



ENERGY EXPENDITURE PLAN



Grant Elementary School

2368 Pearl Street

Santa Monica, CA 90405

P: (310) 450-7651

PREPARED FOR:

California Energy Commission
Energy Division
Local Assistance and Financing Office, MS-23
1516 Ninth Street
Sacramento, Ca 95814



PREPARED ON:
5/17/2017

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Section 1: Facility Background

Grant Elementary School

Grant Elementary School is located at 2368 Pearl Street in Santa Monica, CA 90405. It is an elementary school serving approximately 628 students ranging from grades K-5 and provides instruction using 7 permanent buildings and 10 portable buildings. The total amount of occupied space is 60,234 SF. For a complete map of the campus, see Appendix A.

The campus operates on an academic calendar that begins in late August and ends in late June. Winter Break is a two week break that begins at the end of December and goes to the first week of January. Spring Break is a one week break that begins in mid-April. School is in session beginning at 8:20 a.m. and continuing until 2:50 p.m., Monday through Friday. For a complete academic calendar and bell schedule, refer to Appendix A.



Utility Costs and Rate Schedules

The Grant Elementary School facilities receive electricity services from Southern California Edison (SCE) and gas services from SoCalGas (SCG). Monthly utility data is considered separately for each utility meter and each energy type (electricity, natural gas, propane, diesel, and water).

The following is a list of the meters associated with each energy type utilized at Grant Elementary School:

Table 1: Electric Meter Numbers and Rate Schedules

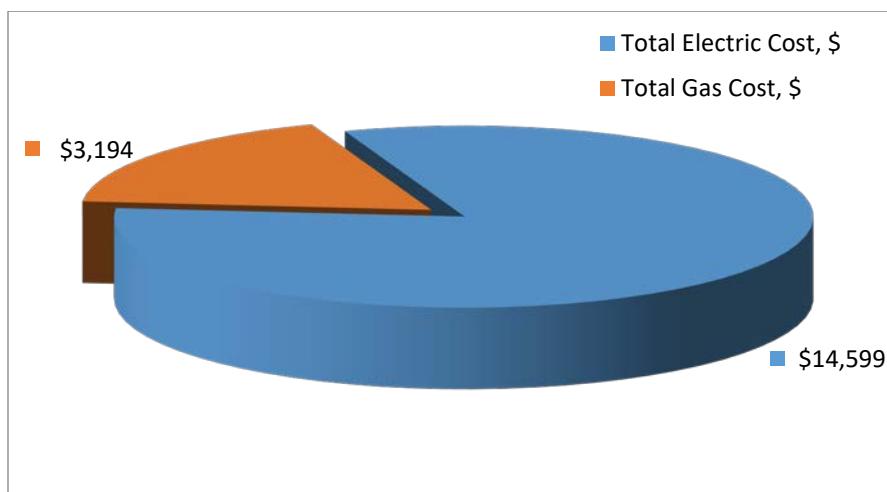
Account Number	Meter Number	Rate Schedule
3-005-4483-13	223000-003822	TOU-GS-1-A
3-008-4981-74	259000-073665	TOU-GS-2-R

Table 2: Gas or Propane Meter Numbers and Rate Schedules

Account Number	Meter Number	Rate Schedule
204046000	12454480	GN-10

The site also utilizes a 122.4 kW photovoltaic array, installed in 2013, that produced 188,597 kWh from July, 2015 to June, 2016.

The utility data provided uses the data recovered from each of these meters during the period of July, 2015 to June, 2016. The cost comparison of Grant Elementary School's gas and electricity costs can be seen in the table below:



Benchmarking

As part of the site evaluation we determined the Energy Utilization Analysis (EUA) to provide important information about the energy usage of the school. Listed in the table below is the Benchmarking Report for Grant Elementary School:

Energy Use Intensity Calculator					
Electricity		Natural Gas		Other Fuels	
1.43	W/SF	0.06	Therms/SF	0.00	Gals/SF
5.73	kWh/SF	\$ 0.05	Cost/SF	\$ 0.00	Cost/SF
\$ 0.24	Cost/SF				
Energy Costs/SF/Year		\$ 0.30	Energy Use(Kbtu)/SF/Year		67.64

The main purpose of this report is to assess the current energy usage of Grant Elementary School. Energy consumption is analyzed compared to the site's actual weather data expressed in Cooling Degree Days (CDD) & Heating Degree Days (HDD). Graphs comparing the energy consumption to the CDD and HDD can be found in Appendix B.

The Baseline Energy Utilization Analysis (EUA) report compiles the monthly energy data from all meters on site. The EUA is useful in identifying critical energy consuming benchmarks like kWh/SF, kBtu/SF, and Cost/SF for each fuel type and individual school site. This report is a great resource to have for identifying the lowest energy performing schools. The report ranking will present the schools that consume the most energy when compared to others within the district or other comparable districts. The considered school is rated at 5.73 kWh/SF/yr.

The baseline EUA summary of all the meters for Grant Elementary School can be found in Appendix B.

Section 2: Energy Efficiency Measures (EEM) Summary

Energy savings are based on the difference between annual energy use under existing conditions and annual energy use under proposed conditions. These annual energy savings, and the corresponding annual energy cost savings, are used to determine the cost-effectiveness of the projects. Demand savings are calculated as the difference between the electricity demand of the existing equipment and electricity demand of proposed equipment. The table below shows the Energy Efficiency Measures proposed and the corresponding savings associated with them.

EEM Number	Energy Efficiency Measure	Demand Savings (kW)	Electricity Savings (kWh/yr)	Natural Gas or Fuel Savings (therms or gal/yr)	Annual Cost Savings (\$)	Rebates and Grants (\$)	Installed Measure Cost (\$)
Lighting	Lighting – Interior Fixture Retrofit	36	62,976		\$5,857.00	\$62,000.00	\$164,309.00
Lighting	Lighting – Exterior Fixture Retrofit	6	23,010		\$2,140.00	\$40,000.00	\$60,031.00
Lighting	Lighting – Retrofit Interior Lamps to LED	1	1,538		\$143.00	\$2,000.00	\$3,813.00
Lighting	Lighting – LED Exit Signs	0	158		\$15.00	\$0.00	\$603.00
	Totals	43	87,682		\$8,155.00	\$104,000.00	\$228,756.00

Lighting Systems Retrofit

A significant portion of a facilities electrical costs comes from lighting, making lighting retrofits one of the quickest and simplest methods for reducing utility costs. In most cases the retrofits will result in improved light quality and reduced maintenance costs in addition to the estimated energy savings.

The method used for calculating energy savings is outlined below:

$$\underline{\text{Annual Saving, \$} = (\text{Existing Watts} - \text{New Watts}) / 1000 \times \text{Hours/Year} \times \text{Utility Rate} \times N}$$

Where,

Existing Watts – Wattage rating for the existing (Baseline) light fixture

New Watts – New wattage rating for the existing light fixture

Hours/Year – Annual number of “burn-hours” (run hours for different areas; see detailed audit in Appendix C)

Utility Rate – Actual weighted composite utility rate, \$/kWh

N – Number of light fixtures of the particular type (see below & in Appendix C for the actual quantities).

The current interior lighting systems in the Grant Elementary School buildings consist of a combination of 1st generation T-8, compact fluorescent, and incandescent lamps and fixtures. Following examination of the data collected, a full retrofit of the lighting system with LED lamps and fixtures is recommended.

The current exterior lighting systems in the Grant Elementary School buildings consist of compact fluorescent, 1st generation T-8, high pressure sodium, and incandescent lamps and fixtures. Following examination of the data collected, a full retrofit of the lighting system with LED lamps and fixtures is recommended.

The current exit signs in Grant Elementary School buildings consist of old compact fluorescent exit signs. Following examination of the data collected, a full retrofit of the exit signs with new LED is recommended.

This retrofit will generate more saving, electrical demand reduction and better payback than other Energy Conservation Measures such as HVAC replacements. Upon installment of the new system, the campus will conserve 43.027 kW and 87,682 kWh per year. The cost savings per year will be approximately \$8,154.43. A full detailed audit of the current lighting system implemented in the entire campus can be found in Appendix C.

Appendix – A

School Schedules and Maps

Daily Bell Schedule and Academic Calendar

Regular Bell Schedule

8:20 AM	Warning Bell
8:24 AM	School Begins TK-5
8:30 AM	School Begins Pre-K
9:55 - 10:20 AM	TK/K Recess
10:00-10:20 AM	Primary Recess - 1st and 2nd Grades
10:25-10:45 AM	Upper Recess - 3rd-5th Grades
11:30 AM - 12:15 PM	Lunch - PreK - 1st Grade
11:55 AM - 12:40 PM	Lunch - 2nd and 3rd Grade
12:20 - 1:05 PM	Lunch - 4th and 5th Grade
1:45 PM	TK/Kindergarten Dismissal
2:30PM	PreK Dismissal (no bell)
2:50 PM	Dismissal - 1st to 5th Grade

Late Start Friday Schedule

9:40 AM	Warning Bell
9:44 AM	School Begins
11:30 AM - 12:15 PM	Lunch - PreK - 1 st Grade
11:55 AM - 12:40 PM	Lunch - 2nd and 3rd Grade
12:20 - 1:05 PM	Lunch - 4th and 5th Grade
1:45 PM	TK/Kindergarten Dismissal
2:30PM	Pre-K Dismissal
2:50 PM	1st to 5th Grade Dismissal

Minimum Day Schedule

8:30 AM - 12:30 PM	Pre-Kindergarten (Lunch 11:30-12:00)
8:24 AM - 12:15pm	TK/Kindergarten (Lunch 11:30-12:00)
8:24 AM - 1:15 PM	(Primary recess-10:00 -10:20 Grades TK-2) (Upper recess- 10:25-10:45 Grades 3, 4, 5) (Primary lunch-11:30-12:00 Grades PreK-2) (Upper lunch- 12:20-12:50 Grades 3-5)



Minimum Days

August 22	(K-5) First Day of School
August 23	(Kindergarten only) Second Day of School
August 30	(K-5) Primary Back to School Night
September 6	(1-5) Upper Back to School Night (K regular day)
Nov. 7-10	(K-5) Parent Conferences
Nov. 23	(K-5) Day before Thanksgiving
Dec. 23	(K-5) Day before Winter Break
May 25	(K-5) Open House
June 9	(K-5) Last Day of School

Rainy Day Schedule

(see Regular Schedule **EXCEPT** for Lunch)

11:30 AM - 12:10 PM	Lunch - Grades K & 1
12:00 - 12:40 PM	Lunch - Grades 2 & 3
12:25 - 1:05 PM	Lunch - Grades 4 & 5



SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

2016-2017 District Calendar

July 2016							Approved by the Board of Education: 3/19/15							September 2016							
M	T	W	Th	F			M	T	W	Th	F		M	T	W	Th	F				
4	5	6	7	8			1	2	3	4	5		5	6	7	8	9				
11	12	13	14	15			8	9	10	11	12		12	13	14	15	16				
18	19	20	21	22			15	16	17	18	19		19	20	21	22	23				
25	26	27	28	29	30		29	30	31				26	27	28	29	30				
October 2016							November 2016							December 2016							
M	T	W	Th	F			M	T	W	Th	F		M	T	W	Th	F				
4	5	6	7	8			1	2	3	4	5		5	6	7	8	9				
10	11	12	13	14			7	8	9	10	11		12	13	14	15	16				
17	18	19	20	21			14	15	16	17	18		19	20	21	22	23				
24	25	26	27	28	29		21	22	23	24	25		26	27	28	29	30				
January 2017							February 2017							March 2017							
M	T	W	Th	F			M	T	W	Th	F		M	T	W	Th	F				
2	3	4	5	6			1	2	3	4	5		13	14	15	16	17				
9	10	11	12	13	14		6	7	8	9	10		20	21	22	23	24				
16	17	18	19	20	21		13	14	15	16	17		27	28	29	30	31				
23	24	25	26	27	28		20	21	22	23	24										
30	31						29	30													
April 2017							May 2017							June 2017							
M	T	W	Th	F			M	T	W	Th	F		M	T	W	Th	F				
3	4	5	6	7			1	2	3	4	5		5	6	7	8	9				
10	11	12	13	14	15		8	9	10	11	12		12	13	14	15	16				
17	18	19	20	21	22		15	16	17	18	19		19	20	21	22	23				
24	25	26	27	28	29		22	23	24	25	26		26	27	28	29	30				
30	31						29	30													



Employee Work Dates:						
Sept. 1, 2016-June 30, 2017.* Classified 11-Month *must work 22 days in July/August, 2016						
Aug. 8, 2016-June 21, 2017: Classified 10+10						
Aug. 15, 2016-June 14, 2017: Classified 10-Month						
Aug. 17, 2016-June 9, 2017: Certificated/184 Days						
Aug. 18, 2016-June 9, 2017: Certif/CDS/183 Days						
Aug. 19, 2016-June 9, 2017: Classified School Year						
Teacher Work Days: 184 Student Days: 180						
1st Semester: Aug. 22 - Dec. 23 (84 days)						
2nd Semester: Jan. 10 - June 9 (96 days)						



SANTA MONICA-MALIBU UNIFIED SCHOOL DISTRICT

First Day of Instruction:

- Monday, August 22, 2016

Last Day of Instruction:

- Friday, June 17, 2016

Certificated Staff Development Days:

(No Students)

- Wednesday, August 17, 2016

- Thursday, August 18, 2016

HOLIDAYS:

July 4: 4th of July Holiday

Sept. 5: Labor Day Holiday

Oct. 3: Local Holiday

Oct 12: Local Holiday

Nov. 11: Veteran's Day Holiday

Nov. 24: Thanksgiving Holiday

Nov. 25: Legal Holiday (Admission's Day observ)

Dec. 26, 27: Winter Holidays

Dec. 30, Jan 2: Keiki Years Holidays

Jan 16 - Martin Luther King Jr. Holiday

Feb. 20: Presidents' Day Holiday

April 2: Local Holiday

April 24: Legal Holiday (Lincoln's B'day observed)

May 29: Memorial Day Holiday

SCHOOL RECESS:

Dec. 26 - Jan 6: Winter Recess

Apr. 3 - Apr 14: Spring Recess

PUPIL-FREE DAYS:

Aug. 17: All Students

Aug. 18: All Students

Aug. 19: All Students

Nov. 4: Elementary Student's Clink

Jan. 9: Secondary Student's Only

MINIMUM DAYS:

TK/Kinderparent: Aug. 22, Aug. 23, 30, Nov.

7, 8, 9, 10, 23, Dec. 23, May 25, June 9

Elementary: Aug. 22, 30, Sept. 6, Nov. 7, 8,

9, 10, 23, Dec. 23, May 25, June 9

Santa Monica Middle Schools: Sept. 8, Nov.

23, Dec. 23, Mar. 31, Apr. 27, June 8, June 9,

+ 1 discretionary

Malibu MS/HS: Sept. 8, 15, Nov. 23, Dec. 21,

22, 23, March 9, June 6, 7, 8 + 1

discretionary

Samohi: Sept. 15, Dec. 20, 21, 22, 23, Mar. 9,

June 5, 6, 7, 8

Olympic HS: Sept. 20, Nov. 23, Dec. 23, May

2, June 1, 2, 5, 6, 7, 8, 9

Back to School Nights:

Tues. Aug. 30 - Elem TK-2

Tues. Sept. 6 - Elem 3-5

Thurs. Sept. 8 - Middle School

Thurs. Sept. 15 - High School

Tues. Sept. 20 - Olympic HS

Open House Nights:

Thurs. May 25 - Elementary

Thurs. April 27 - SM Middle Schools

Thurs. March 9 - Malibu MS/HS

and Samohi

Tues. May 2 - Olympic HS

Promotions/Graduations:

Wed. June 7 - Elementary

Fri. June 9 - Middle School

Thurs. June 8 - MHS 2:00 pm

Wed. May 31 - Olympic HS 5:30 pm

Wed. May 31 - Olympic HS 5:30 pm

Parent Conference Days (TK-5):

Nov. 4 - Nov. 10, 2016

Testing Dates: expected, not confirmed

AP Testing: May 1 - May 12, 2017

STAR: April 20 - May 18, 2017

SBAC: April 20 - May 29, 2017

TK/Kinder Roundup:

Jan. 30 - Feb. 10, 2017

Final Exams:

Malibu MS/HS: Dec. 21-23, 2016

June 6-8, 2017

Samohi: Dec. 20-23, 2016

June 5-8, 2017

Summer School:

IIS: June 19-July 14, 2017

Credit Recovery: June 19-Jul 21, 2017

ESY: June 19-July 14, 2017

Revised

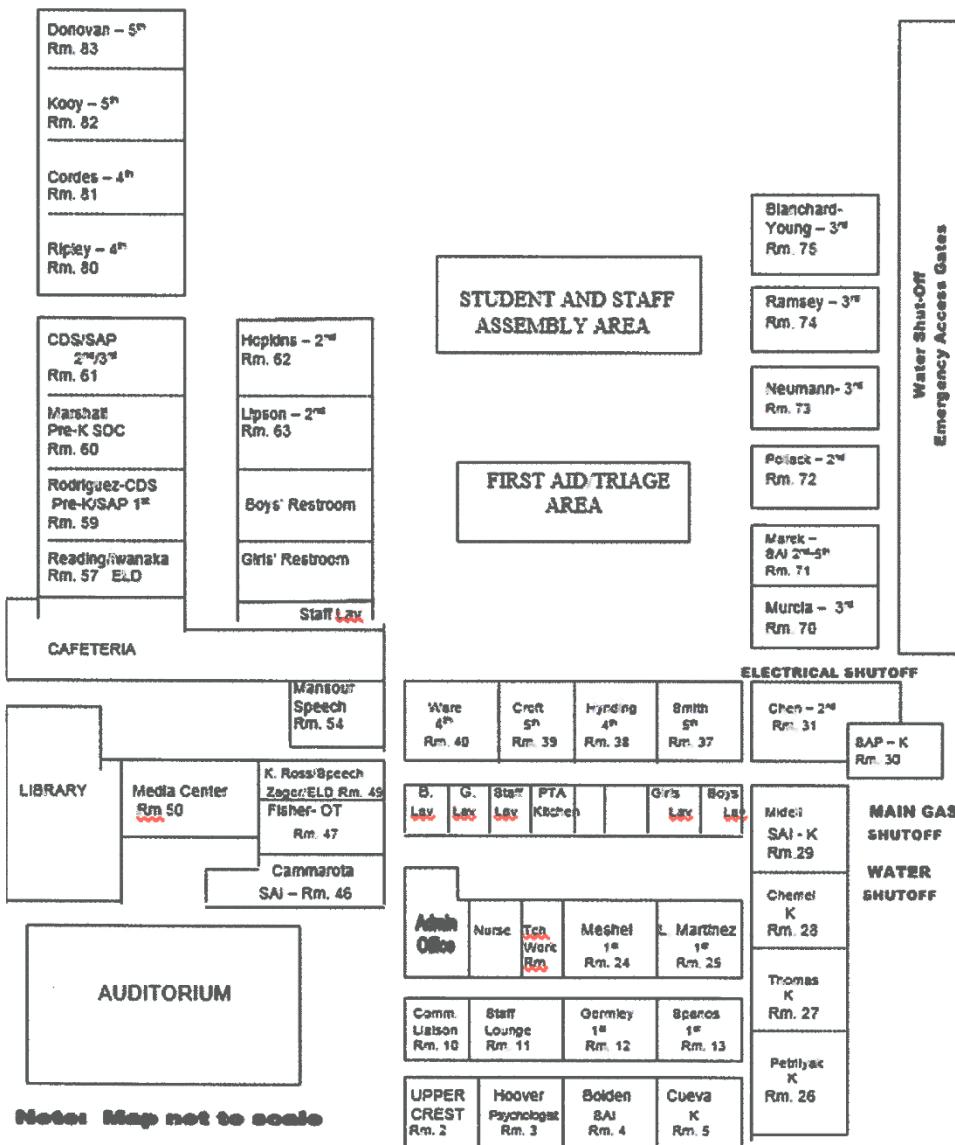
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SANTA MONICA-MALIBU
GRANT ELEMENTARY SCHOOL
ENERGY AUDIT REPORT

Grant Elementary School Map

GRANT ELEMENTARY SCHOOL 2013-2014



©

Appendix – B

Energy Utilization Analysis

Customer Name: **Santa Monica-Malibu USD**Facility Name: **Grant Elementary**

Facility Location: 2368 Pearl Street, Santa Monica, CA
Sq. Ft. (conditioned space): 60,234
Billing Period
FROM: Jul-15
TO: Jun-16

Elec Utility Name:			SCE	Natural Gas Utility Name:			SCG
Account #	Meter #	Rate Schedule		Account #	Meter #	Rate Schedule	
2-07-030-4431	223000-003822	TOU-GS-1-A		6307342052	12454480	GN-10-NON-RESIDENTIAL	
2-35-607-1647	259000-073665	TOU-GS-2-R		0	0	0	
0	0	0		0	0	0	
0	0	0		0	0	0	

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL ANNUAL (Purchased from SCE)	TOTAL ANNUAL (Purchased from SCE and Solar Production)
Cooling Degree Days*	4	71	15	45	6	89	118	222	271	243	47	16	1,147	
Heating Degree Days*	266	150	170	112	115	37	22	1	1	5	164	284	1,327	
Days in Billing Period														
electric	29	32	30	29	32	30	29	29	32	30	33	30	365	
natural gas	33	30	29	29	31	30	30	29	32	28	34	30	365	
Electric Usage														
kWh per Billing Cycle	16,535	15,453	12,828	11,853	12,926	12,821	7,912	8,279	14,002	14,472	13,921	15,690	156,692	
\$ for kWh Billed	\$1,567	\$1,413	\$1,229	\$1,159	\$1,265	\$1,134	\$725	\$1,138	\$1,350	\$1,338	\$1,078	\$1,203	\$14,599	
Max kW Billed	116	101	87	77	85	77	56	79	89	95	75	96	86	
\$ for kW Billed	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Electric Cost, \$	\$1,567	\$1,413	\$1,229	\$1,159	\$1,265	\$1,134	\$725	\$1,138	\$1,350	\$1,338	\$1,078	\$1,203	\$14,599	
Ave. Daily Electric Cost, \$	\$54	\$44	\$41	\$40	\$40	\$38	\$25	\$39	\$42	\$45	\$33	\$40	\$40	
Average \$/kWh Cost	\$0.095	\$0.091	\$0.096	\$0.098	\$0.098	\$0.088	\$0.092	\$0.137	\$0.096	\$0.092	\$0.077	\$0.077	\$0.093	
Average Elec \$ /sq.ft. Cost	\$0.026	\$0.023	\$0.020	\$0.019	\$0.021	\$0.019	\$0.012	\$0.019	\$0.022	\$0.022	\$0.018	\$0.020	\$0.242	
kWh / sq.ft.	0.275	0.257	0.213	0.197	0.215	0.213	0.131	0.137	0.232	0.240	0.231	0.260	2.60	5.73
Natural Gas Usage														
Therms per Billing Cycle	1,458	731	289	204	96	24	26	20	45	47	254	547	3,741	
Total Gas Cost, \$	\$1,111	\$590	\$267	\$199	\$105	\$27	\$40	\$34	\$59	\$58	\$246	\$458	\$3,194	
Ave. Daily Gas Cost, \$	\$34	\$20	\$9	\$7	\$3	\$1	\$1	\$1	\$2	\$2	\$7	\$15	\$9	
Average \$/therm Cost	\$0.762	\$0.807	\$0.924	\$0.975	\$1.094	\$1.125	\$1.538	\$1.700	\$1.311	\$1.234	\$0.969	\$0.837	\$0.854	
Average Gas \$ /sq.ft. Cost	\$0.018	\$0.010	\$0.004	\$0.003	\$0.002	\$0.000	\$0.001	\$0.001	\$0.001	\$0.001	\$0.004	\$0.008	\$0.053	
Gas Btus / sq.ft.	2,421	1,214	480	339	159	40	43	33	75	78	422	908	6,211	
Total Energy Usage														
Combined (Elec and Gas) Btus / sq.ft.	3,357	2,089	1,207	1,010	892	766	491	502	868	898	1,210	1,797	15,089	
Total Energy Cost, \$	\$2,678	\$2,003	\$1,496	\$1,358	\$1,370	\$1,161	\$765	\$1,172	\$1,409	\$1,396	\$1,324	\$1,661	\$17,793	
Ave. Energy \$/sq.ft./period	\$0.04	\$0.03	\$0.02	\$0.02	\$0.02	\$0.02	\$0.01	\$0.02	\$0.02	\$0.02	\$0.02	\$0.03	\$0.30	

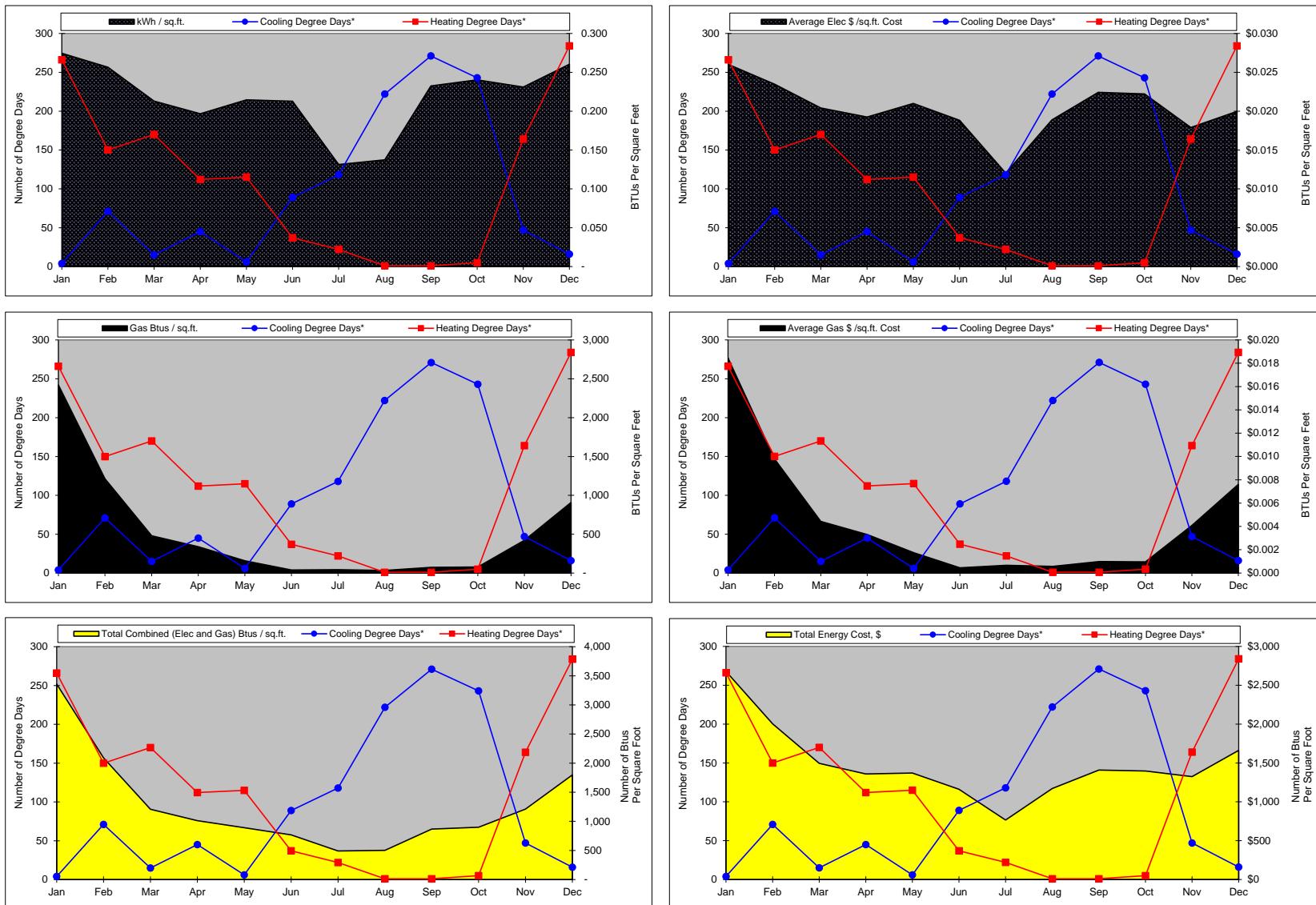
* Notes:

1) Heating degree days and cooling degree days are based on 65 F.

2) Heating degree days and cooling degree days are based on Santa Monica weather data.

Customer: Santa Monica-Malibu USD
Building: Grant Elementary

Energy Used from: Jul-15
to: Jun-16



Appendix – C

Lighting Systems Audit

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SANTA MONICA-MALIBU
GRANT ELEMENTARY SCHOOL
ENERGY AUDIT REPORT

School Distr Santa Monica-Malibu USD - LED Option
 Address: 0
 0
 School: GRANT ELEMENTARY
 School Addr 0
 0

cost per kwh 0.093

LED Option

88.48 45.46 174,139.92 86,457.90 87,682.02 \$ 8,154.43

ORIGINAL AUDIT ID#	INTERIOR/EXTERIOR	SCHOOL DISTRICT	SCHOOL	ROOM	LIGHTING CODE (EXISTING)	ECM	PROPOSED FIXT QTY	EXIST WATT	PROP WATT	EXIST OPER HRS	PROP OPER HRS	EXISTING KW	PROPOSED KW	EXISTING KWH	PROPOSED KWH	SAVED KWH	ANN SAVINGS
1405	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	ADMINISTRATION	T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AND	25	90	48	2185	2185	2.25	1.2	4916.25	2622	2294.25	\$ 213.37
1406	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	ADMINISTRATION	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	2185	2185	0.177	0.096	386.745	209.76	176.985	\$ 16.46
1407	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AND	6	90	48	1816	1816	0.54	0.288	980.64	523.008	457.632	\$ 42.56
1408	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AND	11	90	48	1816	1816	0.99	0.528	1797.84	958.848	838.992	\$ 78.03
1409	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1816	1816	0.059	0.032	107.144	58.112	49.032	\$ 4.56
1410	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	6	59	32	1816	1816	0.354	0.192	642.864	348.672	294.192	\$ 27.36
1411	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1412	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1413	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1414	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1415	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1416	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1417	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1418	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1419	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1420	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1421	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	32 CUSTODIAN	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	400	400	0.112	0.064	44.8	25.6	19.2	\$ 1.79
1422	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	RESTROOMS	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	2	112	64	1816	1816	0.224	0.128	406.784	232.448	174.336	\$ 16.21
1423	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	1816	1816	0.112	0.064	203.392	116.224	87.168	\$ 8.11
1424	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	1816	1816	0.112	0.064	203.392	116.224	87.168	\$ 8.11
1425	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	12	118	64	1816	1816	1.416	0.768	2571.456	1394.688	1176.768	\$ 109.44
1426	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68
1427	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	12	118	64	1816	1816	1.416	0.768	2571.456	1394.688	1176.768	\$ 109.44
1428	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 18.24
1429	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	12	118	64	1816	1816	1.416	0.768	2571.456	1394.688	1176.768	\$ 109.44
1430	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 18.24
1431	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	12	118	64	1816	1816	1.416	0.768	2571.456	1394.688	1176.768	\$ 109.44
1432	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 18.24
1433	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY		T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	1816	1816	0.112	0.064	203.392	116.224	87.168	\$ 8.11
1434	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	RESTROOM	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	18							

1486	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	74	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12	59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$ 54.72
1487	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	73	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	12	59	32	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$ 54.72
1488	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	72	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	14	59	32	1816	1816	0.826	0.448	1500.016	813.568	686.448	\$ 63.84
1489	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	71	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$ 79.04
1490	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	70	T8-4'-32W-3L-EB/ISN-X-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE3X32UNV/ISN	12	87	48	1816	1816	1.044	0.576	1895.904	1046.016	849.888	\$ 79.04
1491	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	I/S-A19-60W-1L-NONE-X-X	PORTABLE EXTERIOR	(LED)NEW DECO WALLPACK CUTOFF VINCI-20-50-UNV-B	6	60	20	3650	3650	0.36	0.12	1314	438	876	\$ 81.47
1492	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	PORTABLE EXTERIOR	HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM FLOOD D211-LED-80-50-UNV-T	2	188	80	3650	3650	0.376	0.16	1372.4	584	788.4	\$ 73.32
1493	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	31	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	6	59	32	1816	1816	0.354	0.192	642.864	348.672	294.192	\$ 27.36
1494	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	31	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	6	118	64	1816	1816	0.708	0.384	1285.728	697.344	588.384	\$ 54.72
1495	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	30	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	8	59	32	1816	1816	0.472	0.256	857.152	464.896	392.256	\$ 36.48
1496	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	29	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1497	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	29	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 18.24
1498	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	29B	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	1	59	32	1816	1816	0.059	0.032	107.144	58.112	49.032	\$ 4.56
1499	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	28	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1500	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	28	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	4	59	32	1816	1816	0.236	0.128	428.576	232.448	196.128	\$ 18.24
1501	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	27	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	14	118	64	1816	1816	1.652	0.896	3000.032	1627.136	1372.896	\$ 127.68
1502	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	27	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	5	59	32	1816	1816	0.295	0.16	535.72	290.56	245.16	\$ 22.80
1503	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	26	T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	16	118	64	1816	1816	1.888	1.024	3428.608	1859.584	1569.024	\$ 145.92
1504	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	26	T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	5	59	32	1816	1816	0.295	0.16	535.72	290.56	245.16	\$ 22.80
1505	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	7 CUSTODIAN	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	400	400	0.112	0.064	44.8	25.6	19.2	\$ 1.79
1506	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	RESTROOMS	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	1816	1816	0.112	0.064	203.392	116.224	87.168	\$ 8.11
1507	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	RESTROOMS	T8-4'-32W-4L-EB/ISN-X-X	(LED)4L 12T8/4F/850/DIR, 97740 (1) QHE4X32UNV/ISN	1	112	64	1816	1816	0.112	0.064	203.392	116.224	87.168	\$ 8.11
1508	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	5 T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	18	118	64	1816	1816	2.124	1.152	3857.184	2092.032	1765.152	\$ 164.16	
1509	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	5 T8-4'-32W-2L-EB/ISN-X-X	(LED)2L 12T8/4F/850/DIR, 97740 (1) QHE2X32UNV/ISN	3	59	32	1816	1816	0.177	0.096	321.432	174.336	147.096	\$ 13.68	
1510	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	5 T8-4'-32W-3L-EB/ISN-I/O-X	(LED)3L 12T8/4F/850/DIR, 97740 (1) QHE1X32UNV/ISN AND	2	90	48	1816	1816	0.18	0.096	326.88	174.336	152.544	\$ 14.19	
1511	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	4 T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	18	118	64	1816	1816	2.124	1.152	3857.184	2092.032	1765.152	\$ 164.16	
1512	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	3 T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	18	118	64	1816	1816	2.124	1.152	3857.184	2092.032	1765.152	\$ 164.16	
1513	INTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	2 T8-4'-32W-4L-EB/ISN-I/O-X	(LED)4L 12T8/4F/850/DIR, 97740 (2) QHE2X32UNV/ISN	18	118	64	1816	1816	2.124	1.152	3857.184	2092.032	1765.152	\$ 164.16	
1514	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	HALL WAY EXTERIOR	HPS-MED-70W-1L-CWA-X-X	(LED)NEW INFINILUX 12X12 SURFACE CANOPY CLSD-XX	18	95	23	3650	3650	1.71	0.414	6241.5	1511.1	4730.4	\$ 439.93
1515	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	HALL WAY EXTERIOR	I/S-A19-60W-1L-NONE-X-X	(LED)1L A19 8W 5000K E26, 455600	2	60	8	3650	3650	0.12	0.016	438	58.4	379.6	\$ 35.30
1516	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	SCHOOL EXTERIOR	HPS-MED-100W-1L-CWA-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-40-50-UN	19	138	40	3650	3650	2.622	0.76	9570.3	2774	6796.3	\$ 632.06
1517	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	SCHOOL EXTERIOR	CF/4P-TRIP-42W-1L-EB-X-X	(LED)NEW INFINILUX 12X12 SURFACE CANOPY CLSD-XX	2	46	23	3650	3650	0.092	0.046	335.8	167.9	167.9	\$ 15.61
1518	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	SCHOOL EXTERIOR	CF/S-TWST-23W-1L-SELF-X-X	(LED)1L A19 8W 5000K E26, 455600	2	23	8	3650	3650	0.046	0.016	167.9	58.4	109.5	\$ 10.18
1519	EXTERIOR	NTA MONICA-MALIBU	GRANT ELEMENTARY	SCHOOL EXTERIOR	HPS-MED-150W-1L-CWA-X-X	(LED)NEW DECO MEDIUM WALLPACK D414-LED-40-50-UN	4	188	40	3650	3650	0.752	0.16	2744.8</td			