



Based on an actual customer audit and recommendations

Executive Summary

Project Overview

Cost of Project

22,469
0
22,469
8,240
2,107
10,348
82,407
21,077
103,484
2.7
55,716
56.60

- 1. Energy cost (\$) = 0.1130/kWh; Annual energy cost escalation (%) = 0.00
- 2. Energy savings are averaged over 10 year analysis period
- 3. Maintenance costs are averaged over 10 year analysis period
- 4. Assumed cost of capital (%) = 6.00
- 5. Product Tax Rate (%) = 0.00
- 6. Service Tax Rate (%) = 0.00

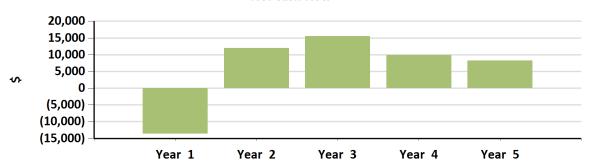


Cash Flow Analysis

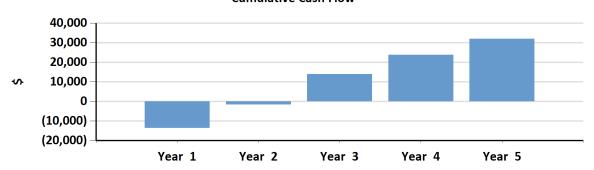
10 Year Cash Flow Analysis (\$)

	Year 1	Year 2	Year 3	Year 4	Year 5
Product Costs	12,562	-	-	-	-
Installation Services	9,907	-	-	-	-
Energy Savings	8,241	8,241	8,241	8,241	8,241
Maintenance Savings	580	3,779	7,291	1,599	-
Net Cash Flow	(13,648)	12,020	15,532	9,840	8,241
Cumulative Cash Flow	(13,648)	(1,628)	13,903	23,743	31,984

Net Cash Flow



Cumulative Cash Flow

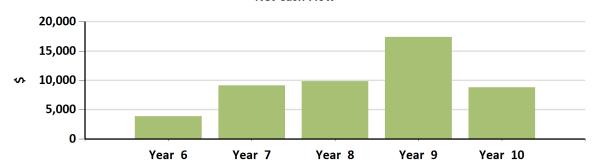




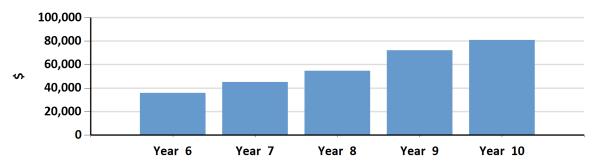
10 Year Cash Flow Analysis (\$)

	Year 6	Year 7	Year 8	Year 9	Year 10	Total
Product Costs	-	-	-	-	-	12,562
Installation Services	-	-	-	-	-	9,907
Energy Savings	8,241	8,241	8,241	8,241	8,241	82,408
Maintenance Savings	(4,402)	900	1,583	9,167	580	21,077
Net Cash Flow	3,839	9,141	9,824	17,408	8,821	81,016
Cumulative Cash Flow	35,823	44,964	54,787	72,195	81,016	81,016

Net Cash Flow



Cumulative Cash Flow





Cost of Waiting

Cost of Waiting

Monthly (\$)	Yearly (\$)	5 Years (\$)	10 Years (\$)	15 Years (\$)	20 Years (\$)
830	9,970	49,850	99,700	149,550	199,400





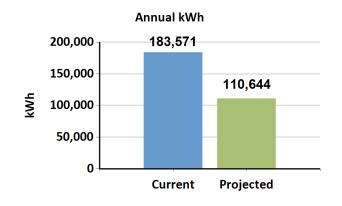
Energy Usages and Costs

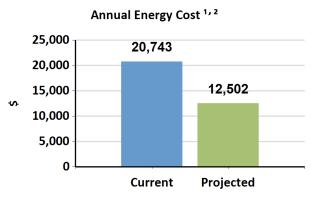
Annual Energy Usage

Current Usage (kWh)	Projected Usage (kWh)	Reduction (%)	%) Current Cost (\$) 1,2 Projected Cost		Savings (\$)	Savings (%)
183,571	110,644	40	20,743	12,502	8,240	40

- 1. Energy cost (\$) = 0.1130/kWh; Annual energy cost escalation (%) = 0.00
- 2. Energy costs are averaged over 10 year analysis period

Energy Comparison





- 1. Energy Cost (\$) = 0.1130/kWh; Annual energy cost escalation (%) = 0.00
- 2. Energy costs are averaged over 10 year analysis period

Watts Summary

Existing Watts ¹	Proposed Watts ¹	Reduced Watts	Reduction (%)
26,478	17,883	8,595	40

1. The watts calculations in this table take into account existing fixtures that are being replaced, upgraded, and/or have new lighting controls being proposed for them

Lighting Wattage Comparison

Area:									
Space	Existing Fixture	Qty	Watts	Total Watts	Proposed Solution	Qty	Watts	Total Watts	
Stairwell 1-5:									
4ft T8 1 Lamp	4ft, F32 T8 1 Lamp Strip	50	40	2,000	T8 4ft 15Watt Tube	50	15	750	
Stairwell 1-5:									



	4ft, 4 Lamp,				T8 4ft 15Watt			
4ft T8 4 Lamp	F32 T8 Wrap	1	130	130	Tube	4	15	60
Exterior Visitor Parking:								
8FT T8 2 Lamp	8ft, F59 T8 2 Lamp Strip	15	130	1,950	8Ft LED Tube	30	40	1,200
East Entry Overhang:								
Bollard Post Top Fixture	70w Metal Halide	4	95	380	Corn Lamp W/Fan	4	20	80
East Entry Overhang:								
Canopy 70W	70w Metal Halide	2	95	190	45W Canopy Light	2	45	90
Building Perimeter :								
Flood Light 70W	70w Metal Halide	4	95	380	Flood Light	4	50	200
Interior Parking P1-P3:								
P1-P3 4FT 2 Lamp	4ft, F32 T8 2 Lamp Strip	124	70	8,680	T8 4ft 15Watt Tube	248	15	3,720
Interior Parking P1-P3:								
P1-P3 4FT 4 Lamp	8ft, F32 T8 4 Lamp Strip	7	130	910	T8 4ft 15Watt Tube	28	15	420
Interior Parking P1-P3:								
P1-P3 T8 4FT 1 Lamp	4ft, F32 T8 1 Lamp Strip	3	40	120	T8 4ft 15Watt Tube	3	15	45
Interior :								
Site Office	2x4, 2 Lamp, F32 T8 Prismatic	2	70	140	T8 4ft 15Watt Tube	4	15	60
Interior :								
SW Emergency Exit	4ft, 2 Lamp, F32 T8 Wrap	1	70	70	T8 4ft 15Watt Tube	2	15	30
Building Perimeter :								
Wall Pack 50W	50w Metal Halide Wall Pack	5	60	300	25W Wall Pack	5	25	125
Building Perimeter :								



Wall Pack 50W Directional	50w Metal Halide Wall Pack	3	60	180	25W Wall Pack	3	25	75
Interior:								
West Lobby Candlelight	9W A19 CFL	4	9	36	Lobby Candelabra	4	4	16
Total			1094	15,466			314	6,871



Environmental Impact

Greenhouse Gas Analysis

Greenhouse Gas Comparisons¹

Greenhouse Gas	Current ¹	Projected ¹	Avoided	Environmental Effect
Carbon Dioxide, CO₂ (kg)	129,009	77,758	51,251	Greenhouse Gas, Global Warming
Nitrous Oxide, N₂0 (g)	1,654	997	657	Greenhouse Gas, Global Warming
Methane, CH ₄ (g)	2,581	1,556	1,025	Greenhouse Gas, Global Warming
Nitrogen Oxides, NOx (g)	112,867	68,028	44,839	Smog, Acid rain, Global Warming
Sulfur Oxides, SOx (g)	244,113	147,134	96,979	Acid rain

^{1.} Average emission rates per kWh are based on estimates from eGrid 2012

