,275	\$25,650	N/A	0.0
13	2	D	1	Interior Columns/Beams		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	3	A	1	Floor Structure		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	3	B	1	Stair Treads/Risers	Provide handrails on north entry stairs to north courtyard and to 1941 gym seating	100	LF	\$10.00	\$1,000	\$10.00	\$1,000	\$2,000	\$400	\$20	\$2,420	4771	1.11	\$266	\$2,686	\$322	\$54	\$3,062	\$612	\$3,675	N/A	0.0
16	4	A	1	Roof structure	Tie roof deck to parapet when replacing roof	900	LF	\$5.00	\$4,500	\$20.00	\$18,000	\$22,500	\$4,500	\$225	\$27,225	4771	1.11	\$2,995	\$30,220	\$3,626	\$604	\$34,451	\$6,890	\$41,341	N/A	0.0
17	4	B	1	Roof Covering	Repair masonry below cast in place concrete coping and provide new metal copings to prevent moisture intrusion.	960	LF	\$5.00	\$4,800	\$10.00	\$9,600	\$14,400	\$2,880	\$144	\$17,424	4771	1.11	\$1,917	\$19,341	\$2,321	\$387	\$22,048	\$4,410	\$26,458	N/A	0.0
18	4	B	2	Roof Covering	Replace underside of elevated walkway	960	SF	\$2.00	\$1,920	\$5.00	\$4,800	\$6,720	\$1,344	\$67	\$8,131	4771	1.11	\$894	\$9,026	\$1,083	\$181	\$10,289	\$2,058	\$12,347	N/A	0.0
19	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the gymnasium roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	67,011	SF	\$2.00	\$134,022	\$1.00	\$67,011	\$201,033	\$40,207	\$2,010	\$243,250	4771	1.11	\$26,757	\$270,007	\$32,401	\$5,400	\$307,808	\$61,562	\$369,370	\$18,102	20.4
20	5	A	1	Interior Walls		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500	0.0
21	5	B	1	Ceilings	Remove ceiling tiles in 1941 gymnasium to expose structure and allow for replacement of new air handling system. Acoustic treatment, if needed in contingency.	14,400	SF	\$0.00	\$0	\$1.00	\$14,400	\$14,400	\$2,880	\$144	\$17,424	4771	1.11	\$1,917	\$19,341	\$2,321	\$387	\$22,048	\$4,410	\$26,458	N/A	0.0
22	5	B	2	Ceilings	Replace damaged ceiling tiles in room 405.	250	SF	\$2.00	\$500	\$2.00	\$500	\$1,000	\$200	\$10	\$1,210	4771	1.11	\$133	\$1,343	\$161	\$27	\$1,531	\$306	\$1,837	N/A	0.0
23	5	B	3	Ceilings	Complete ceiling tile in room 336	1,000	SF	\$2.00	\$2,000	\$2.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0
24	5	C	1	Interior Doors/Hardware/Windows	Provide closers on classroom doors.	174	EA	\$75.00	\$13,013	\$50.00	\$8,675	\$21,688	\$4,338	\$217	\$26,242	4771	1.11	\$2,887	\$29,128	\$3,495	\$583	\$33,206	\$6,641	\$39,848	N/A	0.0
25	5	D	1	Floor Finishes		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0



BUILDING INFORMATION

JEFFERSON
ENROLLMENT 74
ACRES: 5.5
8/17/2009
Current Year 2013

SF/STUDENT 402
STUDENTS/AC 13.455
EUI 103.62 kBTU/SF/yr

Total Project Cost: \$1,797,233
Replacement Value: \$6,860,578
Total Project Cost/Replacement Value: 26.2%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: Age
ADDITION #1 1951 62
ADDITION #2 1954 59
ADDITION #3 0 0
ADDITION #4 0 0
ADDITION #5 0 0

BUILDING AREA 22,317 SF BUR: 1,336 SF ROOF DATE 1951 62 Age
BUILDING AREA 7,450 SF METAL: 10,722 SF ROOF DATE 1980 33
BUILDING AREA 0 SF TPO/BUR: 6,419 SF ROOF DATE 2000 13
BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE 0 0
BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE
BUILDING AREA 0 SF ROOF AREA SF ROOF DATE
TOTAL 29,767 SF TOTAL 18,477 SF

WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 36 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 2,434 SF SINGLE PANE -WINDOW WALL
WINDOW: 0 SF DOUBLE PANE -WINDOW WALL
WINDOW: 1,769 SF GLASS BLOCK
WINDOW: 430 SF FIBERGLASS PANEL
TOTAL 4,669 SF

BOILER DATE: Age
BOILER DATE: 1951 62
BOILER DATE: 0
BOILER DATE:

PLUMBING FIXTURES:
WC 19
U 9
S 9
WS 0
TOTAL 37

DOOR: 58 UNITS INTERIOR
DOOR: 12 UNITS EXTERIOR
TOTAL 70 UNITS 5308 EUI 10/2013

PERIMETER 712 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
																										COMP
						No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	712	LF	\$1.00	\$712	\$5.00	\$3,560	\$4,272	\$854	\$43	\$5,169	4771	1.11	\$569	\$5,738	\$689	\$115	\$6,541	\$1,308	\$7,849	\$50	157.0
2	1	B	1	Exterior Steps/Retaining Walls	Provide accessible route from south exit.	500	SF	\$3.00	\$1,500	\$6.00	\$3,000	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0
3	2	A	1	Exterior Walls	Repoint brick in west wing, repair failing concrete column at south entry to prevent moisture intrusion and degradation of exterior envelope.	200	SF	\$5.00	\$1,000	\$10.00	\$2,000	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	\$50	110.2
4	2	A	2	Exterior Walls	Replace north exit stair with enclosed to prevent moisture intrusion and degradation of exterior envelope.	600	SF	\$45.00	\$27,000	\$45.00	\$27,000	\$54,000	\$10,800	\$540	\$65,340	4771	1.11	\$7,187	\$72,527	\$8,703	\$1,451	\$82,681	\$16,536	\$99,217	N/A	0.0
5	2	A	1	Exterior Wall Insulation		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
6	2	B	1	Window replacement	The building has large amounts of single pane windows with glass block above. Replace glass block with insulated metal panel and operable windows with 2 fixed and one operable window.	4,239	SF	\$24.00	\$101,736	\$21.00	\$89,019	\$190,755	\$38,151	\$1,908	\$230,814	4771	1.11	\$25,389	\$256,203	\$30,744	\$5,124	\$292,071	\$58,414	\$350,486	\$2,552	137.3
7	2	B	2	Window replacement	Replace gym windows	430	SF	\$35.00	\$15,050	\$7.00	\$3,010	\$18,060	\$3,612	\$181	\$21,853	4771	1.11	\$2,404	\$24,256	\$2,911	\$485	\$27,652	\$5,530	\$33,183	\$250	132.7
8	2	B	3	Window replacement	Replace broken windows above south	100	SF	\$10.00	\$1,000	\$15.00	\$1,500	\$2,500	\$500	\$25	\$3,025	4771	1.11	\$333	\$3,358	\$403	\$67	\$3,828	\$766	\$4,593	\$50	91.9
9	2	B	4	Window replacement	side.	100	LF	\$12.00	\$1,200	\$10.00	\$1,000	\$2,200	\$440	\$22	\$2,662	4771	1.11	\$293	\$2,955	\$355	\$59	\$3,368	\$674	\$4,042	N/A	0.0
10	2	C	1	Exterior Door Replacement	Replace exterior doors with insulated hollow metal doors with double pane	12	EA	\$1,300.00	\$15,600	\$750.00	\$9,000	\$24,600	\$4,920	\$246	\$29,766	4771	1.11	\$3,274	\$33,040	\$3,965	\$661	\$37,666	\$7,533	\$45,199	\$200	226.0
11	2	D	1	Interior Columns/Beams		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
12	3	A	1	Floor Structure		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
13	3	B	1	Stair Treads/Risers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	4	A	1	Roof structure		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	4	B	1	Roof Covering	Replace roof membrane	1,336	SF	\$2.00	\$2,672	\$1.00	\$1,336	\$4,008	\$802	\$40	\$4,850	4771	1.11	\$533	\$5,383	\$646	\$108	\$6,137	\$1,227	\$7,364	\$100	73.6
16	4	B	2	Roof Covering	Provide gutters, downspouts and drywell on east & west sides of building & south entry.	200	LF	\$2.50	\$500	\$5.00	\$1,000	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0
17	4	B	3	Roof Covering	Provide roof access & 3 roof ladders	4	EA	\$1,000.00	\$4,000	\$500.00	\$2,000	\$6,000	\$1,200	\$60	\$7,260	4771	1.11	\$799	\$8,059	\$967	\$161	\$9,187	\$1,837	\$11,024	N/A	0.0
18	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the gymnasium roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	1,336	SF	\$2.00	\$2,672	\$1.00	\$1,336	\$4,008	\$802	\$40	\$4,850	4771	1.11	\$533	\$5,383	\$646	\$108	\$6,137	\$1,227	\$7,364	\$1,406	5.2
19	5	A	1	Interior Walls		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
20	5	B	1	Ceilings		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
21	5	C	1	Interior Doors/Hardware/Windows		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
22	5	D	1	Floor Finishes		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
23	5	E	1	Paint		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
24	6	A	1	Toilet Partitions		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
25	6	B	1	Signage/Directories		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
26	6	C	1	Fixed Seating/Risers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
27	6	D	1	Chalk/Tack boards/Cabinets		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
28	6	E	1	Fume Hoods		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
29	6	F	1	Lockers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
30	6	G	1	Cells and Visitor Cubicles		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
31	6	H	1	Ansul Hoods	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
32	6	I	1	Swimming Pools	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
33	7	A	1	Heating	1	EA	\$85,000.00	\$85,000	\$35,000.00	\$35,000	\$120,000	\$24,000	\$1,200	\$145,200	4771	1.11	\$15,972	\$161,172	\$19,341	\$3,223	\$183,736	\$36,747	\$220,483	\$1,406	156.8																					
34	7	A	2	Heating	29,767	EA	\$6.50	\$193,486	\$6.50	\$193,486	\$386,971	\$77,394	\$3,870	\$468,235	4771	1.11	\$51,506	\$519,741	\$62,369	\$10,395	\$592,504	\$118,501	\$711,005	N/A	0.0																					
35	7	B	1	Ventilating	1	EA	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0																					
36	7	C	1	Cooling	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
37	7	D	1	Temperature Controls	29,767	SF	\$0.75	\$22,325	\$0.75	\$22,325	\$44,651	\$8,930	\$447	\$54,027	4771	1.11	\$5,943	\$59,970	\$7,196	\$1,199	\$68,366	\$13,673	\$82,039	\$1,500	54.7																					
38	7	E	1	Commissioning	29,767	SF	\$0.00	\$0	\$0.50	\$14,884	\$14,884	\$2,977	\$149	\$18,009	4771	1.11	\$1,981	\$19,990	\$2,399	\$400	\$22,789	\$4,558	\$27,346	N/A	0.0																					
39	8	A	1	Plumbing Fixtures	37	EA	\$500.00	\$18,500	\$100.00	\$3,700	\$22,200	\$4,440	\$222	\$26,862	4771	1.11	\$2,955	\$29,817	\$3,578	\$596	\$33,991	\$6,798	\$40,789	N/A	0.0																					
40	8	B	1	Plumbing Supply	1	EA	\$100.00	\$100	\$50.00	\$50	\$150	\$30	\$2	\$182	4771	1.11	\$20	\$201	\$24	\$4	\$230	\$46	\$276	N/A	0.0																					
41	8	C	1	Plumbing Waste	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
42	9	B	1	Lighting	1	LS	\$9,036.00	\$9,036	\$11,865.00	\$11,865	\$20,901	\$4,180	\$209	\$25,290	4771	1.11	\$2,782	\$28,072	\$3,369	\$561	\$32,002	\$6,400	\$38,403	\$2,894	13.3																					
43	9	C	1	Distribution	1	LS	\$8,675.00	\$8,675	\$2,675.00	\$2,675	\$11,350	\$2,270	\$114	\$13,734	4771	1.11	\$1,511	\$15,244	\$1,829	\$305	\$17,378	\$3,476	\$20,854	N/A	0.0																					
44	9	D	1	Voice/Data	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
45	9	E	1	Clock bell	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
46	10	A	1	Elevator/Lift	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
47	11	A	1	Egress	400	SF	\$5.00	\$2,000	\$5.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0																					
48	11	B	1	Extinguishing System	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
49	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$360.00	\$360	\$240.00	\$240	\$600	\$120	\$6	\$726	4771	1.11	\$80	\$806	\$97	\$16	\$919	\$184	\$1,102	\$176	6.3																					
50	11	C	2	Exit Signs/Emergency Lighting/Alarms	29,767	SF	\$0.38	\$11,311	\$0.38	\$11,311	\$22,623	\$4,525	\$226	\$27,374	4771	1.11	\$3,011	\$30,385	\$3,646	\$608	\$34,639	\$6,928	\$41,566	N/A	0.0																					
51	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
52	11	E	1	Handicap Accessibility Missing Program Elements	58	EA	\$200.00	\$11,600	\$50.00	\$2,900	\$14,500	\$2,900	\$145	\$17,545	4771	1.11	\$1,930	\$19,475	\$2,337	\$389	\$22,201	\$4,440	\$26,642	N/A	0.0																					
53	12	A	1		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
TOTAL PROJECT COSTS																								\$1,797,233																						
REPLACEMENT VALUE					29,767	SF	\$85.00	\$2,530,195	\$45.00	\$1,339,515	\$3,869,710	\$773,942	\$38,697	\$4,682,349	4771	1.11	\$515,058	\$5,197,408	\$415,793	\$103,948	\$5,717,148	\$1,143,430	\$6,860,578																							
TOTAL POTENTIAL ENERGY SAVINGS:																								\$10,584																						
CURRENT UTILITY COSTS																								\$31,565																						
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																								34%																						



BUILDING INFORMATION

LEWIS & CLARK

ENROLLMENT 461
ACRES: 10
AUDIT DATE: 8/6/2009
Current Year 2013
Age
CONSTRUCTION DATE: 1954 59
ADDITION #1 1967 46
ADDITION #2 2008 5
ADDITION #3 0 0
ADDITION #4 0 0
ADDITION #5

SF/STUDENT 131
STUDENTS/AC 46.1
EUI 79.40 kBTU/SF/yr

Total Project Cost: \$3,614,967
Replacement Value: \$13,923,744
Total Project Cost/Replacement Value 26.0%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

BUILDING AREA 38,892 SF METAL: 14,815 SF ROOF DATE 1980 33
BUILDING AREA 19,041 SF TPO/BUR: 8,214 SF ROOF DATE 1998 15
BUILDING AREA 2,480 SF TPO/HYP: 19,041 SF ROOF DATE 2008 5
BUILDING AREA 0 SF TPO: 2,480 SF ROOF DATE 2008 5
BUILDING AREA 0 SF ROOF ARE/ 0 SF ROOF DATE
BUILDING AREA 0 SF ROOF ARE/ SF ROOF DATE
TOTAL 60,413 SF TOTAL 44,550 SF

Age
WINDOW: 152 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 0 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 3,620 SF SINGLE PANE -WINDOW WALL
WINDOW: 186 SF DOUBLE PANE -WINDOW WALL
WINDOW: 4,246 SF GLASS BLOCK
WINDOW: 0 SF FIBERGLASS PANEL
TOTAL 8,204 SF

Age
BOILER DATE: 1954 59

PLUMBING FIXTURES:
WC 22
U 16
S 18
WS 0
TOTAL 56

DOOR: 86 UNITS INTERIOR
DOOR: 14 UNITS EXTERIOR
TOTAL 100 UNITS 5308 EUI 10/2013
PERIMETER 1248 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
																										COMP	SUB
1	1	A	1	Foundation Wall Insulation	foundation wall.	1,248	LF	\$1.00	\$1,248	\$5.00	\$6,240	\$7,488	\$1,498	\$75	\$9,060	4771	1.11	\$997	\$10,057	\$1,207	\$201	\$11,465	\$2,293	\$13,758	\$100	137.6	
2	1	B	1	Exterior Steps/Retaining Walls		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
3	2	A	1	Exterior Wall Insulation	Install 2-inch Insulated metal panel system on exterior walls of gymnasium.	5,120	SF	\$7.00	\$35,840	\$5.00	\$25,600	\$61,440	\$12,288	\$614	\$74,342	4771	1.11	\$8,178	\$82,520	\$9,902	\$1,650	\$94,073	\$18,815	\$112,887	\$1,000	112.9	
4	2	A	2	Exterior Wall Insulation	Repair woodpecker holes in EIFS on east side to prevent moisture intrusion and degradation to exterior envelope.	100	SF	\$1.00	\$100	\$10.00	\$1,000	\$1,100	\$220	\$11	\$1,331	4771	1.11	\$146	\$1,477	\$177	\$30	\$1,684	\$337	\$2,021	\$50	40.4	
5	2	A	1	Exterior Walls	Replace failing joint sealants between masonry and spandrel panels.	1,000	LF	\$5.00	\$5,000	\$10.00	\$10,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	\$200	137.8	
6	2	A	2	Exterior Walls	Re-point brick on east side to prevent moisture intrusion on east and west side of building.	4,000	SF	\$5.00	\$20,000	\$10.00	\$40,000	\$60,000	\$12,000	\$600	\$72,600	4771	1.11	\$7,986	\$80,586	\$9,670	\$1,612	\$91,868	\$18,374	\$110,242	\$500	220.5	
7	2	B	1	Window replacement	The building has large amounts of single pane windows with glass block above. Replace glass block with insulated metal panel and operable windows with 2 fixed and one operable window.	8,018	SF	\$24.00	\$192,432	\$21.00	\$168,378	\$360,810	\$72,162	\$3,608	\$436,580	4771	1.11	\$48,024	\$484,604	\$58,152	\$9,692	\$552,448	\$110,490	\$662,938	\$3,473	190.9	
8	2	B	2	Window replacement	Replace missing glass block, north end of west elevation	5	EA	\$18.00	\$90	\$15.00	\$75	\$165	\$33	\$2	\$200	4771	1.11	\$22	\$222	\$27	\$4	\$253	\$51	\$303	\$25	12.1	
9	2	C	1	Exterior Door Replacement	Exterior doors are single pane, un insulated hollow metal doors. Replace with insulated hollow metal doors with double pane glazing.	14	EA	\$1,300.00	\$18,200	\$750.00	\$10,500	\$28,700	\$5,740	\$287	\$34,727	4771	1.11	\$3,820	\$38,547	\$4,626	\$771	\$43,944	\$8,789	\$52,732	\$200	263.7	
10	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
11	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
12	3	B	1	Stair Treads/Risers	Extend handrails in stairs to meet code.	100	LF	\$10.00	\$1,000	\$10.00	\$1,000	\$2,000	\$400	\$20	\$2,420	4771	1.11	\$266	\$2,686	\$322	\$54	\$3,062	\$612	\$3,675	N/A	0.0	
13	4	A	1	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	4	B	1	Roof Covering	Replace gymnasium roof to prevent moisture intrusion in roof assembly. Clean roof drains to allow roof to drain more rapidly.	8,214	SF	\$2.00	\$16,428	\$1.00	\$8,214	\$24,642	\$4,928	\$246	\$29,817	4771	1.11	\$3,280	\$33,097	\$3,972	\$662	\$37,730	\$7,546	\$45,276	\$500	90.6	
15	4	B	2	Roof Covering	Provide ladder to provide access from west roof to north roof and to gym roof.	1	LS	\$0.00	\$0	\$1,000.00	\$1,000	\$1,000	\$200	\$10	\$1,210	4771	1.11	\$133	\$1,343	\$161	\$27	\$1,531	\$306	\$1,837	N/A	0.0	
16	4	B	3	Roof Covering	Replace coping at top of entry tower.	50	LF	\$12.00	\$600	\$10.00	\$500	\$1,100	\$220	\$11	\$1,331	4771	1.11	\$146	\$1,477	\$177	\$30	\$1,684	\$337	\$2,021	N/A	0.0	
18	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the gymnasium roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	8,214	SF	\$2.00	\$16,428	\$1.00	\$8,214	\$24,642	\$4,928	\$246	\$29,817	4771	1.11	\$3,280	\$33,097	\$3,972	\$662	\$37,730	\$7,546	\$45,276	\$3,468	13.1	
19	5	A	1	Interior Walls		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
20	5	B	1	Ceilings		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
21	5	C	1	Interior Doors/Hardware/Windows		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
22	5	D	1	Floor Finishes		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
23	5	E	1	Paint		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
24	6	A	1	Toilet Partitions		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
25	6	B	1	Signage/Directories		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
26	6	C	1	Fixed Seating/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
27	6	D	1	Chalk/Tack boards/Cabinets		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
28	6	E	1	Fume Hoods		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
29	6	F	1	Lockers	0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
30	6	G	1	Cells and Visitor Cubicles	0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
31	6	H	1	Ansul Hoods	0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
32	6	I	1	Swimming Pools	0			\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
33	7	A	1	Heating	0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0																			
34	7	A	2	Heating	58,000	SF	\$6.50	\$377,000	\$6.50	\$377,000	\$754,000	\$150,800	\$7,540	\$912,340	4771	1.11	\$100,357	\$1,012,697	\$121,524	\$20,254	\$1,154,475	\$230,895	\$1,385,370	N/A	0.0																					
35	7	C	1	Cooling	6	EA	\$0.00	\$0	\$100.00	\$600	\$600	\$120	\$6	\$726	4771	1.11	\$80	\$806	\$97	\$16	\$919	\$184	\$1,102	N/A	0.0																					
36	7	D	1	Temperature Controls	60,413	SF	\$0.75	\$45,310	\$0.75	\$45,310	\$90,620	\$18,124	\$906	\$109,650	4771	1.11	\$12,061	\$121,711	\$14,605	\$2,434	\$138,751	\$27,750	\$166,501	\$2,900	57.4																					
37	7	E	1	Commissioning	60,413	SF	\$0.00	\$0	\$0.50	\$30,207	\$30,207	\$6,041	\$302	\$36,550	4771	1.11	\$4,020	\$40,570	\$4,868	\$811	\$46,250	\$9,250	\$55,500	N/A	0.0																					
38	8	A	1	Plumbing Fixtures	56	EA	\$500.00	\$28,000	\$100.00	\$5,600	\$33,600	\$6,720	\$336	\$40,656	4771	1.11	\$4,472	\$45,128	\$5,415	\$903	\$51,446	\$10,289	\$61,735	N/A	0.0																					
39	8	B	1	Plumbing Supply	0	LF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
40	8	C	1	Plumbing Waste	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
41	9	A	1	Building Service	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
42	9	B	1	Lighting	1	LS	\$6,047.00	\$6,047	\$6,890.00	\$6,890	\$12,937	\$2,587	\$129	\$15,654	4771	1.11	\$1,722	\$17,376	\$2,085	\$348	\$19,808	\$3,962	\$23,770	\$1,429	16.6																					
43	9	C	1	Distribution	1	LS	\$8,675.00	\$8,675	\$2,675.00	\$2,675	\$11,350	\$2,270	\$114	\$13,734	4771	1.11	\$1,511	\$15,244	\$1,829	\$305	\$17,378	\$3,476	\$20,854	N/A	0.0																					
44	9	D	1	Voice/Data	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
45	10	A	1	Elevator/Lift	1	LS	\$100,000.00	\$100,000	\$25,000.00	\$25,000	\$125,000	\$25,000	\$1,250	\$151,250	4771	1.11	\$16,638	\$167,888	\$20,147	\$3,358	\$191,392	\$38,278	\$229,670	N/A	0.0																					
46	11	A	1	Egress	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
47	11	B	1	Extinguishing System	60,413	SF	\$1.50	\$90,620	\$2.50	\$151,033	\$241,652	\$48,330	\$2,417	\$292,399	4771	1.11	\$32,164	\$324,563	\$38,948	\$6,491	\$370,002	\$74,000	\$444,002	N/A	0.0																					
48	11	C	1	Exit Signs/Emergency Lighting/Alarms	60,413	SF	\$0.38	\$22,957	\$0.38	\$22,957	\$45,914	\$9,183	\$459	\$55,556	4771	1.11	\$6,111	\$61,667	\$7,400	\$1,233	\$70,300	\$14,060	\$84,360	N/A	0.0																					
49	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
50	11	E	1	Handicap Accessibility	550	SF	\$10.00	\$5,500	\$10.00	\$5,500	\$11,000	\$2,200	\$110	\$13,310	4771	1.11	\$1,464	\$14,774	\$1,773	\$295	\$16,842	\$3,368	\$20,211	N/A	0.0																					
51	11	E	2	Handicap Accessibility	200	SF	\$10.00	\$2,000	\$10.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0																					
52	11	E	3	Handicap Accessibility	86	EA	\$200.00	\$17,200	\$50.00	\$4,300	\$21,500	\$4,300	\$215	\$26,015	4771	1.11	\$2,862	\$28,877	\$3,465	\$578	\$32,919	\$6,584	\$39,503	N/A	0.0																					
53	12	A	1	Missing Program Elements	0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
TOTAL PROJECT COSTS																											\$3,614,967																			
REPLACEMENT VALUE					60,413	SF	\$85.00	\$5,135,105	\$45.00	\$2,718,585	\$7,853,690	\$1,570,738	\$78,537	\$9,502,965	4771	1.11	\$1,045,326	\$10,548,291	\$843,863	\$210,966	\$11,603,120	\$2,320,624	\$13,923,744																							
TOTAL POTENTIAL ENERGY SAVINGS:																											\$13,745																			
CURRENT UTILITY COSTS																											\$58,473																			
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																												24%																		



BUILDING INFORMATION

LOWELL
ENROLLMENT 253
ACRES: 3.8
8/13/2009
Current Year 2013

SF/STUDENT 156
STUDENTS/AC 66.579
EUI 84.93 kBTU/SF/yr

Total Project Cost: \$1,618,829
Replacement Value: \$9,104,492
Total Project Cost/Replacement Value: 17.8%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: 1909 104
ADDITION #1 1935 78
ADDITION #2 1960 53
ADDITION #3 1990 23
ADDITION #4 1990 23
MODULAR 2012 1

BUILDING AREA	16,431 SF	ASPHALT:	14,703 SF	ROOF DATE	1988 25
BUILDING AREA	15,508 SF	METAL:	466 SF	ROOF DATE	1908 105
BUILDING AREA	4,550 SF	ASPHALT:	100 SF	ROOF DATE	1908 105
BUILDING AREA	144 SF	BALLASTED:	4,694 SF	ROOF DATE	1990 23
BUILDING AREA	580 SF	METAL:	580 SF	ROOF DATE	1990 23
BUILDING AREA	2,290 SF	ROOF AREA	2,290 SF	ROOF DATE	2012 1
TOTAL	39,503 SF	TOTAL	22,833 SF		

WINDOW:	1,854 SF	SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW:	1,961 SF	DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW:	0 SF	SINGLE PANE -WINDOW WALL
WINDOW:	0 SF	DOUBLE PANE -WINDOW WALL
WINDOW:	0 SF	GLASS BLOCK
WINDOW:	83 SF	FIBERGLASS PANEL
TOTAL	3,898 SF	

BOILER DATE: 2000 13
BOILER DATE:
BOILER DATE:
BOILER DATE:

PLUMBING FIXTURES:
WC 9
U 8
S 13
WS 0
TOTAL 30

DOOR: 78 UNITS INTERIOR
DOOR: 11 UNITS EXTERIOR
TOTAL 89 UNITS 5308 EUI 10/2013

PERIMETER 781 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	781	LF	\$1.00	\$781	\$5.00	\$3,905	\$4,686	\$937	\$47	\$5,670	4771	1.11	\$624	\$6,294	\$755	\$126	\$7,175	\$1,435	\$8,610	\$100	86.1																				
2	1	B	1	Exterior Steps/Retaining Walls	Replace exterior steps on north side of building to prevent moisture intrusion and degradation of exterior envelope.	200	SF	\$3.00	\$600	\$6.00	\$1,200	\$1,800	\$360	\$18	\$2,178	4771	1.11	\$240	\$2,418	\$290	\$48	\$2,756	\$551	\$3,307	N/A	0.0																				
3	2	A	1	Exterior Wall Insulation	Replace joint sealants	200	LF	\$5.00	\$1,000	\$10.00	\$2,000	\$3,000	\$600	\$30	\$6,000	4771	1.11	\$660	\$6,660	\$799	\$133	\$7,592	\$1,518	\$9,111	\$100	91.1																				
4	2	A	2	Exterior Wall	Replace missing and spalling brick/repoint brick, re-set stone sills to prevent moisture intrusion and degradation of exterior envelope.	1,000	SF	\$5.00	\$5,000	\$10.00	\$10,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	N/A	0.0																				
5	2	A	3	Exterior Wall	Replace EIFS on west wall of gymnasium windows with insulated metal panels.	83	SF	\$7.00	\$581	\$5.00	\$415	\$996	\$199	\$10	\$1,205	4771	1.11	\$133	\$1,338	\$161	\$27	\$1,525	\$305	\$1,830	N/A	0.0																				
6	2	A	4	Exterior Wall	Repaint wood columns to prevent moisture intrusion and degradation of exterior envelope.	150	SF	\$0.50	\$75	\$0.50	\$75	\$150	\$30	\$2	\$182	4771	1.11	\$20	\$201	\$24	\$4	\$230	\$46	\$276	N/A	0.0																				
7	2	B	1	Window replacement	Replace broken windows and screens to prevent moisture intrusion and degradation of exterior envelope.	100	SF	\$10.00	\$1,000	\$15.00	\$1,500	\$2,500	\$500	\$25	\$3,025	4771	1.11	\$333	\$3,358	\$403	\$67	\$3,828	\$766	\$4,593	\$100	45.9																				
8	2	B	2	Window replacement	Windows are single pane windows. Storm windows do not seal properly. Replace with double pane window system.	3,815	SF	\$45.00	\$171,675	\$15.00	\$57,225	\$228,900	\$45,780	\$2,289	\$276,969	4771	1.11	\$30,467	\$307,436	\$36,892	\$6,149	\$350,477	\$70,095	\$420,572	\$2,833	148.5																				
9	2	C	2	Exterior Door Replacement	Replace exterior doors with thermally broken storefront aluminum doors with double pane glazing.	7	EA	\$1,300.00	\$9,100	\$750.00	\$5,250	\$14,350	\$2,870	\$144	\$17,364	4771	1.11	\$1,910	\$19,273	\$2,313	\$385	\$21,972	\$4,394	\$26,366	\$250	105.5																				
10	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
11	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
12	3	B	1	Stair Treads/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
13	4	A	1	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
14	4	A	2	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
15	4	B	3	Roof Covering	Replace drip edge & fascia, provide gutter north and south side of 1960 wing.	150	LF	\$12.00	\$1,800	\$10.00	\$1,500	\$3,300	\$660	\$33	\$3,993	4771	1.11	\$439	\$4,432	\$532	\$89	\$5,053	\$1,011	\$6,063	N/A	0.0																				
16	4	B	4	Roof Covering	Replace hypalon roof without ballast.	4,694	SF	\$2.00	\$9,388	\$2.00	\$9,388	\$18,776	\$3,755	\$188	\$22,719	4771	1.11	\$2,499	\$25,218	\$3,026	\$504	\$28,749	\$5,750	\$34,498	\$500	69.0																				
17	4	B	5	Roof Covering	Replace asphalt shingle roof @ north entry	100	SF	\$1.50	\$150	\$2.50	\$250	\$400	\$80	\$4	\$484	4771	1.11	\$53	\$537	\$64	\$11	\$612	\$122	\$735	N/A	0.0																				
18	4	B	6	Roof Covering	Replace metal roof @ north entry	466	SF	\$5.50	\$2,563	\$2.00	\$932	\$3,495	\$699	\$35	\$4,229	4771	1.11	\$465	\$4,694	\$563	\$94	\$5,351	\$1,070	\$6,422	N/A	0.0																				
19	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the classroom roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	4,694	SF	\$2.00	\$9,388	\$1.00	\$4,694	\$14,082	\$2,816	\$141	\$17,039	4771	1.11	\$1,874	\$18,914	\$2,270	\$378	\$21,561	\$4,312	\$25,874	\$498	52.0																				
20	5	A	1	Interior Walls		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
21	5	B	1	Ceilings		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
22	5	C	1	Interior Doors/Hardware/Windows		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
23	5	D	1	Floor Finishes	Replace carpet in basement corridor, main office & room 302	2,000	SF	\$3.50	\$7,000	\$1.50	\$3,000	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	N/A	0.0																				
24	5	E	1	Paint		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
25	6	A	1	Toilet Partitions		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
26	6	B	1	Signage/Directories		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
27	6	C	1	Fixed Seating/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)		
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																	
28	6	D	1	Chalk/Tack boards/Cabinets		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
29	6	E	1	Fume Hoods		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
30	6	F	1	Lockers		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
31	6	G	1	Cells and Visitor Cubicles		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
32	6	H	1	Ansul Hoods		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
33	6	I	1	Swimming Pools		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
34	7	A	1	Heating	The unit ventilators are original to the building and have exceeded their useful service life. Replace with a new HVAC system.. Room 310 does not have heat.	39,503	SF	\$6.50	\$256,770	\$6.50	\$256,770	\$513,539	\$102,708	\$5,135	\$621,382	4771	1.11	\$68,352	\$689,734	\$82,768	\$13,795	\$786,297	\$157,259	\$943,556	N/A	0.0	
35	7	B	1	Ventilating	Provide ventilation in gymnasium	5,000	SF	\$6.50	\$32,500	\$6.50	\$32,500	\$65,000	\$13,000	\$650	\$78,650	4771	1.11	\$8,652	\$87,302	\$10,476	\$1,746	\$99,524	\$19,905	\$119,428	N/A	0.0	
36	7	C	3	Cooling	Provide cooling in computer room.	1	EA	\$5,000.00	\$5,000	\$2,500.00	\$2,500	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0	
37	7	D	1	Temperature Controls	Replace pneumatic temperature controls with DDC.	39,503	SF	\$0.75	\$29,627	\$0.75	\$29,627	\$59,255	\$11,851	\$593	\$71,698	4771	1.11	\$7,887	\$79,585	\$9,550	\$1,592	\$90,727	\$18,145	\$108,872	\$1,800	60.5	
38	7	E	1	Commissioning	Retro commission existing mechanical equipment.	39,503	SF	\$0.00	\$0	\$0.50	\$19,752	\$19,752	\$3,950	\$198	\$23,899	4771	1.11	\$2,629	\$26,528	\$3,183	\$531	\$30,242	\$6,048	\$36,291	N/A	0.0	
39	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	30	EA	\$500.00	\$15,000	\$100.00	\$3,000	\$18,000	\$3,600	\$180	\$21,780	4771	1.11	\$2,396	\$24,176	\$2,901	\$484	\$27,560	\$5,512	\$33,072	N/A	0.0	
40	8	B	1	Plumbing Supply		0		\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
41	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
42	9	A	1	Building Service		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
43	9	A	1	Building Service	Provide labels on service disconnect switches to identify loads that they serve.	1	LS	\$25.00	\$25	\$50.00	\$50	\$75	\$15	\$1	\$91	4771	1.11	\$10	\$101	\$12	\$2	\$115	\$23	\$138	N/A	0.0	
44	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps	1	LS	\$6,852.00	\$6,852	\$8,665.00	\$8,665	\$15,517	\$3,103	\$155	\$18,776	4771	1.11	\$2,065	\$20,841	\$2,501	\$417	\$23,759	\$4,752	\$28,510	\$2,239	12.7	
45	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$1,500.00	\$1,500	\$1,350.00	\$1,350	\$2,850	\$570	\$29	\$3,449	4771	1.11	\$379	\$3,828	\$459	\$77	\$4,364	\$873	\$5,236	N/A	0.0	
46	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
47	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
48	11	A	1	Egress	Provide enclosed exit stair from west end of third floor	900	SF	\$45.00	\$40,500	\$45.00	\$40,500	\$81,000	\$16,200	\$810	\$98,010	4771	1.11	\$10,781	\$108,791	\$13,055	\$2,176	\$124,022	\$24,804	\$148,826	N/A	0.0	
49	11	B	1	Extinguishing System		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
50	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	2	EA	\$45.00	\$90	\$30.00	\$60	\$150	\$30	\$2	\$182	4771	1.11	\$20	\$201	\$24	\$4	\$230	\$46	\$276	\$44	6.3	
51	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	39,503	SF	\$0.38	\$15,011	\$0.38	\$15,011	\$30,022	\$6,004	\$300	\$36,327	4771	1.11	\$3,996	\$40,323	\$4,839	\$806	\$45,968	\$9,194	\$55,162	N/A	0.0	
52	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
53	11	E	1	Handicap Accessibility	Reconfigure corridor ramp to comply with ADA, provide access to library computer room.	200	SF	\$10.00	\$2,000	\$10.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0	
54	12	A	2	Missing Program Elements		0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
TOTAL PROJECT COSTS REPLACEMENT VALUE						39,503	SF	\$85.00	\$3,357,755	\$45.00	\$1,777,635	\$5,135,390	\$1,027,078	\$51,354	\$6,213,822	4771	1.11	\$683,520	\$6,897,342	\$551,787	\$137,947	\$7,587,077	\$1,517,415	\$9,104,492			
TOTAL POTENTIAL ENERGY SAVINGS:																										\$5,331	
CURRENT UTILITY COSTS																										\$37,060	
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																											14%

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana



BUILDING INFORMATION

MAINTENANCE

AUDIT DATE: 8/17/2009
Current Year: 2013

STAFF: 14
ACRES: 1

SF/STAFF: 501
STAFF/AC: 14
EUI: 44.45 kBTU/SF/yr

Total Project Cost: \$57,632
Replacement Value: \$1,615,636
Total Project Cost/Replacement Value: 3.6%

General Contractor Gen. Cond. OH & P: 20%
MT Gross Receipts Tax: 1%
Escalation: 11%
AE Design Fees (Renovation/Remodel): 12%
Permit Fees: 2%
Contingency: 20%
AE Design Fees (New Construction): 8%

CONSTRUCTION DATE: 1992 21
ADDITION #1: 0 0
ADDITION #2: 0 0
ADDITION #3: 0 0
ADDITION #4: 0 0
ADDITION #5: 0 0

BUILDING AREA: 7,010 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
BUILDING AREA: 0 SF
TOTAL: 7,010 SF

METAL: 7,500 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
ROOF AREA: 0 SF
TOTAL: 7,500 SF

ROOF DATE: 1992 21
ROOF DATE: 0 0
ROOF DATE: 0 0
ROOF DATE: 0 0
ROOF DATE: 0 0
ROOF DATE: 0 0
TOTAL: 504 SF

BOILER DATE: 1992 21
BOILER DATE: 1992 21
BOILER DATE:
BOILER DATE:

PLUMBING FIXTURES:
WC: 1
U: 1
S: 1
WS: 0
TOTAL: 3

DOOR: 9 UNITS INTERIOR
DOOR: 4 UNITS EXTERIOR
TOTAL: 13 UNITS
5308 EUI 10/2013
PERIMETER: 339 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
																										COMP
1	1	A	1	Foundation Wall Insulation		0	LF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	1	B	1	Exterior Steps/ Walls		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	2	A	1	Exterior Walls	Replace rusted vent on north wall to prevent moisture intrusion and degradation of exterior wall assembly.	1	LS	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0
4	2	B	1	Window replacement		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	2	C	1	Exterior Door Replacement		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	2	D	1	Interior Columns/Beams		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	3	A	1	Floor Structure		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	3	B	1	Stair Treads/Risers		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
9	4	A	1	Roof structure		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	4	B	1	Roof Covering	Provide missing downspout on south wall to prevent moisture intrusion and degradation of exterior wall assembly.	15	LF	\$70.00	\$1,050	\$4.00	\$60	\$1,110	\$222	\$11	\$1,343	4771	1.11	\$148	\$1,491	\$179	\$30	\$1,700	\$340	\$2,039	N/A	0.0
11	4	C	1	Roof Insulation		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	5	A	1	Interior Walls		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	5	B	1	Ceilings		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	5	C	1	Interior Doors/Hardware		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	5	D	1	Floor Finishes		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	5	E	1	Paint		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	6	A	1	Toilet Partitions		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	6	B	1	Signage/Directories		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
19	6	C	1	Fixed Seating/Risers		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
20	6	D	1	Chalk/Tack boards/Cabinets		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
21	6	E	1	Fume Hoods		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
22	6	F	1	Lockers		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
23	6	G	1	Cells and Visitor Cubicles		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
24	6	H	1	Ansul Hoods		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
25	6	I	1	Swimming Pools		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
26	7	A	1	Heating		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
27	7	B	1	Ventilating		0	0	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	7	C	1	Cooling	Provide cooling for two rooms currently utilizing window mounted air conditioning units	2	EA	\$3,000.00	\$6,000	\$1,500.00	\$3,000	\$9,000	\$1,800	\$90	\$10,890	4771	1.11	\$1,198	\$12,088	\$1,451	\$242	\$13,780	\$2,756	\$16,536	N/A	0.0
29	7	D	1	Temperature Controls		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
30	7	E	1	Commissioning	Retro commission existing mechanical equipment.	7,010	SF	\$0.00	\$0	\$0.50	\$3,505	\$3,505	\$701	\$35	\$4,241	4771	1.11	\$467	\$4,708	\$565	\$94	\$5,367	\$1,073	\$6,440	N/A	0.0
31	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	3	EA	\$500.00	\$1,500	\$100.00	\$300	\$1,800	\$360	\$18	\$2,178	4771	1.11	\$240	\$2,418	\$290	\$48	\$2,756	\$551	\$3,307	N/A	0.0
32	8	B	1	Plumbing Supply		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
33	8	C	1	Plumbing Waste		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
34	9	A	1	Building Service		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
35	9	B	1	Lighting	Install occupancy sensors. Replace T-12 HO lamps with T-8 or T-5 HO lamps.	1	LS	\$3,249.00	\$3,249	\$4,725.00	\$4,725	\$7,974	\$1,595	\$80	\$9,649	4771	1.11	\$1,061	\$10,710	\$1,285	\$214	\$12,209	\$2,442	\$14,651	\$1,324	11.1
36	9	C	1	Distribution		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
37	9	D	1	Voice/Data		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
38	10	A	1	Elevator/Lift		0										4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
39	11	A	1	Egress	Repair closer arm on west exit from break room.	1	LS	\$100.00	\$100	\$100.00	\$100	\$200	\$40	\$2	\$242	4771	1.11	\$27	\$269	\$32	\$5	\$306	\$61	\$367	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)	
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
40	11	B	1	Extinguishing System	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
41	11	C	2	Exit Signs/Emergency Lighting/Alarms	7,010	SF	\$0.38	\$2,664	\$0.38	\$2,664	\$5,328	\$1,066	\$53	\$6,446	4771	1.11	\$709	\$7,155	\$859	\$143	\$8,157	\$1,631	\$9,789	N/A	0.0	
42	11	D	1	Asbestos/Haz Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
43	11	E	1	Handicap Accessibility	9	EA	\$200.00	\$1,800	\$50.00	\$450	\$2,250	\$450	\$23	\$2,723	4771	1.11	\$299	\$3,022	\$363	\$60	\$3,445	\$689	\$4,134	N/A	0.0	
44	12	A	1	Missing Program	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
TOTAL PROJECT COSTS																										
REPLACEMENT VALUE					7,010	SF	\$85.00	\$595,850	\$45.00	\$315,450	\$911,300	\$182,260	\$9,113	\$1,102,673	4771	1.11	\$121,294	\$1,223,967	\$97,917	\$24,479	\$1,346,364	\$269,273	\$1,615,636	\$57,632		
TOTAL POTENTIAL ENERGY SAVINGS:																									\$1,324	
CURRENT UTILITY COSTS																									\$5,437	
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																									24%	



BUILDING INFORMATION

MEADOW HILL

AUDIT DATE: 8/12/2009
Current Year: 2013

ENROLLMENT: 407
ACRES: 9

SF/STUDENT: 203
STUDENTS/AC: 45.222
EUI: 58.18 kBTU/SF/yr

Total Project Cost: \$2,256,755
Replacement Value: \$18,996,751
Total Project Cost/Replacement Value: 11.9%

General Contractor Gen. Cond. OH & P: 20%
MT Gross Receipts Tax: 1%
Escalation: 11%
AE Design Fees (Renovation/Remodel): 12%
Permit Fees: 2%
Contingency: 20%
AE Design Fees (New Construction): 8%

CONSTRUCTION DATE: 1967 46
ADDITION #1: 1979 34
ADDITION #2: 1989 24
ADDITION #3: 1989 24
ADDITION #4: 0 0
ADDITION #5: 0 0

BUILDING AREA: 28,009 SF
BUR: 8,978 SF
ROOF DATE: 1967 46

BUILDING AREA: 29,465 SF
HYP/BUR: 9,749 SF
ROOF DATE: 1989 24

BUILDING AREA: 16,584 SF
HYP/BUR: 51,846 SF
ROOF DATE: 1999 14

BUILDING AREA: 8,366 SF
HYP/BUR: 8,366 SF
ROOF DATE: 1998 15

BUILDING AREA: 0 SF
ROOF AREA: 0 SF
ROOF DATE: 0 0

BUILDING AREA: 0 SF
ROOF AREA: 0 SF
ROOF DATE: 0 0

TOTAL: 82,424 SF

WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 313 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 1,466 SF SINGLE PANE -WINDOW WALL
WINDOW: 2,288 SF DOUBLE PANE -WINDOW WALL
WINDOW: 0 SF GLASS BLOCK
WINDOW: 0 SF FIBERGLASS PANEL

TOTAL: 4,067 SF

BOILER DATE: 1967 46
BOILER DATE: 1998 15

PLUMBING FIXTURES:
WC: 14
U: 6
S: 6
WS: 3
TOTAL: 29

DOOR: 92 UNITS INTERIOR
DOOR: 20 UNITS EXTERIOR
TOTAL: 112 UNITS

PERIMETER: 2216 LF

5308 EUI 10/2013

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	2,216	LF	\$1.00	\$2,216	\$5.00	\$11,080	\$13,296	\$2,659	\$133	\$16,088	4771	1.11	\$1,770	\$17,858	\$2,143	\$357	\$20,358	\$4,072	\$24,430	\$250	97.7																				
2	1	B	1	Exterior Steps/Retaining Walls	Exterior steps are failing	500	SF	\$3.00	\$1,500	\$6.00	\$3,000	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0																				
3	2	A	1	Exterior Wall	Replace missing brick in sixth grade classroom pod, repoint brick and soffits in 300 classroom pod to prevent moisture intrusion and degradation of exterior envelope	500	SF	\$5.00	\$2,500	\$10.00	\$5,000	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0																				
4	2	A	2	Exterior Wall	Replace joint sealants to prevent moisture intrusion and degradation of exterior envelope	200	LF	\$5.00	\$1,000	\$10.00	\$2,000	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	\$100	55.1																				
5	2	A	3	Exterior Wall	Replace limited areas of siding on modular classroom to prevent moisture intrusion and degradation of exterior envelope	100	SF	\$4.00	\$400	\$5.00	\$500	\$900	\$180	\$9	\$1,089	4771	1.11	\$120	\$1,209	\$145	\$24	\$1,378	\$276	\$1,654	\$50	33.1																				
6	2	B	1	Window replacement	Replace broken windows in sixth grade classroom pod & rooms 314, 318, 404, 407, library to prevent moisture intrusion and degradation of exterior envelope	1,500	SF	\$10.00	\$15,000	\$15.00	\$22,500	\$37,500	\$7,500	\$375	\$45,375	4771	1.11	\$4,991	\$50,366	\$6,044	\$1,007	\$57,418	\$11,484	\$68,901	\$100	689.0																				
7	2	B	2	Window replacement	Replace single pane windows.	1,466	SF	\$21.00	\$30,786	\$15.00	\$21,990	\$52,776	\$10,555	\$528	\$63,859	4771	1.11	\$7,024	\$70,883	\$8,506	\$1,418	\$80,807	\$16,161	\$96,969	N/A	0.0																				
8	2	C	1	Exterior Door Replacement	Replace exterior doors with insulated hollow metal doors with double pane	20	EA	\$1,300.00	\$26,000	\$750.00	\$15,000	\$41,000	\$8,200	\$410	\$49,610	4771	1.11	\$5,457	\$55,067	\$6,608	\$1,101	\$62,776	\$12,555	\$75,332	\$250	301.3																				
9	2	D	1	Interior Columns/Beams		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
10	3	A	1	Floor Structure		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
11	3	B	1	Stair Treads/Risers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
12	4	A	1	Roof structure		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
13	4	B	1	Roof Covering	Replace roof membrane	60,824	SF	\$2.00	\$121,648	\$1.00	\$60,824	\$182,472	\$36,494	\$1,825	\$220,791	4771	1.11	\$24,287	\$245,078	\$29,409	\$4,902	\$279,389	\$55,878	\$335,267	N/A	0.0																				
14	4	B	2	Roof Covering	Provide gutters and downspouts to prevent moisture intrusion and degradation of exterior envelope near room 205 & multipurpose	200	LF	\$2.50	\$500	\$5.00	\$1,000	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0																				
15	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the gymnasium roof assembly to raise the R-value of the roof from an estimated R-5 to R-28. Improve slope above office area to prevent moisture intrusion.	17,344	SF	\$2.00	\$34,688	\$1.00	\$17,344	\$52,032	\$10,406	\$520	\$62,959	4771	1.11	\$6,925	\$69,884	\$8,386	\$1,398	\$79,668	\$15,934	\$95,602	\$1,095	87.3																				
16	5	A	1	Interior Walls		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
17	5	B	1	Ceilings	Replace ceiling in room 202	900	SF	\$2.00	\$1,800	\$2.00	\$1,800	\$3,600	\$720	\$36	\$4,356	4771	1.11	\$479	\$4,835	\$580	\$97	\$5,512	\$1,102	\$6,614	N/A	0.0																				
18	5	C	1	Interior Doors/Hardware/Windows		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
19	5	D	1	Floor Finishes	403.	3,600	SF	\$3.50	\$12,600	\$1.50	\$5,400	\$18,000	\$3,600	\$180	\$21,780	4771	1.11	\$2,396	\$24,176	\$2,901	\$484	\$27,560	\$5,512	\$33,072	N/A	0.0																				
20	5	E	1	Paint		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
21	6	A	1	Toilet Partitions		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
22	6	B	1	Signage/Directories		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
23	6	C	1	Fixed Seating/Risers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
24	6	D	1	Chalk/Tack boards/Cabinets		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
25	6	E	1	Fume Hoods		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
26	6	F	1	Lockers		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
27	6	G	1	Cells and Visitor Cubicles		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
28	6	H	1	Ansul Hoods		0			\$0		\$0		\$0		\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																	
29	6	I	1	Swimming Pools		0			\$0		\$0		\$0		\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																	
30	7	A	1	Heating	Boiler #1 is original to building and is nearing the end of its useful service life. Replace hot water boiler with new boiler.	1	EA	\$75,000.00	\$75,000	\$25,000.00	\$25,000	\$100,000	\$20,000	\$1,000	\$121,000	4771	1.11	\$13,310	\$134,310	\$16,117	\$2,686	\$153,113	\$30,623	\$183,736	\$4,350	42.2																				
31	7	A	2	Heating	Unit ventilators in original building are in poor condition should be replaced. Install a new HVAC system.	28,009	SF	\$6.50	\$182,059	\$6.50	\$182,059	\$364,117	\$72,823	\$3,641	\$440,582	4771	1.11	\$48,464	\$489,046	\$58,685	\$9,781	\$557,512	\$111,502	\$669,014	N/A	0.0																				
32	7	B	1	Ventilating	Add VFD's to AHU-1, RF-1, RF-2, AHU-2, return air to 1967 gymnasium.	1	LS	\$13,000.00	\$13,000	\$3,000.00	\$3,000	\$16,000	\$3,200	\$160	\$19,360	4771	1.11	\$2,130	\$21,490	\$2,579	\$430	\$24,498	\$4,900	\$29,398	\$2,962	9.9																				
33	7	B	2	Ventilating	Replace bearings on SF-1.	1	EA	\$500.00	\$500	\$500.00	\$500	\$1,000	\$200	\$10	\$1,210	4771	1.11	\$133	\$1,343	\$161	\$27	\$1,531	\$306	\$1,837	N/A	0.0																				
34	7	C	1	Cooling	Provide cooling to server room in 1989 addition.	1	EA	\$5,000.00	\$5,000	\$2,500.00	\$2,500	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0																				
35	7	D	1	Temperature Controls	Replace temperature controls with DDC.	82,424	SF	\$0.75	\$61,818	\$0.75	\$61,818	\$123,636	\$24,727	\$1,236	\$149,600	4771	1.11	\$16,456	\$166,056	\$19,927	\$3,321	\$189,303	\$37,861	\$227,164	\$4,000	56.8																				
36	7	E	1	Commissioning	Provide retro commissioning.	82,424	SF	\$0.00	\$0	\$0.50	\$41,212	\$41,212	\$8,242	\$412	\$49,867	4771	1.11	\$5,485	\$55,352	\$6,642	\$1,107	\$63,101	\$12,620	\$75,721	\$8,000	9.5																				
37	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	29	EA	\$500.00	\$14,500	\$100.00	\$2,900	\$17,400	\$3,480	\$174	\$21,054	4771	1.11	\$2,316	\$23,370	\$2,804	\$467	\$26,642	\$5,328	\$31,970	N/A	0.0																				
38	8	B	1	Plumbing Supply		0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
39	8	C	1	Plumbing Waste		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
40	9	A	1	Building Service		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
41	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps.	1	LS	\$2,452.00	\$2,452	\$4,445.00	\$4,445	\$6,897	\$1,379	\$69	\$8,345	4771	1.11	\$918	\$9,263	\$1,112	\$185	\$10,560	\$2,112	\$12,672	\$1,902	6.7																				
42	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$3,525.00	\$3,525	\$3,225.00	\$3,225	\$6,750	\$1,350	\$68	\$8,168	4771	1.11	\$898	\$9,066	\$1,088	\$181	\$10,335	\$2,067	\$12,402	N/A	0.0																				
43	9	D	1	Voice/Data		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
44	10	A	1	Elevator/Lift		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
45	11	A	1	Egress		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
46	11	B	1	Extinguishing System		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
47	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	3	EA	\$45.00	\$135	\$30.00	\$90	\$225	\$45	\$2	\$272	4771	1.11	\$30	\$302	\$36	\$6	\$345	\$69	\$413	\$66	6.3																				
48	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	82,424	SF	\$0.38	\$31,321	\$0.38	\$31,321	\$62,642	\$12,528	\$626	\$75,797	4771	1.11	\$8,338	\$84,135	\$10,096	\$1,683	\$95,914	\$19,183	\$115,096	N/A	0.0																				
49	11	D	1	Asbestos/Hazardous Materials		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
50	11	E	1	Handicap Accessibility Missing Program Elements	Relocate interior doors in 1979 & 1989 addition to provide accessible approach.	46	EA	\$1,000.00	\$46,000	\$1,000.00	\$46,000	\$92,000	\$18,400	\$920	\$111,320	4771	1.11	\$12,245	\$123,565	\$14,828	\$2,471	\$140,864	\$28,173	\$169,037	N/A	0.0																				
51	12	A	1	Elements		0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
TOTAL PROJECT COSTS																																														
REPLACEMENT VALUE						82,424	SF	\$85.00	\$7,006,040	\$45.00	\$3,709,080	\$10,715,120	\$2,143,024	\$107,151	\$12,965,295	4771	1.11	\$1,426,182	\$14,391,478	\$1,151,318	\$287,830	\$15,830,625	\$3,166,125	\$18,996,751																						
TOTAL POTENTIAL ENERGY SAVINGS:																																														
CURRENT UTILITY COSTS																													\$22,725																	
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																													78,959																	
																													29%																	

A	B	C	D	E	F		G		H		I		J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
					QUANTITY		MATERIAL		LABOR																				
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL	SUB-TOTAL	Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)				
44	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0			
45	11	E	1	Handicap Accessibility Missing Program Elements	0			\$0		\$0	\$0	\$0	\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0			
46	12	A	1		0			\$0		\$0	\$0	\$0	\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0			
TOTAL PROJECT COSTS																								\$25,356					
REPLACEMENT VALUE					21,210	SF	\$85.00	\$1,802,850	\$45.00	\$954,450	\$2,757,300	\$551,460	\$27,573	\$3,336,333		4771	1.11	\$366,997	\$3,703,330	\$296,266	\$74,067	\$4,073,663	\$814,733	\$4,888,395					
TOTAL POTENTIAL ENERGY SAVINGS:																													
CURRENT UTILITY COSTS																													
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																													

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%



BUILDING INFORMATION

MOUNT JUMBO

ENROLLMENT 100
ACRES: 5.3
AUDIT DATE: 8/18/2009
Current Year 2013

SF/STUDENT 403
STUDENTS/AC 18.868
EUI 54.23 kBTU/SF/yr

Total Project Cost: \$1,141,404
Replacement Value: \$9,289,103
Total Project Cost/Replacement Value: 12.3%

CONSTRUCTION DATE: 1979 34
ADDITION #1 0 0
ADDITION #2 0 0
ADDITION #3 0 0
ADDITION #4 0 0
ADDITION #5 0 0

BUILDING AREA 40,304 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
TOTAL 40,304 SF
METAL: 39,057 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA SF
TOTAL 39,057 SF
Age 1979 34
Age 0 0
Age 0 0
Age 0 0
Age 0 0
Age 0 0

WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 1,596 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 0 SF SINGLE PANE -WINDOW WALL
WINDOW: 0 SF DOUBLE PANE -WINDOW WALL
WINDOW: 0 SF GLASS BLOCK
WINDOW: 276 SF FIBERGLASS PANEL
DOOR: 67 UNITS INTERIOR
DOOR: 14 UNITS EXTERIOR
TOTAL 81 UNITS
PERIMETER 1165 LF
5308 EUI 10/2013

PLUMBING FIXTURES:
WC 18
U 7
S 13
WS 2
TOTAL 40

Table with 27 columns (A-Z) and 33 rows (1-33). Columns include ECN, ECM Name, ECM Description, Quantity, Material, Labor, Sub-total, General Contractor, Montana Gross Receipts Tax, Subtotal-Construction Costs, ENR at Time of Estimate, ENR Adjustment, Escalation, Sub-total, A/E Design Services, Building Permits, Contingency, Total Project Costs, Year One Savings, Simple Payback (YRS).

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
34	7	E	1	Commissioning	Recommission existing mechanical systems	40,304	SF	\$0.00	\$0	\$0.50	\$20,152	\$20,152	\$4,030	\$202	\$24,384	4771	1.11	\$2,682	\$27,066	\$3,248	\$541	\$30,855	\$6,171	\$37,026	N/A	0.0																				
35	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	10	EA	\$500.00	\$5,000	\$100.00	\$1,000	\$6,000	\$1,200	\$60	\$7,260	4771	1.11	\$799	\$8,059	\$967	\$161	\$9,187	\$1,837	\$11,024	N/A	0.0																				
36	8	B	1	Plumbing Supply		0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
37	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
38	9	A	1	Building Service		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
39	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps	1	LS	\$7,889.00	\$7,889	\$10,650.00	\$10,650	\$18,539	\$3,708	\$185	\$22,432	4771	1.11	\$2,468	\$24,900	\$2,988	\$498	\$28,386	\$5,677	\$34,063	\$2,648	12.9																				
40	9	B	2	Lighting	Repair leaning poles in parking lot	1	LS	\$2,500.00	\$2,500	\$2,500.00	\$2,500	\$5,000	\$1,000	\$50	\$6,050	4771	1.11	\$666	\$6,716	\$806	\$134	\$7,656	\$1,531	\$9,187	N/A	0.0																				
41	9	C	1	Distribution		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
42	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
43	9	E	1	Clock/Bell		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
44	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
45	11	A	1	Egress		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
46	11	B	1	Extinguishing System	Provide Fire Suppression	40,304	SF	\$1.50	\$60,456	\$2.50	\$100,760	\$161,216	\$32,243	\$1,612	\$195,071	4771	1.11	\$21,458	\$216,529	\$25,984	\$4,331	\$246,843	\$49,369	\$296,212	N/A	0.0																				
47	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	7	EA	\$45.00	\$315	\$30.00	\$210	\$525	\$105	\$5	\$635	4771	1.11	\$70	\$705	\$85	\$14	\$804	\$161	\$965	\$154	6.3																				
48	11	C	2	Exit Signs/Emergency Lighting/Alarms	Provide emergency egress lighting	1	LS	\$1,500.00	\$1,500	\$1,500.00	\$1,500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	NA	0.0																				
49	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	40,304	SF	\$0.38	\$15,316	\$0.38	\$15,316	\$30,631	\$6,126	\$306	\$37,064	4771	1.11	\$4,077	\$41,141	\$4,937	\$823	\$46,900	\$9,380	\$56,280	N/A	0.0																				
50	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
51	11	E	1	Handicap Accessibility Missing Program Elements	Replace door hardware with accessible levers. Approach to doors non compliant.	67	EA	\$2,000.00	\$134,000	\$500.00	\$33,500	\$167,500	\$33,500	\$1,675	\$202,675	4771	1.11	\$22,294	\$224,969	\$26,996	\$4,499	\$256,465	\$51,293	\$307,758	N/A	0.0																				
52	12	A	1			0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																				
TOTAL PROJECT COSTS																																														
REPLACEMENT VALUE						40,304	SF	\$85.00	\$3,425,840	\$45.00	\$1,813,680	\$5,239,520	\$1,047,904	\$52,395	\$6,339,819	4771	1.11	\$697,380	\$7,037,199	\$562,976	\$140,744	\$7,740,919	\$1,548,184	\$9,289,103																						
TOTAL POTENTIAL ENERGY SAVINGS:																																														
CURRENT UTILITY COSTS																											\$5,917																			
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																												21%																		

A	B	C	D	E	F		G		H		I		J		L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z											
					QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs																ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																														
41	9	D	1	Voice/Data	0				\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
42	10	A	1	Elevator/Lift	0				\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
43	11	A	1	Egress	0				\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
44	11	B	1	Extinguishing System	0				\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
45	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$900.00	\$900	\$600.00	\$600	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	\$440	6.3															
46	11	C	2	Exit Signs/Emergency Lighting/Alarms	52,049	SF	\$0.38	\$19,779	\$0.38	\$19,779	\$39,557	\$7,911	\$396	\$47,864	4771	1.11	\$5,265	\$53,129	\$6,376	\$1,063	\$60,567	\$12,113	\$72,681	N/A	0.0															
47	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
48	11	E	1	Handicap Accessibility	0			\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
49	12	A	1	Missing Program	0			\$0		\$0		\$0		\$0		\$0		\$0		4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0								
TOTAL PROJECT COSTS																																	\$227,863							
REPLACEMENT VALUE					52,049	SF	\$85.00	\$4,424,165	\$45.00	\$2,342,205	\$6,766,370	\$1,353,274	\$67,664	\$8,187,308	4771	1.11	\$900,604	\$9,087,912	\$727,033	\$181,758	\$9,996,703	\$1,999,341	\$11,996,043																	
TOTAL POTENTIAL ENERGY SAVINGS:																																		\$4,753						
CURRENT UTILITY COSTS																																		\$45,564						
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																		10%						

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Overhead Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
28	6	H	1	Ansul Hoods	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
29	6	I	1	Swimming Pools	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
30	7	A	1	Heating	1	LS	\$80,000.00	\$80,000	\$45,000.00	\$45,000	\$125,000	\$25,000	\$1,250	\$151,250	4771	1.11	\$16,638	\$167,888	\$20,147	\$3,358	\$191,392	\$38,278	\$229,670	\$992	231.5
31	7	A	2	Heating	2	EA	\$2,500.00	\$5,000	\$500.00	\$1,000	\$6,000	\$1,200	\$60	\$7,260	4771	1.11	\$799	\$8,059	\$967	\$161	\$9,187	\$1,837	\$11,024	\$329	33.5
32	7	A	3	Heating	49,685	SF	\$6.50	\$322,953	\$6.50	\$322,953	\$645,905	\$129,181	\$6,459	\$781,545	4771	1.11	\$85,970	\$867,515	\$104,102	\$17,350	\$988,967	\$197,793	\$1,186,761	N/A	0.0
33	7	A	1	Ventilating	2	EA	\$4,800.00	\$9,600	\$1,100.00	\$2,200	\$11,800	\$2,360	\$118	\$14,278	4771	1.11	\$1,571	\$15,849	\$1,902	\$317	\$18,067	\$3,613	\$21,681	\$169	128.3
34	7	B	2	Ventilating	10	EA		\$0	\$200.00	\$2,000	\$2,000	\$400	\$20	\$2,420	4771	1.11	\$266	\$2,686	\$322	\$54	\$3,062	\$612	\$3,675	N/A	0.0
35	7	A	4	Ventilating	2	EA	\$2,500.00	\$5,000	\$600.00	\$1,200	\$6,200	\$1,240	\$62	\$7,502	4771	1.11	\$825	\$8,327	\$999	\$167	\$9,493	\$1,899	\$11,392	\$219	52.0
36	7	A	5	Ventilating	1	EA	\$500.00	\$500	\$100.00	\$100	\$600	\$120	\$6	\$726	4771	1.11	\$80	\$806	\$97	\$16	\$919	\$184	\$1,102	N/A	0.0
37	7	A	6	Ventilating	1	EA	\$2,500.00	\$2,500	\$500.00	\$500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	N/A	0.0
38	7	A	7	Ventilating	1	EA	\$1,000.00	\$1,000	\$500.00	\$500	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0
39	7	A	8	Ventilating	1,000	SF	\$10.00	\$10,000	\$5.00	\$5,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	\$500	55.1
40	7	C	1	Cooling	1	EA	\$1,500.00	\$1,500	\$500.00	\$500	\$2,000	\$400	\$20	\$2,420	4771	1.11	\$266	\$2,686	\$322	\$54	\$3,062	\$612	\$3,675	\$100	36.7
41	7	D	1	Temperature Controls	49,685	SF	\$0.75	\$37,264	\$0.75	\$37,264	\$74,528	\$14,906	\$745	\$90,178	4771	1.11	\$9,920	\$100,098	\$12,012	\$2,002	\$114,112	\$22,822	\$136,934	\$1,500	91.3
42	7	E	1	Commissioning	92,989	SF	\$0.00	\$0	\$0.50	\$46,495	\$46,495	\$9,299	\$465	\$56,258	4771	1.11	\$6,188	\$62,447	\$7,494	\$1,249	\$71,189	\$14,238	\$85,427	\$5,000	17.1
43	8	A	1	Plumbing Fixtures	20	EA	\$500.00	\$10,000	\$100.00	\$2,000	\$12,000	\$2,400	\$120	\$14,520	4771	1.11	\$1,597	\$16,117	\$1,934	\$322	\$18,374	\$3,675	\$22,048	N/A	0.0
44	8	B	1	Plumbing Supply		LF		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
45	8	C	1	Plumbing Waste	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
46	9	A	1	Building Service	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
47	9	B	1	Lighting	1	LS	\$13,061.00	\$13,061	\$17,265.00	\$17,265	\$30,326	\$6,065	\$303	\$36,694	4771	1.11	\$4,036	\$40,731	\$4,888	\$815	\$46,433	\$9,287	\$55,720	\$4,313	12.9
48	9	B	2	Lighting	1	LS	\$10,000.00	\$10,000	\$5,000.00	\$5,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	N/A	0.0
49	9	C	1	Distribution	1	LS	\$15,725.00	\$15,725	\$9,125.00	\$9,125	\$24,850	\$4,970	\$249	\$30,069	4771	1.11	\$3,308	\$33,376	\$4,005	\$668	\$38,049	\$7,610	\$45,658	N/A	0.0
50	9	D	1	Voice/Data	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
51	10	A	1	Elevator/Lift	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
52	11	A	1	Egress	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
53	11	B	1	Extinguishing System	24,693	SF	\$5.00	\$123,465	\$2.00	\$49,386	\$172,851	\$34,570	\$1,729	\$209,150	4771	1.11	\$23,006	\$232,156	\$27,859	\$4,643	\$264,658	\$52,932	\$317,590	N/A	0.0
54	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$1,035.00	\$1,035	\$690.00	\$690	\$1,725	\$345	\$17	\$2,087	4771	1.11	\$230	\$2,317	\$278	\$46	\$2,641	\$528	\$3,169	\$506	6.3
55	11	C	2	Exit Signs/Emergency Lighting/Alarms	92,989	SF	\$0.38	\$35,336	\$0.38	\$35,336	\$70,672	\$14,134	\$707	\$85,513	4771	1.11	\$9,406	\$94,919	\$11,390	\$1,898	\$108,208	\$21,642	\$129,849	N/A	0.0
56	11	D	1	Asbestos/Hazardous Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
57	11	E	1	Handicap Accessibility Missing Program Elements	65	EA	\$500.00	\$32,250	\$50.00	\$3,225	\$35,475	\$7,095	\$355	\$42,925	4771	1.11	\$4,722	\$47,646	\$5,718	\$953	\$54,317	\$10,863	\$65,180	N/A	0.0
58	12	A	1	Elements	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
TOTAL PROJECT COSTS																									
REPLACEMENT VALUE					92,989	SF	\$85.00	\$7,904,065	\$45.00	\$4,184,505	\$12,088,570	\$2,417,714	\$120,886	\$14,627,170	4771	1.11	\$1,608,989	\$16,236,158	\$1,298,893	\$324,723	\$17,859,774	\$3,571,955	\$21,431,729		
TOTAL POTENTIAL ENERGY SAVINGS:																									
CURRENT UTILITY COSTS																									
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																									\$16,628
																									\$72,374
																									23%

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
																										COMP	SUB
30	7	A	1	Heating	Boiler is original to building and is past it's useful service life. Replace steam boiler with new boiler.	1	LS	\$85,000.00	\$85,000	\$35,000.00	\$35,000	\$120,000	\$24,000	\$1,200	\$145,200	4771	1.11	\$15,972	\$161,172	\$19,341	\$3,223	\$183,736	\$36,747	\$220,483	\$1,043	211.4	
31	7	A	2	Heating	The unit ventilators are original to the building and have exceeded their useful service life. Replace with a new HVAC system.	24,062	EA	\$6.50	\$156,403	\$6.50	\$156,403	\$312,806	\$62,561	\$3,128	\$378,495	4771	1.11	\$41,634	\$420,130	\$50,416	\$8,403	\$478,948	\$95,790	\$574,737	N/A	0.0	
32	7	B	1	Ventilating	Replace unit ventilator serving gym.	1	LS	\$10,000.00	\$10,000	\$3,000.00	\$3,000	\$13,000	\$2,600	\$130	\$15,730	4771	1.11	\$1,730	\$17,460	\$2,095	\$349	\$19,905	\$3,981	\$23,886	N/A	0.0	
33	7	C	1	Cooling		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
34	7	D	1	Temperature Controls	Replace pneumatic controls with DDC system providing night setback, occupied/unoccupied modes.	24,062	SF	\$0.75	\$18,047	\$0.75	\$18,047	\$36,093	\$7,219	\$361	\$43,673	4771	1.11	\$4,804	\$48,477	\$5,817	\$970	\$55,263	\$11,053	\$66,316	\$1,000	66.3	
35	7	E	1	Commissioning	Retro commission existing systems	24,062	SF	\$0.00	\$0	\$0.50	\$12,031	\$12,031	\$2,406	\$120	\$14,558	4771	1.11	\$1,601	\$16,159	\$1,939	\$323	\$18,421	\$3,684	\$22,105	N/A	0.0	
36	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	20	EA	\$500.00	\$10,000	\$50.00	\$1,000	\$11,000	\$2,200	\$110	\$13,310	4771	1.11	\$1,464	\$14,774	\$1,773	\$295	\$16,842	\$3,368	\$20,211	\$100	202.1	
37	8	B	1	Plumbing Supply		0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
38	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
39	9	A	1	Building Service	Install new 3 phase electrical service with pad mounted transformer to accommodate future elevator.	1	LS	\$15,350.00	\$15,350	\$7,450.00	\$7,450	\$22,800	\$4,560	\$228	\$27,588	4771	1.11	\$3,035	\$30,623	\$3,675	\$612	\$34,910	\$6,982	\$41,892	N/A	0.0	
40	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps	1	LS	\$4,053.00	\$4,053	\$4,040.00	\$4,040	\$8,093	\$1,619	\$81	\$9,793	4771	1.11	\$1,077	\$10,870	\$1,304	\$217	\$12,391	\$2,478	\$14,870	\$1,046	14.2	
41	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$17,875.00	\$17,875	\$15,375.00	\$15,375	\$33,250	\$6,650	\$333	\$40,233	4771	1.11	\$4,426	\$44,658	\$5,359	\$893	\$50,910	\$10,182	\$61,092	N/A	0.0	
42	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
43	9	E	1	Clock/Bell		25,033	SF	\$0.50	\$12,517	\$0.50	\$12,517	\$25,033	\$5,007	\$250	\$30,290	4771	1.11	\$3,332	\$33,622	\$4,035	\$672	\$38,329	\$7,666	\$45,995	N/A	0.0	
44	10	A	1	Elevator/Lift	Provide elevator serving both floors of facility.	1	LS	\$100,000.00	\$100,000	\$25,000.00	\$25,000	\$125,000	\$25,000	\$1,250	\$151,250	4771	1.11	\$16,638	\$167,888	\$20,147	\$3,358	\$191,392	\$38,278	\$229,670	N/A	0.0	
45	11	A	1	Egress	Provide handrails at code complaint height and extension	100	LF	\$10.00	\$1,000	\$10.00	\$1,000	\$2,000	\$400	\$20	\$2,420	4771	1.11	\$266	\$2,686	\$322	\$54	\$3,062	\$612	\$3,675	N/A	0.0	
46	11	A	2	Egress	Replace steep ramp from gymnasium	200	SF	\$10.00	\$2,000	\$10.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0	
46	11	B	1	Extinguishing System	Provide fire suppression system.	25,033	SF	\$1.50	\$37,550	\$2.50	\$62,583	\$100,132	\$20,026	\$1,001	\$121,160	4771	1.11	\$13,328	\$134,487	\$16,138	\$2,690	\$153,316	\$30,663	\$183,979	N/A	0.0	
47	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs. Provide emergency egress lighting	1	LS	\$1,815.00	\$1,815	\$1,710.00	\$1,710	\$3,525	\$705	\$35	\$4,265	4771	1.11	\$469	\$4,734	\$568	\$95	\$5,397	\$1,079	\$6,477	\$154	42.1	
48	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	25,033	SF	\$0.38	\$9,513	\$0.38	\$9,513	\$19,025	\$3,805	\$190	\$23,020	4771	1.11	\$2,532	\$25,553	\$3,066	\$511	\$29,130	\$5,826	\$34,956	N/A	0.0	
49	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0	
50	11	E	1	Handicap Accessibility Missing Program Elements	Replace door hardware with accessible levers.	82	EA	\$200.00	\$16,400	\$50.00	\$4,100	\$20,500	\$4,100	\$205	\$24,805	4771	1.11	\$2,729	\$27,534	\$3,304	\$551	\$31,388	\$6,278	\$37,666	N/A	0.0	
51	12	A	1	Elements	Remove modular classroom	1	LS	\$0.00	\$0	\$10,000.00	\$10,000	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	N/A	0.0	
TOTAL PROJECT COSTS																											
REPLACEMENT VALUE						25,033	SF	\$85.00	\$2,127,805	\$45.00	\$1,126,485	\$3,254,290	\$650,858	\$32,543	\$3,937,691	4771	1.11	\$433,146	\$4,370,837	\$349,667	\$87,417	\$4,807,921	\$961,584	\$5,769,505			
TOTAL POTENTIAL ENERGY SAVINGS:																											
CURRENT UTILITY COSTS																										\$8,179	
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																											38%



BUILDING INFORMATION

RATTLESNAKE

ENROLLMENT 380
ACRES: 7
AUDIT DATE: 8/13/2009
Current Year 2013

SF/STUDENT 162
STUDENTS/AC 54.286
EUI 77.88 kBTU/SF/yr

Total Project Cost: \$2,156,181
Replacement Value: \$1,163,900
Total Project Cost/Replacement Value: 15.2%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

Age
CONSTRUCTION DATE: 1960 53
ADDITION #1 1989 0
ADDITION #2 0 0
MODULAR 2012 1
ADDITION #4 0 0
ADDITION #5 0 0

BUILDING AREA 32,022 SF
BUILDING AREA 27,143 SF
BUILDING AREA 0 SF
BUILDING AREA 2,290 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
TOTAL 61,455 SF

HYP/BUR: 30,587 SF
HYP: 22,338 SF
METAL 2,483 SF
ROOF AREA 2,290 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
TOTAL 57,698 SF

Age
WINDOW: 0 SF SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW: 0 SF DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW: 2,332 SF SINGLE PANE -WINDOW WALL
WINDOW: 1,929 SF DOUBLE PANE -WINDOW WALL
WINDOW: 0 SF GLASS BLOCK
WINDOW: 1,067 SF FIBERGLASS PANEL
TOTAL 5,328 SF

Age
BOILER DATE: 1960 53
BOILER DATE: 0
BOILER DATE:
BOILER DATE:

PLUMBING FIXTURES:
WC 25
U 9
S 14
WS 2
TOTAL 50

DOOR: 86 UNITS INTERIOR
DOOR: 16 UNITS EXTERIOR
TOTAL 102 UNITS 5308 EUI 10/2013
PERIMETER 1244 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
																										QUANTITY
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	1,244	LF	\$1.00	\$1,244	\$5.00	\$6,220	\$7,464	\$1,493	\$75	\$9,031	4771	1.11	\$993	\$10,025	\$1,203	\$200	\$11,428	\$2,286	\$13,714	\$100	137.1
2	1	B	1	Exterior Steps/Retaining Walls	Exterior steps are failing	200	SF	\$3.00	\$600	\$6.00	\$1,200	\$1,800	\$360	\$18	\$2,178	4771	1.11	\$240	\$2,418	\$290	\$48	\$2,756	\$551	\$3,307	N/A	0.0
3	1	B	3	Exterior	Trim trees on south side of building and remove trees in court yard to prevent moisture intrusion and degradation of exterior envelope.	250	SF	\$0.00	\$0	\$2.50	\$625	\$625	\$125	\$6	\$756	4771	1.11	\$83	\$839	\$101	\$17	\$957	\$191	\$1,148	N/A	0.0
4	2	A	1	Exterior Walls	Stabilize precast wall panels in new gymnasium to prevent moisture intrusion and prevent degradation to exterior wall envelope.	50	LF	\$100.00	\$5,000	\$100.00	\$5,000	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	N/A	0.0
5	2	A	2	Exterior Walls	Repaint tops of walls in 1967 building and masonry near room 101/102 to prevent moisture intrusion and prevent degradation to exterior wall envelope.	100	SF	\$5.00	\$500	\$10.00	\$1,000	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0
6	2	A	3	Exterior Walls	Stabilize south east entry door near room 202 in 1967 building to prevent moisture intrusion and prevent degradation to exterior wall envelope.	200	SF	\$10.00	\$2,000	\$10.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	N/A	0.0
7	2	A	1	Exterior Wall Insulation	Install 2-inch Insulated metal panel system on exterior walls of gymnasium.	2,830	SF	\$7.00	\$19,810	\$5.00	\$14,150	\$33,960	\$6,792	\$340	\$41,092	4771	1.11	\$4,520	\$45,612	\$5,473	\$912	\$51,997	\$10,399	\$62,397	\$500	124.8
8	2	B	1	Window replacement	Replace damaged, failed gaskets and sills for double pane windows in 101-108, 201-208	500	SF	\$21.00	\$10,500	\$15.00	\$7,500	\$18,000	\$3,600	\$180	\$21,780	4771	1.11	\$2,396	\$24,176	\$2,901	\$484	\$27,560	\$5,512	\$33,072	\$500	66.1
9	2	B	2	Window replacement	Replace single pane windows.	2,332	SF	\$21.00	\$48,972	\$15.00	\$34,980	\$83,952	\$16,790	\$840	\$101,582	4771	1.11	\$11,174	\$112,756	\$13,531	\$2,255	\$128,542	\$25,708	\$154,250	\$910	169.5
10	2	B	3	Window replacement	Replace kalwall on each end of gymnasium. May contain asbestos.	1,067	SF	\$35.00	\$37,345	\$7.00	\$7,469	\$44,814	\$8,963	\$448	\$54,225	4771	1.11	\$5,965	\$60,190	\$7,223	\$1,204	\$68,616	\$13,723	\$82,339	\$500	164.7
11	2	C	1	Exterior Door Replacement	Exterior doors are single pane, un insulated hollow metal doors. Replace with insulated hollow metal doors with double pane glazing.	16	EA	\$1,300.00	\$20,800	\$750.00	\$12,000	\$32,800	\$6,560	\$328	\$39,688	4771	1.11	\$4,366	\$44,054	\$5,286	\$881	\$50,221	\$10,044	\$60,265	\$100	602.7
12	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
13	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	3	B	1	Stair Treads/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	4	A	1	Roof structure	Rebuild overhang at west side of gym where members have cracked and sagged to prevent moisture intrusion and degradation of exterior envelope.	1	LS	\$5,000.00	\$5,000	\$5,000.00	\$5,000	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	N/A	0.0
16	4	A	2	Roof structure	Repair base of gym roof laminated beams (rotting).	1	LS	\$5,000.00	\$5,000	\$5,000.00	\$5,000	\$10,000	\$2,000	\$100	\$12,100	4771	1.11	\$1,331	\$13,431	\$1,612	\$269	\$15,311	\$3,062	\$18,374	N/A	0.0
17	4	B	1	Roof Covering	Provide gutters in 1989 addition to prevent moisture intrusion degradation of exterior envelope.	500	LF	\$2.50	\$1,250	\$2.50	\$1,250	\$2,500	\$500	\$25	\$3,025	4771	1.11	\$333	\$3,358	\$403	\$67	\$3,828	\$766	\$4,593	N/A	0.0
18	4	B	2	Roof Covering	Provide downspouts in 1989 addition to prevent moisture intrusion degradation of exterior envelope.	200	LF	\$70.00	\$14,000	\$4.00	\$800	\$14,800	\$2,960	\$148	\$17,908	4771	1.11	\$1,970	\$19,878	\$2,385	\$398	\$22,661	\$4,532	\$27,193	N/A	0.0
19	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the gymnasium roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	30,587	SF	\$2.00	\$61,174	\$1.00	\$30,587	\$91,761	\$18,352	\$918	\$111,031	4771	1.11	\$12,213	\$123,244	\$14,789	\$2,465	\$140,498	\$28,100	\$168,598	\$2,025	83.3
20	5	A	1	Interior Walls		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F		G		H		I		J		K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
					QUANTITY		MATERIAL		LABOR		SUB-TOTAL																					
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL	SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)							
33	7	D	1	Temperature Controls	Provide DDC controls. New controls will allow for unit occupied/unoccupied scheduling and night setback of the space temperatures.	42,993	SF	\$0.75	\$32,245	\$0.75	\$32,245	\$64,490	\$12,898	\$645	\$78,032	4771	1.11	\$8,584	\$86,616	\$10,394	\$1,732	\$98,742	\$19,748	\$118,490	\$1,300	91.1						
34	7	E	1	Commissioning	Retro commission mechanical systems. Unit ventilators act as fan coil units.	42,993	SF	\$0.00	\$0	\$0.50	\$21,497	\$21,497	\$4,299	\$215	\$26,011	4771	1.11	\$2,861	\$28,872	\$3,465	\$577	\$32,914	\$6,583	\$39,497	N/A	0.0						
35	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	34	EA	\$500.00	\$17,000	\$100.00	\$3,400	\$20,400	\$4,080	\$204	\$24,684	4771	1.11	\$2,715	\$27,399	\$3,288	\$548	\$31,235	\$6,247	\$37,482	N/A	0.0						
36	8	B	1	Plumbing Supply		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
37	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
38	9	A	1	Building Service	Install new 3 phase electrical service with pad mounted transformer and new switchboard	1	LS	\$23,050.00	\$23,050	\$11,250.00	\$11,250	\$34,300	\$6,860	\$343	\$41,503	4771	1.11	\$4,565	\$46,068	\$5,528	\$921	\$52,518	\$10,504	\$63,021	\$500	126.0						
39	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors and replace incandescent lamps with CFL	1	LS	\$1,560.00	\$1,560	\$2,195.00	\$2,195	\$3,755	\$751	\$38	\$4,544	4771	1.11	\$500	\$5,043	\$605	\$101	\$5,749	\$1,150	\$6,899	\$1,200	5.7						
40	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$14,550.00	\$14,550	\$8,050.00	\$8,050	\$22,600	\$4,520	\$226	\$27,346	4771	1.11	\$3,008	\$30,354	\$3,642	\$607	\$34,604	\$6,921	\$41,524	N/A	0.0						
41	9	C	2	Distribution	re-route water line over switch board.	1	LS	\$1,000.00	\$1,000	\$500.00	\$500	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0						
42	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
43	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
44	11	A	1	Egress		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
45	11	B	1	Extinguishing System	Provide fire suppression system	42,993	SF	\$2.00	\$85,986	\$4.00	\$171,972	\$257,958	\$51,592	\$2,580	\$312,129	4771	1.11	\$34,334	\$346,463	\$41,576	\$6,929	\$394,968	\$78,994	\$473,962	N/A	0.0						
46	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	11	EA	\$45.00	\$495	\$30.00	\$330	\$825	\$165	\$8	\$998	4771	1.11	\$110	\$1,108	\$133	\$22	\$1,263	\$253	\$1,516	\$242	6.3						
47	11	C	2	Exit Signs/Emergency Lighting/Alarms	Provide emergency egress lighting	1	LS	\$1,200.00	\$1,200	\$1,200.00	\$1,200	\$2,400	\$480	\$24	\$2,904	4771	1.11	\$319	\$3,223	\$387	\$64	\$3,675	\$735	\$4,410	N/A	0.0						
48	11	C	3	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	42,993	SF	\$0.38	\$16,337	\$0.38	\$16,337	\$32,675	\$6,535	\$327	\$39,536	4771	1.11	\$4,349	\$43,885	\$5,266	\$878	\$50,029	\$10,006	\$60,035	N/A	0.0						
49	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0						
50	11	E	1	Handicap Accessibility	Replace door hardware with accessible handsets.	59	EA	\$200.00	\$11,800	\$50.00	\$2,950	\$14,750	\$2,950	\$148	\$17,848	4771	1.11	\$1,963	\$19,811	\$2,377	\$396	\$22,584	\$4,517	\$27,101	N/A	0.0						
51	12	A	1	Missing Program Elements	Reconfigure locker rooms to create new warming kitchen and serving area	2,500	SF	\$45.00	\$112,500	\$45.00	\$112,500	\$225,000	\$45,000	\$2,250	\$272,250	4771	1.11	\$29,948	\$302,198	\$36,264	\$6,044	\$344,505	\$68,901	\$413,406	N/A	0.0						
TOTAL PROJECT COSTS																														\$1,627,230		
REPLACEMENT VALUE																																
TOTAL POTENTIAL ENERGY SAVINGS:																																\$22,203
CURRENT UTILITY COSTS																																\$43,814
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																51%

A COMP	B SUB	C ECM	D ECM Name	E ECM DESCRIPTION	F QUANTITY		H MATERIAL		J LABOR		L SUB-TOTAL	M General Contractor Over Head Profit Bonds & Insurance	N Montana Gross Receipts Tax	O Subtotal- Construction Costs	P ENR at Time of Estimate	Q ENR Adjustment	R Escalation	S SUB-TOTAL	T A/E Design Services, printing, travel, misc.	U Building Permits	V SUB-TOTAL	W Contingency	X TOTAL PROJECT COSTS	Y YEAR ONE SAVINGS	Z SIMPLE PAYBACK (YRS)													
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																												
41	11	C	1	Exit Signs/Emergency Lighting/Alarms	Provide emergency egress lighting	1	LS	\$330.00	\$330	\$330.00	\$330	\$660	\$132	\$7	\$799	4771	1.11	\$88	\$886	\$106	\$18	\$1,011	\$202	\$1,213	N/A	0.0												
42	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	2,892	SF	\$0.38	\$1,099	\$0.38	\$1,099	\$2,198	\$440	\$22	\$2,659	4771	1.11	\$293	\$2,952	\$354	\$59	\$3,365	\$673	\$4,038	N/A	0.0												
43	11	D	1	Asbestos/Hazardous Materials		0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
44	12	A	1	Missing Program Elements		0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
TOTAL PROJECT COSTS																							\$242,257															
REPLACEMENT VALUE						2,892	SF	\$85.00	\$245,820	\$45.00	\$130,140	\$375,960	\$75,192	\$3,760	\$454,912	4771	1.11	\$50,040	\$504,952	\$40,396	\$10,099	\$555,447	\$111,089	\$666,536														
TOTAL POTENTIAL ENERGY SAVINGS:																																						
CURRENT UTILITY COSTS																																				\$552		
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																					\$2,694	20%

A COMP	B SUB	C ECM	D ECM Name	E ECM DESCRIPTION	F QUANTITY		H MATERIAL		J LABOR		L SUB-TOTAL	M General Contractor Over Head Profit Bonds & Insurance	N Montana Gross Receipts Tax	O Subtotal- Construction Costs	P ENR at Time of Estimate	Q ENR Adjustment	R Escalation	S SUB-TOTAL	T A/E Design Services, printing, travel, misc.	U Building Permits	V SUB-TOTAL	W Contingency	X TOTAL PROJECT COSTS	Y YEAR ONE SAVINGS	Z SIMPLE PAYBACK (YRS)	
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
41	11	C	1	Exit Signs/Emergency Lighting/Alarms	Provide emergency egress lighting	1	LS	\$330.00	\$330	\$330.00	\$330	\$660	\$132	\$7	\$799	4771	1.11	\$88	\$886	\$106	\$18	\$1,011	\$202	\$1,213	N/A	0.0
42	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	2,892	SF	\$0.38	\$1,099	\$0.38	\$1,099	\$2,198	\$440	\$22	\$2,659	4771	1.11	\$293	\$2,952	\$354	\$59	\$3,365	\$673	\$4,038	N/A	0.0
43	11	D	1	Asbestos/Hazardous Materials		0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
44	12	A	1	Missing Program Elements		0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
TOTAL PROJECT COSTS																										
REPLACEMENT VALUE						2,892	SF	\$85.00	\$245,820	\$45.00	\$130,140	\$375,960	\$75,192	\$3,760	\$454,912	4771	1.11	\$50,040	\$504,952	\$40,396	\$10,099	\$555,447	\$111,089	\$666,536		
TOTAL POTENTIAL ENERGY SAVINGS:																								\$627		
CURRENT UTILITY COSTS																								\$2,694		
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																								23%		

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
34	7	A	1	Heating	Boiler is original to building and is past it's useful service life. Replace hot water boilers with new boilers.	1	LS	\$17,000.00	\$17,000	\$5,000.00	\$5,000	\$22,000	\$4,400	\$220	\$26,620	4771	1.11	\$2,928	\$29,548	\$3,546	\$591	\$33,685	\$6,737	\$40,422	\$1,376	29.4																				
35	7	A	2	Heating	Unit ventilators are in poor condition should be replaced. Install new HVAC system.	16,085	EA	\$6.50	\$104,553	\$6.50	\$104,553	\$209,105	\$41,821	\$2,091	\$253,017	4771	1.11	\$27,832	\$280,849	\$33,702	\$5,617	\$320,168	\$64,034	\$384,201	N/A	0.0																				
36	7	B	1	Ventilating	Install VFD's on fans motors on gym air handlers and library air handler.	3	EA	\$3,000.00	\$9,000	\$500.00	\$1,500	\$10,500	\$2,100	\$105	\$12,705	4771	1.11	\$1,398	\$14,103	\$1,692	\$282	\$16,077	\$3,215	\$19,292	\$181	106.6																				
37	7	C	1	Cooling	Provide cooling in computer rooms 114 & 116.	2	EA	\$5,000.00	\$10,000	\$2,500.00	\$5,000	\$15,000	\$3,000	\$150	\$18,150	4771	1.11	\$1,997	\$20,147	\$2,418	\$403	\$22,967	\$4,593	\$27,560	N/A	0.0																				
38	7	D	1	Temperature Controls	Replace pneumatic controls with DDC with time clocks, night set back.	46,072	SF	\$0.75	\$34,554	\$0.75	\$34,554	\$69,108	\$13,822	\$691	\$83,621	4771	1.11	\$9,198	\$92,819	\$11,138	\$1,856	\$105,814	\$21,163	\$126,976	\$4,000	31.7																				
39	7	E	1	Commissioning	Retro commission mechanical systems.	46,072	SF	\$0.00	\$0	\$0.50	\$23,036	\$23,036	\$4,607	\$230	\$27,874	4771	1.11	\$3,066	\$30,940	\$3,713	\$619	\$35,271	\$7,054	\$42,325	N/A	0.0																				
40	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	20	EA	\$500.00	\$10,000	\$100.00	\$2,000	\$12,000	\$2,400	\$120	\$14,520	4771	1.11	\$1,597	\$16,117	\$1,934	\$322	\$18,374	\$3,675	\$22,048	\$500	44.1																				
41	8	B	1	Plumbing Supply		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
42	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
43	9	A	1	Building Service		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
44	9	B	1	Lighting	Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps	1	LS	\$8,390.00	\$8,390	\$20,865.00	\$20,865	\$29,255	\$5,851	\$293	\$35,399	4771	1.11	\$3,894	\$39,292	\$4,715	\$786	\$44,793	\$8,959	\$53,752	\$3,641	14.8																				
45	9	C	1	Distribution	Replace obsolete electrical panels with new panels.	1	LS	\$13,375.00	\$13,375	\$6,975.00	\$6,975	\$20,350	\$4,070	\$204	\$24,624	4771	1.11	\$2,709	\$27,332	\$3,280	\$547	\$31,159	\$6,232	\$37,390	N/A	0.0																				
46	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
47	9	E	1	Clock/Bell		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
48	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
49	11	A	1	Egress		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
50	11	B	1	Extinguishing System		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
51	11	C	1	Exit Signs/Emergency Lighting/Alarms	Provide emergency egress lighting	1	LS	\$750.00	\$750	\$750.00	\$750	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0																				
52	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	46,072	SF	\$0.38	\$17,507	\$0.38	\$17,507	\$35,015	\$7,003	\$350	\$42,368	4771	1.11	\$4,660	\$47,028	\$5,643	\$941	\$53,612	\$10,722	\$64,335	N/A	0.0																				
53	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
54	11	E	1	Handicap Accessibility Missing Program Elements	Replace door hardware with accessible levers.	73	EA	\$200.00	\$14,600	\$50.00	\$3,650	\$18,250	\$3,650	\$183	\$22,083	4771	1.11	\$2,429	\$24,512	\$2,941	\$490	\$27,943	\$5,589	\$33,532	N/A	0.0																				
55	12	A	1			0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
TOTAL PROJECT COSTS																																														
REPLACEMENT VALUE						46,072	SF	\$85.00	\$3,916,120	\$45.00	\$2,073,240	\$5,989,360	\$1,197,872	\$59,894	\$7,247,126	4771	1.11	\$797,184	\$8,044,309	\$643,545	\$160,886	\$8,848,740	\$1,769,748	\$10,618,488																						
TOTAL POTENTIAL ENERGY SAVINGS:																																														
CURRENT UTILITY COSTS																											\$18,133																			
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																												\$97,135																		
																											19%																			

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
38	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
39	10	A	1	Elevator/Lift	Provide elevator serving all floors	1	LS	\$75,000.00	\$75,000	\$25,000.00	\$25,000	\$100,000	\$20,000	\$1,000	\$121,000	4771	1.11	\$13,310	\$134,310	\$16,117	\$2,686	\$153,113	\$30,623	\$183,736	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0										
40	11	A	1	Egress	Provide second exit from upper level	200	SF	\$40.00	\$8,000	\$40.00	\$8,000	\$16,000	\$3,200	\$160	\$19,360	4771	1.11	\$2,130	\$21,490	\$2,579	\$430	\$24,498	\$4,900	\$29,398	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0										
41	11	B	1	Extinguishing System		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
42	11	C	1	Exit Signs/Emergency Lighting/Alarms	Install LED exit signs	1	LS	\$135.00	\$135	\$90.00	\$90	\$225	\$45	\$2	\$272	4771	1.11	\$30	\$302	\$36	\$6	\$345	\$69	\$413	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$66	6.3												
43	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install emergency lighting	1	LS	\$750.00	\$750	\$750.00	\$750	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
44	11	C	3	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA. Replace initiating devices and connect to main building	0	SF	\$0.50	\$0	\$0.50	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
45	11	D	1	Asbestos/Haz Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
46	11	E	1	Handicap Accessibility	Provide accessible route to main level and second floor as noted above			\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
47	12	A	1	Missing Program		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
TOTAL PROJECT COSTS																																		\$618,529												
REPLACEMENT VALUE						9,840	SF	\$85.00	\$836,400	\$45.00	\$442,800	\$1,279,200	\$255,840	\$12,792	\$1,547,832	4771	1.11	\$170,262	\$1,718,094	\$137,447	\$34,362	\$1,889,903	\$377,981	\$2,267,883	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0										
TOTAL POTENTIAL ENERGY SAVINGS:																																			\$1,767											
CURRENT UTILITY COSTS																																			NA											
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																				NA										

QUICK START ENERGY AUDIT

Missoula County Public Schools
Missoula, Montana

BUILDING INFORMATION

SENTINEL BUILDING 400 TECH

ENROLLMENT 1216
ACRES: 0.5
AUDIT DATE: 7/29-30/2009
Current Year 2013

SF/STUDENT 7
STUDENTS/AC 2432
EUI 135.57 kBTU/SF/yr
Total Project Cost: \$348,935
Replacement Value: \$1,857,406
Total Project Cost/Replacement Value: 18.8%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%



CONSTRUCTION DATE: 1960 53
ADDITION #1 0 0
ADDITION #2 0 0
ADDITION #3 0 0
ADDITION #4 0 0
ADDITION #5 0 0

BUILDING AREA 8,059 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
BUILDING AREA 0 SF
TOTAL 8,059 SF
METAL: 8,100 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA 0 SF
ROOF AREA SF
TOTAL 8,100 SF
ROOF DATE 1960 53
ROOF DATE 0 0
ROOF DATE 0 0
ROOF DATE 0 0
ROOF DATE 0 0
ROOF DATE 0 0
ROOF DATE

WINDOW: 261 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
WINDOW: 0 SF
SINGLE PANE -INDIVIDUAL WINDOWS
DOUBLE PANE -INDIVIDUAL WINDOWS
SINGLE PANE -WINDOW WALL
DOUBLE PANE -WINDOW WALL
GLASS BLOCK
FIBERGLASS PANEL

BOILER DATE: NA NA
BOILER DATE: 0
BOILER DATE:
BOILER DATE:

PLUMBING FIXTURES:
WC 2
U 0
S 2
WS 0
TOTAL 4

DOOR: 18 UNITS INTERIOR
DOOR: 5 UNITS EXTERIOR
TOTAL 23 UNITS
PERIMETER 421 LF
5308 EUI 10/2013

Table with columns A-Z: COMP, SUB, ECM, ECM Name, ECM DESCRIPTION, QUANTITY (No. Units, Unit Meas., Per Unit, TOTAL), LABOR (Per Unit, TOTAL, SUB-TOTAL), General Contractor Over Head Profit Bonds & Insurance, Montana Gross Receipts Tax, Subtotal-Construction Costs, ENR at Time of Estimate, ENR Adjustment, Escalation, SUB-TOTAL, A/E Design Services, Building Permits, SUB-TOTAL, Contingency, TOTAL PROJECT COSTS, YEAR ONE SAVINGS, SIMPLE PAYBACK (YRS)

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
40	11	B	1	Extinguishing System	0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
41	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$135.00	\$135	\$90.00	\$90	\$225	\$45	\$2	\$272	4771	1.11	\$30	\$302	\$36	\$6	\$345	\$69	\$413	\$66	6.3
42	11	C	2	Exit Signs/Emergency Lighting/Alarms	1	LS	\$750.00	\$750	\$750.00	\$750	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0
43	11	C	3	Exit Signs/Emergency Lighting/Alarms	8,059	SF	\$0.50	\$4,030	\$0.50	\$4,030	\$8,059	\$1,612	\$81	\$9,751	4771	1.11	\$1,073	\$10,824	\$1,299	\$216	\$12,339	\$2,468	\$14,807	N/A	0.0
44	11	D	1	Asbestos/Haz Materials	0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
45	11	E	1	Handicap Accessibility	0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
46	12	A	1	Missing Program	0			\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
TOTAL PROJECT COSTS																									\$348,935
REPLACEMENT VALUE					8,059	SF	\$85.00	\$685,015	\$45.00	\$362,655	\$1,047,670	\$209,534	\$10,477	\$1,267,681	4771	1.11	\$139,445	\$1,407,126	\$112,570	\$28,143	\$1,547,838	\$309,568	\$1,857,406		
TOTAL POTENTIAL ENERGY SAVINGS:																									\$1,920
CURRENT UTILITY COSTS																									\$12,671
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																									15%

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z														
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)														
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																													
36	9	C	1	Distribution	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
37	9	D	1	Voice/Data	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
38	10	A	1	Elevator/Lift	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
39	11	A	1	Egress	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
40	11	B	1	Extinguishing System	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
41	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$135.00	\$135	\$90.00	\$90	\$225	\$45	\$2	\$272	4771	1.11	\$30	\$302	\$36	\$6	\$345	\$69	\$413	\$66	6.3														
42	11	C	2	Exit Signs/Emergency Lighting/Alarms	1	LS	\$750.00	\$750	\$750.00	\$750	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0														
43	11	C	3	Exit Signs/Emergency Lighting/Alarms	20,984	SF	\$0.50	\$10,492	\$0.50	\$10,492	\$20,984	\$4,197	\$210	\$25,391	4771	1.11	\$2,793	\$28,184	\$3,382	\$564	\$32,129	\$6,426	\$38,555	N/A	0.0														
44	11	D	1	Asbestos/Haz Materials	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
45	11	E	1	Handicap Accessibility	200	SF	\$3.00	\$600	\$6.00	\$1,200	\$1,800	\$360	\$18	\$2,178	4771	1.11	\$240	\$2,418	\$290	\$48	\$2,756	\$551	\$3,307	N/A	0.0														
46	12	A	1	Missing Program	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0													
TOTAL PROJECT COSTS																							\$835,648																
REPLACEMENT VALUE					20,984	SF	\$85.00	\$1,783,640	\$45.00	\$944,280	\$2,727,920	\$545,584	\$27,279	\$3,300,783	4771	1.11	\$363,086	\$3,663,869	\$293,110	\$73,277	\$4,030,256	\$806,051	\$4,836,308																
TOTAL POTENTIAL ENERGY SAVINGS:																																						\$4,380	
CURRENT UTILITY COSTS																																							\$16,393
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																																							27%

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																										
																										COMP	SUB	ECM	Category	DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																															No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
37	9	D	1	Voice/Data		0		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																							
38	10	A	1	Elevator/Lift		0		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																							
39	11	A	1	Egress		0		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
40	11	B	1	Extinguishing System		0		\$0		\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
41	11	C	1	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	17,411	SF	\$0.38	\$6,616	\$0.38	\$6,616	\$13,232	\$2,646	\$132	\$16,011	4771	1.11	\$1,761	\$17,772	\$2,133	\$355	\$20,261	\$4,052	\$24,313	N/A	0.0																									
42	11	D	1	Asbestos/Haz Materials		0		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
43	11	E	1	Handicap Accessibility		0		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
44	12	A	1	Missing Program		0		\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																								
TOTAL PROJECT COSTS																											\$303,653																								
REPLACEMENT VALUE						17,411	SF	\$85.00	\$1,479,935	\$45.00	\$783,495	\$2,263,430	\$452,686	\$22,634	\$2,738,750	4771	1.11	\$301,263	\$3,040,013	\$243,201	\$60,800	\$3,344,014	\$668,803	\$4,012,817																											
TOTAL POTENTIAL ENERGY SAVINGS:																										\$504																									
CURRENT UTILITY COSTS																										\$11,843																									
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																										4%																									



BUILDING INFORMATION

WASHINGTON

ENROLLMENT 637
ACRES: 4.5
AUDIT DATE: 8/17/2009
Current Year 2013

SF/STUDENT 130
STUDENTS/AC 141.56
EUI 71.65 kBTU/SF/yr

Total Project Cost: \$2,611,080
Replacement Value: \$19,080,413
Total Project Cost/Replacement Value: 13.7%

General Contractor Gen. Cond. OH & P 20%
MT Gross Receipts Tax 1%
Escalation 11%
AE Design Fees (Renovation/Remodel) 12%
Permit Fees 2%
Contingency 20%
AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: 1951 62
ADDITION #1 1954 59
ADDITION #2 1986 27
ADDITION #3 1989 24
ADDITION #4 2004 9
ADDITION #5

BUILDING AREA	32,466 SF	METAL-C:	11,851 SF	ROOF DATE	1980 33
BUILDING AREA	6,519 SF	HYP/BUR-A:	6,519 SF	ROOF DATE	1986 27
BUILDING AREA	923 SF	HYP:	22,546 SF	ROOF DATE	1989 24
BUILDING AREA	38,820 SF	HYP/BUR-G:	7,848 SF	ROOF DATE	1990 23
BUILDING AREA	4,059 SF	HYP/BUR-M:	4,059 SF	ROOF DATE	2004 9
BUILDING AREA	0 SF	METAL-S	923 SF	ROOF DATE	1986 27
TOTAL	82,787 SF	TOTAL	53,746 SF		

WINDOW:	0 SF	SINGLE PANE -INDIVIDUAL WINDOWS
WINDOW:	1,056 SF	DOUBLE PANE -INDIVIDUAL WINDOWS
WINDOW:	1,871 SF	SINGLE PANE -WINDOW WALL
WINDOW:	0 SF	DOUBLE PANE -WINDOW WALL
WINDOW:	2,550 SF	GLASS BLOCK
WINDOW:	20 SF	FIBERGLASS PANEL
TOTAL	5,497 SF	

BOILER DATE: 1951 62
BOILER DATE: 1989 24
BOILER DATE: 1989 24
BOILER DATE: 1989 24
BOILER DATE: 1995 18
BOILER DATE: 1995 18
BOILER DATE: 1995 18

PLUMBING FIXTURES:
WC 31
U 11
S 19
WS 0
TOTAL 61

DOOR: 67 UNITS INTERIOR
DOOR: 20 UNITS EXTERIOR
TOTAL 87 UNITS 5308 EUI 10/2013

PERIMETER 1526 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z		
																										COMP	SUB
No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																						
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	1,526	LF	\$1.00	\$1,526	\$5.00	\$7,630	\$9,156	\$1,831	\$92	\$11,079	4771	1.11	\$1,219	\$12,297	\$1,476	\$246	\$14,019	\$2,804	\$16,823	\$100	168.2	
2	1	B	1	Exterior Steps/Retaining Walls	Exterior steps are failing	500	SF	\$3.00	\$1,500	\$6.00	\$3,000	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0	
3	2	A	1	Exterior Wall	Repoint brick east and west sides of annex, corner of boiler room, gymnasium, planter, patch cracks in southwest corner of 1989 concrete foundation to prevent moisture intrusion and degradation to exterior envelope.	2,000	SF	\$5.00	\$10,000	\$10.00	\$20,000	\$30,000	\$6,000	\$300	\$36,300	4771	1.11	\$3,993	\$40,293	\$4,835	\$806	\$45,934	\$9,187	\$55,121	\$250	220.5	
4	2	A	2	Exterior Wall	Replace plywood openings in east side of gymnasium with insulated wall panels or masonry.	20	SF	\$7.00	\$140	\$5.00	\$100	\$240	\$48	\$2	\$290	4771	1.11	\$32	\$322	\$39	\$6	\$367	\$73	\$441	\$50	8.8	
5	2	A	3	Exterior Wall	Replace fascia and skirting on modular to prevent moisture intrusion and degradation to exterior envelope.	1,000	SF	\$2.00	\$2,000	\$2.00	\$2,000	\$4,000	\$800	\$40	\$4,840	4771	1.11	\$532	\$5,372	\$645	\$107	\$6,125	\$1,225	\$7,349	\$50	147.0	
6	2	A	4	Exterior Wall	Replace joint sealants in walls, vent penetrations and EIFS to prevent moisture intrusion and degradation to exterior envelope.	200	LF	\$1.00	\$200	\$4.00	\$800	\$1,000	\$200	\$10	\$1,210	4771	1.11	\$133	\$1,343	\$161	\$27	\$1,531	\$306	\$1,837	\$50	36.7	
7	2	A	5	Exterior Wall Insulation	Add two inches of insulation/metal panel to the exterior wall assembly of 1989 gymnasium.	5,100	SF	\$7.00	\$35,700	\$5.00	\$25,500	\$61,200	\$12,240	\$612	\$74,052	4771	1.11	\$8,146	\$82,198	\$9,864	\$1,644	\$93,705	\$18,741	\$112,446	\$1,000	112.4	
8	2	B	1	Window replacement	The building has large amounts of single pane windows with glass block above. Replace glass block with insulated metal panel and operable windows with 2 fixed and one operable window. Replace concrete frame in annex window system.	1,871	SF	\$24.00	\$44,904	\$21.00	\$39,291	\$84,195	\$16,839	\$842	\$101,876	4771	1.11	\$11,206	\$113,082	\$13,570	\$2,262	\$128,914	\$25,783	\$154,697	\$500	309.4	
9	2	B	2	Window replacement	Replace three broken glass blocks in room 101 and hole in transom of entry to H4.	4	EA	\$18.00	\$72	\$15.00	\$60	\$132	\$26	\$1	\$160	4771	1.11	\$18	\$177	\$21	\$4	\$202	\$40	\$243	\$50	4.9	
10	2	C	1	Exterior Door Replacement	Replace exterior doors with insulated hollow metal doors with double pane glazing.	20	EA	\$1,300.00	\$26,000	\$750.00	\$15,000	\$41,000	\$8,200	\$410	\$49,610	4771	1.11	\$5,457	\$55,067	\$6,608	\$1,101	\$62,776	\$12,555	\$75,332	\$500	150.7	
11	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
12	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
13	3	B	1	Stair Treads/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	4	A	1	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	4	B	1	Roof Covering	Replace hypalon roof above original gym.	14,367	SF	\$2.00	\$28,734	\$1.00	\$14,367	\$43,101	\$8,620	\$431	\$52,152	4771	1.11	\$5,737	\$57,889	\$6,947	\$1,158	\$65,993	\$13,199	\$79,192	\$1,000	79.2	
16	4	B	1	Roof Covering	Provide gutters and downspouts on modular classroom to prevent moisture intrusion and degradation of exterior envelope.	160	LF	\$2.50	\$400	\$5.00	\$800	\$1,200	\$240	\$12	\$1,452	4771	1.11	\$160	\$1,612	\$193	\$32	\$1,837	\$367	\$2,205	N/A	0.0	
17	4	B	2	Roof Covering	Replace copings and fascia on original building. Replace copings on Annex.	250	LF	\$12.00	\$3,000	\$10.00	\$2,500	\$5,500	\$1,100	\$55	\$6,655	4771	1.11	\$732	\$7,387	\$886	\$148	\$8,421	\$1,684	\$10,105	N/A	0.0	
18	4	B	3	Roof Covering	Trim trees to prevent damage to roof coverings.	500	SF	\$0.00	\$0	\$2.50	\$1,250	\$1,250	\$250	\$13	\$1,513	4771	1.11	\$166	\$1,679	\$201	\$34	\$1,914	\$383	\$2,297	N/A	0.0	
19	4	B	4	Roof Covering	Remove flagpole and patch canopy to prevent moisture intrusion and degradation of exterior envelope.	1	LS	\$500.00	\$500	\$1,000.00	\$1,000	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0	
20	4	B	5	Roof Covering	Paint downspout at north entry to prevent moisture intrusion and degradation of exterior envelope.	100	SF	\$0.50	\$50	\$0.50	\$50	\$100	\$20	\$1	\$121	4771	1.11	\$13	\$134	\$16	\$3	\$153	\$31	\$184	N/A	0.0	
21	4	B	6	Roof Covering	Provide roof ladders	3	EA	\$1,000.00	\$3,000	\$500.00	\$1,500	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0	

A	B	C	D	E	F		G		H		I		J		L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z											
					QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs																ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																														
32	8	A	1	Plumbing Fixtures	33	EA	\$500.00	\$16,500	\$100.00	\$3,300	\$19,800	\$3,960	\$198	\$23,958	4771	1.11	\$2,635	\$26,593	\$3,191	\$532	\$30,316	\$6,063	\$36,380	N/A	0.0															
33	8	B	1	Plumbing Supply	0	0	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
34	8	C	1	Plumbing Waste	0			\$0		\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0											
35	9	A	1	Building Service	1	LS	\$18,025.00	\$18,025	\$9,125.00	\$9,125	\$27,150	\$5,430	\$272	\$32,852	4771	1.11	\$3,614	\$36,465	\$4,376	\$729	\$41,570	\$8,314	\$49,884	N/A	0.0															
36	9	B	1	Lighting	1	LS	\$6,698.00	\$6,698	\$8,275.00	\$8,275	\$14,973	\$2,995	\$150	\$18,117	4771	1.11	\$1,993	\$20,110	\$2,413	\$402	\$22,926	\$4,585	\$27,511	\$2,581	10.7															
37	9	B	2	Lighting	5	LS	\$300.00	\$1,500	\$300.00	\$1,500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	N/A	0.0															
38	9	C	1	Distribution	1	LS	\$7,150.00	\$7,150	\$6,150.00	\$6,150	\$13,300	\$2,660	\$133	\$16,093	4771	1.11	\$1,770	\$17,863	\$2,144	\$357	\$20,364	\$4,073	\$24,437	N/A	0.0															
39	9	D	1	Voice/Data	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
40	9	E	1	Clock Bell	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
41	10	A	1	Elevator/Lift	1	LS	\$150,000.00	\$150,000	\$50,000.00	\$50,000	\$200,000	\$40,000	\$2,000	\$242,000	4771	1.11	\$26,620	\$268,620	\$32,234	\$5,372	\$306,227	\$61,245	\$367,472	N/A	0.0															
42	11	A	1	Egress	1,200	SF	\$45.00	\$54,000	\$45.00	\$54,000	\$108,000	\$21,600	\$1,080	\$130,680	4771	1.11	\$14,375	\$145,055	\$17,407	\$2,901	\$165,362	\$33,072	\$198,435	N/A	0.0															
43	11	B	1	Extinguishing System	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
44	11	C	1	Exit Signs/Emergency Lighting/Alarms	1	LS	\$450.00	\$450	\$300.00	\$300	\$750	\$150	\$8	\$908	4771	1.11	\$100	\$1,007	\$121	\$20	\$1,148	\$230	\$1,378	\$220	6.3															
45	11	C	2	Exit Signs/Emergency Lighting/Alarms	1	LS	\$1,500.00	\$1,500	\$1,500.00	\$1,500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	\$220	25.1															
45	11	C	3	Exit Signs/Emergency Lighting/Alarms	23,096	SF	\$0.38	\$8,776	\$0.38	\$8,776	\$17,553	\$3,511	\$176	\$21,239	4771	1.11	\$2,336	\$23,575	\$2,829	\$472	\$26,876	\$5,375	\$32,251	N/A	0.0															
46	11	D	1	Asbestos/Hazardous Materials	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
47	11	E	1	Handicap Accessibility Missing Program Elements	20	EA	\$2,500.00	\$50,000	\$500.00	\$10,000	\$60,000	\$12,000	\$600	\$72,600	4771	1.11	\$7,986	\$80,586	\$9,670	\$1,612	\$91,868	\$18,374	\$110,242	N/A	0.0															
48	12	A	1	Missing Program Elements	0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0												
TOTAL PROJECT COSTS REPLACEMENT VALUE					23,096	SF	\$85.00	\$1,963,160	\$45.00	\$1,039,320	\$3,002,480	\$600,496	\$30,025	\$3,633,001	4771	1.11	\$399,630	\$4,032,631	\$322,610	\$80,653	\$4,435,894	\$887,179	\$5,323,073																	
TOTAL POTENTIAL ENERGY SAVINGS:																																								
CURRENT UTILITY COSTS																																								
TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																													\$7,171											
																												\$18,471												
																													39%											

QUICK START ENERGY AUDIT
 Missoula County Public Schools
 Missoula, Montana



BUILDING INFORMATION

WILLARD

AUDIT DATE: 7/28/2009
 Current Year 2013

ENROLLMENT 125
 ACRES: 1.5

SF/STUDENT 185
 STUDENTS/AC 83.333
 EUI 69.64 kBtu/SF/yr

Total Project Cost: \$2,080,315
 Replacement Value: \$5,323,073
 Total Project Cost/Replacement Value: 39.1%

General Contractor Gen. Cond. OH & P 20%
 MT Gross Receipts Tax 1%
 Escalation 11%
 AE Design Fees (Renovation/Remodel) 12%
 Permit Fees 2%
 Contingency 20%
 AE Design Fees (New Construction) 8%

CONSTRUCTION DATE: 1922 91 Age
 ADDITION #1 0 0
 ADDITION #2 0 0
 ADDITION #3 0 0
 ADDITION #4 0 0
 ADDITION #5 0 0

BUILDING AREA 23,096 SF HYP/BUR: 8,233 SF ROOF DATE 2001 12
 BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE 0 0
 BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE 0 0
 BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE 0 0
 BUILDING AREA 0 SF ROOF AREA 0 SF ROOF DATE 0 0
 BUILDING AREA 0 SF ROOF AREA SF ROOF DATE
TOTAL 23,096 SF TOTAL 8,233 SF TOTAL 3,012 SF

WINDOW: 2,696 SF SINGLE PANE -INDIVIDUAL WINDOWS
 WINDOW: 316 SF DOUBLE PANE -INDIVIDUAL WINDOWS
 WINDOW: 0 SF SINGLE PANE -WINDOW WALL
 WINDOW: 0 SF DOUBLE PANE -WINDOW WALL
 WINDOW: 0 SF GLASS BLOCK
 WINDOW: 0 SF FIBERGLASS PANEL

BOILER DATE: 1960 53 Age
 BOILER DATE: 0
 BOILER DATE:
 BOILER DATE:

PLUMBING FIXTURES:
 WC 15
 U 10
 S 8
 WS 0
TOTAL 33

DOOR: 54 UNITS INTERIOR
 DOOR: 10 UNITS EXTERIOR
TOTAL 64 UNITS 5308 EUI 10/2013

PERIMETER 372 LF

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	
COMP	SUB	ECM	ECM Name	ECM DESCRIPTION	QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal-Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)	
					No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL																
1	1	A	1	Foundation Wall Insulation	Building lacks insulation in perimeter foundation wall.	372	LF	\$1.00	\$372	\$5.00	\$1,860	\$2,232	\$446	\$22	\$2,701	4771	1.11	\$297	\$2,998	\$360	\$60	\$3,417	\$683	\$4,101	\$50	82.0
2	1	B	1	Exterior Steps/Retaining Walls	Replace exterior steps and handrails on east side. & north step.	500	SF	\$3.00	\$1,500	\$6.00	\$3,000	\$4,500	\$900	\$45	\$5,445	4771	1.11	\$599	\$6,044	\$725	\$121	\$6,890	\$1,378	\$8,268	N/A	0.0
3	2	A	1	Exterior Wall	Repoint exterior walls, entry details and chimney to prevent moisture and air infiltration.	11,160	SF	\$5.00	\$55,800	\$10.00	\$111,600	\$167,400	\$33,480	\$1,674	\$202,554	4771	1.11	\$22,281	\$224,835	\$26,980	\$4,497	\$256,312	\$51,262	\$307,574	\$250	1230.3
4	2	B	1	Window replacement	Replace window system	3,012	SF	\$45.00	\$135,540	\$15.00	\$45,180	\$180,720	\$36,144	\$1,807	\$218,671	4771	1.11	\$24,054	\$242,725	\$29,127	\$4,855	\$276,707	\$55,341	\$332,048	\$942	352.5
5	2	C	1	Exterior Door Replacement	Replace exterior doors and frames to prevent infiltration of air and water.	10	SF	\$1,300.00	\$13,000	\$750.00	\$7,500	\$20,500	\$4,100	\$205	\$24,805	4771	1.11	\$2,729	\$27,534	\$3,304	\$551	\$31,388	\$6,278	\$37,666	\$500	75.3
6	2	D	1	Interior Columns/Beams		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
7	3	A	1	Floor Structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
8	3	B	1	Stair Treads/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
9	4	A	1	Roof structure		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
10	4	B	1	Roof Covering		0	SF	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
11	4	B	1	Roof Drainage	Extend roof scuppers to grade to prevent damage to exterior walls. Roof drains are interior to building.	100	LF	\$70.00	\$7,000	\$4.00	\$400	\$7,400	\$1,480	\$74	\$8,954	4771	1.11	\$985	\$9,939	\$1,193	\$199	\$11,330	\$2,266	\$13,596	N/A	0.0
12	4	C	1	Roof Insulation	Add an additional 4-inches of polyisocyanurate insulation to the 1 inch of existing insulation in the roof assembly to raise the R-value of the roof from an estimated R-5 to R-28.	8,233	SF	\$2.00	\$16,466	\$1.00	\$8,233	\$24,699	\$4,940	\$247	\$29,886	4771	1.11	\$3,287	\$33,173	\$3,981	\$663	\$37,817	\$7,563	\$45,381	\$2,493	18.2
13	5	A	1	Interior Walls		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
14	5	B	1	Ceilings		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
15	5	C	1	Interior Doors/Hardware/Windows		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
16	5	D	1	Floor Finishes		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
17	5	E	1	Paint		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
18	6	A	1	Toilet Partitions		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
19	6	B	1	Signage/Directories		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
20	6	C	1	Fixed Seating/Risers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
21	6	D	1	Chalk/Tack boards/Cabinets		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
22	6	E	1	Fume Hoods		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
23	6	F	1	Lockers		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
24	6	G	1	Cells and Visitor Cubicles		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
25	6	H	1	Ansul Hoods	Replace exterior exhaust vent.	1	LS	\$1,000.00	\$1,000	\$500.00	\$500	\$1,500	\$300	\$15	\$1,815	4771	1.11	\$200	\$2,015	\$242	\$40	\$2,297	\$459	\$2,756	N/A	0.0
26	6	I	1	Swimming Pools		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
27	7	A	1	Heating	Boiler is past it's useful service life. Replace steam boiler with new boiler.	0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	0.0
28	7	A	2	Heating	Replace HVAC System.	23,096	SF	\$6.50	\$150,124	\$6.50	\$150,124	\$300,248	\$60,050	\$3,002	\$363,300	4771	1.11	\$39,963	\$403,263	\$48,392	\$8,065	\$459,720	\$91,944	\$551,664	N/A	0.0
29	7	C	1	Cooling	Provide cooling to computer lab	1	EA	\$5,000.00	\$5,000	\$2,500.00	\$2,500	\$7,500	\$1,500	\$75	\$9,075	4771	1.11	\$998	\$10,073	\$1,209	\$201	\$11,484	\$2,297	\$13,780	N/A	0.0
30	7	D	1	Temperature Controls		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
31	7	E	1	Commissioning		0	SF	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
32	8	A	1	Plumbing Fixtures	Replace faucets and flush valves with infrared sensor faucets and flush valves to conserve water.	33	EA	\$500.00	\$16,500	\$100.00	\$3,300	\$19,800	\$3,960	\$198	\$23,958	4771	1.11	\$2,635	\$26,593	\$3,191	\$532	\$30,316	\$6,063	\$36,380	N/A	0.0
33	8	B	1	Plumbing Supply		0	EA	\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0
34	8	C	1	Plumbing Waste		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z																					
																										QUANTITY		MATERIAL		LABOR		SUB-TOTAL	General Contractor Over Head Profit Bonds & Insurance	Montana Gross Receipts Tax	Subtotal- Construction Costs	ENR at Time of Estimate	ENR Adjustment	Escalation	SUB-TOTAL	A/E Design Services, printing, travel, misc.	Building Permits	SUB-TOTAL	Contingency	TOTAL PROJECT COSTS	YEAR ONE SAVINGS	SIMPLE PAYBACK (YRS)
																										No. Units	Unit Meas.	Per Unit	TOTAL	Per Unit	TOTAL															
35	9	A	1	Building Service		0			\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																		
					Install occupancy sensors in rooms that currently don't have sensors, replace incandescent lamps with CFL, and convert all fixtures with T12 lamps to T8 lamps	1	LS	\$4,474.00	\$4,474	\$7,570.00	\$7,570	\$12,044	\$2,409	\$120	\$14,573	4771	1.11	\$1,603	\$16,176	\$1,941	\$324	\$18,441	\$3,688	\$22,129	\$3,302	6.7																				
36	9	B	1	Lighting		0		\$0.00	\$0	\$0.00	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
37	9	C	1	Distribution		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
38	9	D	1	Voice/Data		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
39	10	A	1	Elevator/Lift		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
40	11	A	1	Egress	Provide two code compliant means of egress on south side of building.	1,200	SF	\$45.00	\$54,000	\$45.00	\$54,000	\$108,000	\$21,600	\$1,080	\$130,680	4771	1.11	\$14,375	\$145,055	\$17,407	\$2,901	\$165,362	\$33,072	\$198,435	\$0	N/A	0.0																			
41	11	B	1	Extinguishing System	Provide fire suppression system	23,096	SF	\$1.50	\$34,644	\$2.50	\$57,740	\$92,384	\$18,477	\$924	\$111,785	4771	1.11	\$12,296	\$124,081	\$14,890	\$2,482	\$141,452	\$28,290	\$169,743	\$0	N/A	0.0																			
42	11	C	1	Exit Signs/Emergency Lighting/Alarms	Replace exit signs with LED type exit signs.	1	LS	\$450.00	\$450	\$300.00	\$300	\$750	\$150	\$8	\$908	4771	1.11	\$100	\$1,007	\$121	\$20	\$1,148	\$230	\$1,378	\$220	6.3																				
43	11	C	1	Exit Signs/Emergency Lighting/Alarms	Add emergency egress lighting.	1	LS	\$1,500.00	\$1,500	\$1,500.00	\$1,500	\$3,000	\$600	\$30	\$3,630	4771	1.11	\$399	\$4,029	\$484	\$81	\$4,593	\$919	\$5,512	\$0	N/A	0.0																			
44	11	C	2	Exit Signs/Emergency Lighting/Alarms	Install additional fire alarm strobes in common use areas to conform to current fire code and ADA.	23,096	SF	\$0.38	\$8,776	\$0.38	\$8,776	\$17,553	\$3,511	\$176	\$21,239	4771	1.11	\$2,336	\$23,575	\$2,829	\$472	\$26,876	\$5,375	\$32,251	\$0	N/A	0.0																			
45	11	D	1	Asbestos/Hazardous Materials		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
46	11	E	1	Handicap Accessibility Missing Program Elements	Replace doors, frames and hardware	54	EA	\$2,500.00	\$135,000	\$500.00	\$27,000	\$162,000	\$32,400	\$1,620	\$196,020	4771	1.11	\$21,562	\$217,582	\$26,110	\$4,352	\$248,044	\$49,609	\$297,652	\$0	N/A	0.0																			
47	12	A	1	Handicap Accessibility Missing Program Elements		0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	4771	1.11	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	0.0																			
TOTAL PROJECT COSTS REPLACEMENT VALUE						23,096	SF	\$85.00	\$1,963,160	\$45.00	\$1,039,320	\$3,002,480	\$600,496	\$30,025	\$3,633,001	4771	1.11	\$399,630	\$4,032,631	\$322,610	\$80,653	\$4,435,894	\$887,179	\$5,323,073	\$2,080,315																					
TOTAL POTENTIAL ENERGY SAVINGS: CURRENT UTILITY COSTS TOTAL POTENTIAL ENERGY SAVINGS/CURRENT ENERGY SAVINGS:																											\$7,757 \$19,352 40%																			