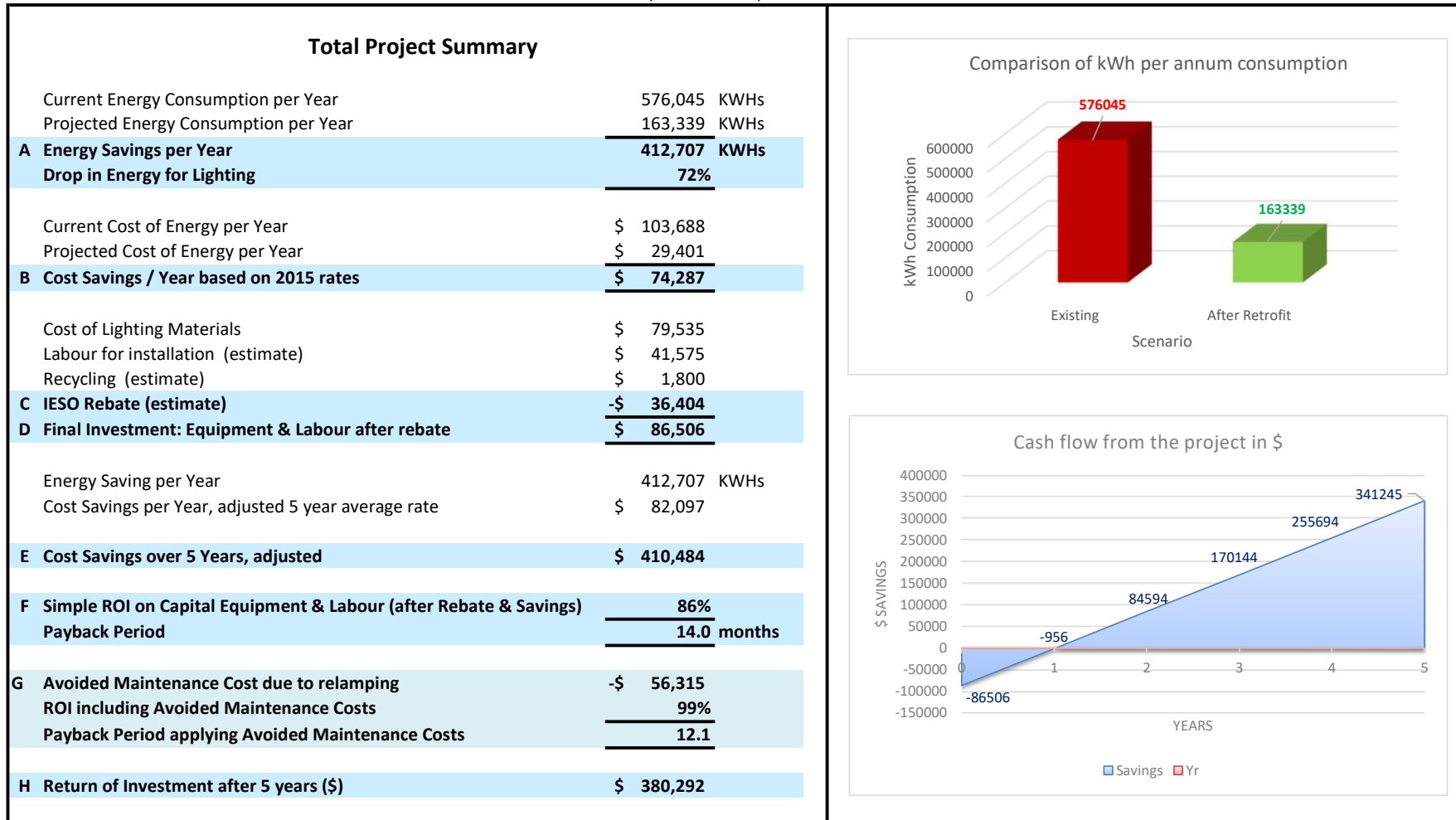


Lighting Audit, Analysis & Proposal

BRAMPTON CHRYSLER_Interior_Exterior

Proposal date: Sept 24 2019



TERMS and CONDITIONS

1. All prices are valid for 30 days from the date of proposal unless otherwise agreed to in writing.
2. Fastening of the fixtures is based on standard fittings and sizes and does not include pole mounts or adaptors that may be required in addition to those quoted.
3. Quote does not include electrical work, including rewiring or modifications, required to meet ESA approval, or additions or alterations deemed necessary by the electrical contractor.
4. Materials quoted here are based on the best estimate at the time of the proposal and may be adjusted should new information come available.
5. The voltage of the fixtures and electrical equipment quoted here is based on site voltage as determined by our representative. Proposal may change if the voltage is found to be different.
6. Lighting Materials will be invoiced upon delivery and payment due within 30 days. Labour will be invoiced upon project completion.
7. Additional costs may be incurred should existing electronic ballasts not be compatible with LED T8/T5 Lamps Quoted.
8. T8/T5 LED Lamp warranty only covers lamps that are being used with a ballast on the manufactures ballast compatibility list



Lighting Audit, Analysis & Proposal
BRAMPTON CHRYSLER_Interior_Exterior

Proposal date: Sept 24 2019

Lighting Retrofit Summary																\$/kwh =	\$ 0.180	
Location	Fixture Style	Existing Fixture Specs	Number of Lamps	Watts /Fixture	Hours /Year	Quantity Fixtures	Energy Usage (kwh/yr)	Current Cost/Year	Replacement Fixture or Lamp	Quantity of New Fixtures	Number of Lamps	Watts /Fixture	NEW Usage (kwh/yr)	NEW Cost/Year	Energy Saved (kwh/yr)	% Saved	\$ Saved (\$/year)	
347V																		
Interior	347V																	
Showroom (East)	Highbays	HID 400W	1	458	3744	22	37,725	\$ 6,790	HB4-1005-2-B	22	1	100	8,237	\$ 1,483	29488	78%	\$ 5,308	
Offices	Troffers 2x4	T8 4' 32W	3	96	3744	8	2,875	\$ 518	LED Panel 2x4	8	1	40	1,198	\$ 216	1677	58%	\$ 302	
Showroom (Center)	Highbays	HID 400W	1	458	3744	4	6,859	\$ 1,235	HB4-1005-2-B	4	1	100	1,498	\$ 270	5361	78%	\$ 965	
Centre	Troffers 2x2	HID 400W	1	458	3744	4	6,859	\$ 1,235	LED Panel 2x4	6	1	40	899	\$ 162	5960	87%	\$ 1,073	
Showroom (West)	Highbays	HID 400W	1	458	3744	34	58,302	\$ 10,494	HB4-1005-2-B	34	1	100	12,730	\$ 2,291	45572	78%	\$ 8,203	
Offices	Troffers 2x4	T8 4' 32W	3	96	3744	9	3,235	\$ 582	LED Panel 2x4	9	1	40	1,348	\$ 243	1887	58%	\$ 340	
Offices	Troffers 2x4	T8 4' 32W	3	96	3744	5	1,797	\$ 323	LED Panel 2x4	5	1	40	749	\$ 135	1048	58%	\$ 189	
Hallway	Troffers 1x4	T8 4' 32W	2	59	3744	4	884	\$ 159	LED Panel 1x4	4	1	30	449	\$ 81	434	49%	\$ 78	
Drive Thru	Industrial Fix 8'	T8 4' 32W	4	112	3744	22	9,225	\$ 1,661	CS3-8645-3	22	1	64	5,272	\$ 949	3954	43%	\$ 712	
	Highbays	HID 400W	1	458	3744	5	8,574	\$ 1,543	HB4-1505-2-B	5	1	150	2,808	\$ 505	5766	67%	\$ 1,038	
Parts Lower	Troffers 2x4	T8 4' 32W	4	128	3744	2	958	\$ 173	T8 LED 12W 4000K	2	4	55	412	\$ 74	547	57%	\$ 98	
	Industrial Fix 4'	T8 4' 32W	2	59	3744	16	3,534	\$ 636	T8 LED 14W 5000K	16	2	35	2,097	\$ 377	1438	41%	\$ 259	
	Industrial Fix 4'	T8 4' 32W	1	59	3744	35	7,731	\$ 1,392	T8 LED 14W 5000K	35	1	17.5	2,293	\$ 413	5438	70%	\$ 979	
Upper	Industrial Fix 4'	T8 4' 32W	1	30	3744	65	7,301	\$ 1,314	T8 LED 14W 5000K	65	1	17.5	4,259	\$ 767	3042	42%	\$ 548	
	Industrial Fix 8'	T12 8' 60W	2	130	3744	1	487	\$ 88	CS3-8645-3	1	1	64	240	\$ 43	247	51%	\$ 44	
Tower Room	Troffers 2x4	T8 4' 32W	4	128	3744	6	2,875	\$ 518	T8 LED 12W 4000K	6	4	55	1,236	\$ 222	1640	57%	\$ 295	
	Industrial Fix 4'	T8 4' 32W	2	59	3744	3	663	\$ 119	T8 LED 12W 4000K	3	2	35	393	\$ 71	270	41%	\$ 49	
Waiting Area	Troffers 2x4	T8 4' 32W	4	128	3744	6	2,875	\$ 518	LED Panel 2x4	6	1	40	899	\$ 162	1977	69%	\$ 356	
	Troffers 2x2	T8 U tube 32W	2	64	3744	1	240	\$ 43	LED Panel 2x2	1	1	30	112	\$ 20	127	53%	\$ 23	
2nd Floor	Troffers 2x4	T8 4' 32W	4	128	3744	38	18,211	\$ 3,278	LED Panel 2x4	38	1	40	5,691	\$ 1,024	12520	69%	\$ 2,254	
	Troffers 2x2	T8 U tube 32W	2	64	3744	3	719	\$ 129	LED Panel 2x2	3	1	30	337	\$ 61	382	53%	\$ 69	
	Troffers 1x4	T8 4' 32W	2	59	3744	2	442	\$ 80	LED Panel 1x4	2	1	30	225	\$ 40	217	49%	\$ 39	
Washroom	Industrial Fix 4'	T8 4' 32W	2	59	3744	2	442	\$ 80	T8 LED 14W 5000K	2	2	35	262	\$ 47	180	41%	\$ 32	
Stairwell	Troffers 1x4	T8 4' 32W	2	59	3744	2	442	\$ 80	T8 LED 12W 4000K	2	2	27.5	206	\$ 37	236	53%	\$ 42	
Main Shop	Industrial Fix 8'	T8 4' 32W	4	112	3744	66	27,676	\$ 4,982	CS3-8645-3	66	1	64	15,815	\$ 2,847	11861	43%	\$ 2,135	
Stairwell	Industrial Fix 4'	T8 4' 32W	2	59	3744	6	1,325	\$ 239	T8 LED 14W 5000K	6	2	35	786	\$ 142	539	41%	\$ 97	
Front Room	Industrial Fix 4'	T8 4' 32W	2	59	3744	4	884	\$ 159	T8 LED 14W 5000K	4	2	35	524	\$ 94	359	41%	\$ 65	
Wash Area	VP IndustrialFix 8'	T8 4' 32W	4	112	3744	9	3,774	\$ 679	BLV-8'-9.5L-850-347-L16	9	1	67.67	2,280	\$ 410	1494	40%	\$ 269	
	VP IndustrialFix 4'	T8 4' 32W	2	59	3744	3	663	\$ 119	VP-4848	3	1	48	539	\$ 97	124	19%	\$ 22	
Body Shop Office	Troffer 2x4	T8 4' 32W	4	128	3744	4	1,917	\$ 345	T8 LED 12W 4000K	4	4	55	824	\$ 148	1093	57%	\$ 197	
Body Shop	Industrial Fix 8'	T8 4' 32W	4	112	3744	23	9,645	\$ 1,736	CS3-8645-3	23	1	68	5,856	\$ 1,054	3789	39%	\$ 682	
	Add					5			CS3-8645-3	5								
Paint Booth	Troffer 2x2	HID 400W	1	458	3744	8	13,718	\$ 2,469	Corn Cob 125W Mogul	8	1	125	3,744	\$ 674	9974	73%	\$ 1,795	
Spray Bake Area	Troffer 2x4	T12 4' 40W	4	172	3744	17	10,947	\$ 1,971	T8 LED + Driver	34	2	70	8,911	\$ 1,604	2037	19%	\$ 367	
Storage	Industrial Fix 8'	T8 4' 32W	4	112	3744	8	3,355	\$ 604	T8 LED 14W 5000K	8	4	70	2,097	\$ 377	1258	38%	\$ 226	
	Troffer 2x4	T8 4' 32W	4	128	3744	1	479	\$ 86	T8 LED 12W 4000K	1	4	55	206	\$ 37	273	57%	\$ 49	
	Industrial Fix 4'	T8 4' 32W	2	59	3744	3	663	\$ 119	T8 LED 14W 5000K	3	2	35	393	\$ 71	270	41%	\$ 49	
Car Wash	Industrial Fix 8'	T8 4' 32W	4	112	3744	4	1,677	\$ 302	VP-4848	5	1	48	899	\$ 162	779	46%	\$ 140	
347V																		
EXTERIOR	347V																	
Parking Area #1	Floods	MH 1000W 2/pole	1	1080	4380	22	104,069	\$ 18,732	FL3-2304T5-2-SF	22	1	230	22,163	\$ 3,989	81906	79%	\$ 14,743	
	Floods	MH 1000W 3/pole	1	1080	4380	9	42,574	\$ 7,663	FL3-2304T5-2-SF	9	1	230	9,067	\$ 1,632	33507	79%	\$ 6,031	
	Floods	MH 1000W 4/pole	1	1080	4380	24	113,530	\$ 20,435	FL3-2304T5-2-SF	24	1	230	24,178	\$ 4,352	89352	79%	\$ 16,083	
Parking Area #2	Floods	MH 1000W 2/pole	1	1080	4380	8	37,843	\$ 6,812	FL3-2304T5-2-YK	8	1	230	8,059	\$ 1,451	29784	79%	\$ 5,361	
Building	Wallpacks	HID 400W	1	458	4380	9	18,054	\$ 3,250	WP6-804-2	9	1	80	3,154	\$ 568	14901	83%	\$ 2,682	
TOTALS for Project						532	576,045	\$ 103,688		552			163,339	\$ 29,401	412,707	72%	\$ 74,287	

Lighting Audit, Analysis & Proposal
BRAMPTON CHRYSLER_Interior_Exterior
 Proposal date: Sept 24 2019

Investment Summary																		
Location	Existing Fixture Specs	Watts /Fixture Old	Hours /Year	Fixture or Lamp	Quantity of New Fixtures	Number of Lamps	Watts /Fixture New	Energy Saved (kwh/year)	\$ Saved (\$/year)	Cost/Fixture (\$)	Total Investment Materials	Total Labor Estimate	Drop in Watts	OPA Rebate Max	Investment After Rebate	ROI (%)	Payback Period mths	
Interior																		
Showroom (East)	HID 400W	458	3744	HB4-1005-2-B	22	1	100	29,488	\$ 5,308	\$ 220.00	\$ 4,840	\$ 3,300	7,876	\$ 3,150	\$ 4,990	106%	11.3	
Offices	T8 4' 32W	96	3744	LED Panel 2x4	8	1	40	1,677	\$ 302	\$ 110.00	\$ 880	\$ 400	448	\$ 320	\$ 960	31%	38.2	
Showroom (Center)	HID 400W	458	3744	HB4-1005-2-B	4	1	100	5,361	\$ 965	\$ 220.00	\$ 880	\$ 600	1,432	\$ 573	\$ 907	106%	11.3	
Centre	HID 400W	458	3744	LED Panel 2x4	6	1	40	5,960	\$ 1,073	\$ 110.00	\$ 660	\$ 600	1,592	\$ 637	\$ 623	172%	7.0	
Showroom (West)	HID 400W	458	3744	HB4-1005-2-B	34	1	100	45,572	\$ 8,203	\$ 220.00	\$ 7,480	\$ 5,100	12,172	\$ 4,869	\$ 7,711	106%	11.3	
Offices	T8 4' 32W	96	3744	LED Panel 2x4	9	1	40	1,887	\$ 340	\$ 110.00	\$ 990	\$ 450	504	\$ 360	\$ 1,080	31%	38.2	
Offices	T8 4' 32W	96	3744	LED Panel 2x4	5	1	40	1,048	\$ 189	\$ 110.00	\$ 550	\$ 250	280	\$ 200	\$ 600	31%	38.2	
Hallway	T8 4' 32W	59	3744	LED Panel 1x4	4	1	30	434	\$ 78	\$ 75.00	\$ 300	\$ 200	116	\$ 120	\$ 380	21%	58.3	
Drive Thru	T8 4' 32W	112	3744	CS3-8645-3	22	1	64	3,954	\$ 712	\$ 145.00	\$ 3,190	\$ 1,650	1,056	\$ 422	\$ 4,418	16%	74.5	
	HID 400W	458	3744	HB4-1505-2-B	5	1	150	5,766	\$ 1,038	\$ 240.00	\$ 1,200	\$ 750	1,540	\$ 616	\$ 1,334	78%	15.4	
Parts Lower	T8 4' 32W	128	3744	T8 LED 12W 4000K	2	4	55	547	\$ 98	\$ 40.00	\$ 80	\$ 40	146	\$ 58	\$ 62	160%	7.5	
	T8 4' 32W	59	3744	T8 LED 14W 5000K	16	2	35	1,438	\$ 259	\$ 20.00	\$ 320	\$ 160	384	\$ 154	\$ 326	79%	15.1	
	T8 4' 32W	59	3744	T8 LED 14W 5000K	35	1	17.5	5,438	\$ 979	\$ 10.00	\$ 350	\$ 350	1,453	\$ 581	\$ 119	823%	1.5	
Upper	T8 4' 32W	30	3744	T8 LED 14W 5000K	65	1	17.5	3,042	\$ 548	\$ 10.00	\$ 650	\$ 650	813	\$ 325	\$ 975	56%	21.4	
	T12 8' 60W	130	3744	CS3-8645-3	1	1	64	247	\$ 44	\$ 145.00	\$ 145	\$ 75	66	\$ 26	\$ 194	23%	52.2	
Tower Room	T8 4' 32W	128	3744	T8 LED 12W 4000K	6	4	55	1,640	\$ 295	\$ 40.00	\$ 240	\$ 120	438	\$ 175	\$ 185	160%	7.5	
	T8 4' 32W	59	3744	T8 LED 12W 4000K	3	2	35	270	\$ 49	\$ 20.00	\$ 60	\$ 30	72	\$ 29	\$ 61	79%	15.1	
Waiting Area	T8 4' 32W	128	3744	LED Panel 2x4	6	1	40	1,977	\$ 356	\$ 110.00	\$ 660	\$ 300	528	\$ 240	\$ 720	49%	24.3	
	T8 U tube 32W	64	3744	LED Panel 2x2	1	1	30	127	\$ 23	\$ 70.00	\$ 70	\$ 50	34	\$ 30	\$ 90	25%	47.1	
2nd Floor	T8 4' 32W	128	3744	LED Panel 2x4	38	1	40	12,520	\$ 2,254	\$ 110.00	\$ 4,180	\$ 1,900	3,344	\$ 1,520	\$ 4,560	49%	24.3	
	T8 U tube 32W	64	3744	LED Panel 2x2	3	1	30	382	\$ 69	\$ 70.00	\$ 210	\$ 150	102	\$ 90	\$ 270	25%	47.1	
	T8 4' 32W	59	3744	LED Panel 1x4	2	1	30	217	\$ 39	\$ 75.00	\$ 150	\$ 100	58	\$ 60	\$ 190	21%	58.3	
Washroom	T8 4' 32W	59	3744	T8 LED 14W 5000K	2	2	35	180	\$ 32	\$ 20.00	\$ 40	\$ 20	48	\$ 19	\$ 41	79%	15.1	
Stairwell	T8 4' 32W	59	3744	T8 LED 12W 4000K	2	2	27.5	236	\$ 42	\$ 20.00	\$ 40	\$ 20	63	\$ 25	\$ 35	122%	9.8	
Main Shop																		
Stairwell	T8 4' 32W	112	3744	CS3-8645-3	66	1	64	11,861	\$ 2,135	\$ 145.00	\$ 9,570	\$ 4,950	3,168	\$ 1,267	\$ 13,253	16%	74.5	
	T8 4' 32W	59	3744	T8 LED 14W 5000K	6	2	35	539	\$ 97	\$ 20.00	\$ 120	\$ 60	144	\$ 58	\$ 122	79%	15.1	
Front Room	T8 4' 32W	59	3744	T8 LED 14W 5000K	4	2	35	359	\$ 65	\$ 20.00	\$ 80	\$ 40	96	\$ 38	\$ 82	79%	15.1	
Wash Area	T8 4' 32W	112	3744	BLV-8'-9.5L-850-347-L16	9	1	67.67	1,494	\$ 269	\$ 260.00	\$ 2,340	\$ 675	399	\$ 270	\$ 2,745	10%	122.5	
	T8 4' 32W	59	3744	VP-4848	3	1	48	124	\$ 22	\$ 140.00	\$ 420	\$ 225	33	\$ 90	\$ 555	4%	299.5	
Body Shop Office	T8 4' 32W	128	3744	T8 LED 12W 4000K	4	4	55	1,093	\$ 197	\$ 40.00	\$ 160	\$ 80	292	\$ 117	\$ 123	160%	7.5	
Body Shop	T8 4' 32W	112	3744	CS3-8645-3	23	1	68	3,789	\$ 682	\$ 145.00	\$ 3,335	\$ 1,725	1,012	\$ 405	\$ 4,655	15%	81.9	
				CS3-8645-3	5					\$ 145.00	\$ 725	\$ 375			\$ 1,100			
Paint Booth	HID 400W	458	3744	Prn Cob 125W Mogul Base +S	8	1	125	9,974	\$ 1,795	\$ 210.00	\$ 1,680	\$ 1,040	2,664	\$ 1,066	\$ 1,654	109%	11.1	
Spray Bake Area	T12 4' 40W	172	3744	T8 LED + Driver	34	2	70	2,037	\$ 367	\$ 35.00	\$ 1,190	\$ 1,190	544	\$ 218	\$ 2,162	17%	70.8	
Storage	T8 4' 32W	112	3744	T8 LED 14W 5000K	8	4	70	1,258	\$ 226	\$ 40.00	\$ 320	\$ 160	336	\$ 134	\$ 346	66%	18.3	
	T8 4' 32W	128	3744	T8 LED 12W 4000K	1	4	55	273	\$ 49	\$ 40.00	\$ 40	\$ 20	73	\$ 29	\$ 31	160%	7.5	
	T8 4' 32W	59	3744	T8 LED 14W 5000K	3	2	35	270	\$ 49	\$ 20.00	\$ 60	\$ 30	72	\$ 29	\$ 61	79%	15.1	
Car Wash	T8 4' 32W	112	3744	VP-4848	5	1	48	779	\$ 140	\$ 140.00	\$ 700	\$ 375	208	\$ 83	\$ 992	14%	84.9	
EXTERIOR																		
Parking Area #1	MH 1000W 2/pole	1080	4380	FL3-2304T5-2-SF	22	1	230	81,906	\$ 14,743	\$ 460.00	\$ 10,120	\$ 4,400	18,700	\$ 6,050	\$ 8,470	174%	6.9	
	MH 1000W 3/pole	1080	4380	FL3-2304T5-2-SF	9	1	230	33,507	\$ 6,031	\$ 460.00	\$ 4,140	\$ 1,800	7,650	\$ 2,475	\$ 3,465	174%	6.9	
	MH 1000W 4/pole	1080	4380	FL3-2304T5-2-SF	24	1	230	89,352	\$ 16,083	\$ 460.00	\$ 11,040	\$ 4,800	20,400	\$ 6,600	\$ 9,240	174%	6.9	
	MH 1000W 2/pole	1080	4380	FL3-2304T5-2-YK	8	1	230	29,784	\$ 5,361	\$ 430.00	\$ 3,440	\$ 1,600	6,800	\$ 2,200	\$ 2,840	189%	6.4	
Building	HID 400W	458	4380	WP6-804-2	9	1	80	14,901	\$ 2,682	\$ 210.00	\$ 1,890	\$ 765	3,402	\$ 675	\$ 1,980	135%	8.9	
TOTALS for Project					552			412,707	74,287		\$ 79,535	\$ 41,575	100,557	\$ 36,404	\$ 84,706	88%	13.7	



Lighting Audit, Analysis & Proposal
BRAMPTON CHRYSLER_Interior_Exterior

Proposal date: Sept 24 2019

Rate Analysis				
Electricity Costs	Cost per kwh <i>combined</i>	Increase in Electricity Costs	Energy Saved <i>kwh/year</i>	Cost Saved per Year <i>\$/year</i>
Electricity Costs Year 1	\$ 0.180	5%	412,707	\$ 74,287
Electricity Costs Year 2	\$ 0.189	5%	412,707	\$ 78,002
Electricity Costs Year 3	\$ 0.198	5%	412,707	\$ 81,902
Electricity Costs Year 4	\$ 0.208	5%	412,707	\$ 85,997
Electricity Costs Year 5	\$ 0.219	5%	412,707	\$ 90,297
5 Year Totals		25%	2,063,534	\$ 410,484

Life Cycle Analysis: Labour & Materials Avoided				
Maintenance Costs Avoided over 5 Years	Cost per Fixture or lamp	Relamping Frequency over 5 years	Quantity Fixtures or Lamps	Total Cost over 5 years
FTL fixture Labor Cost	\$ 35.00	1	383	\$ 13,405.00
FTL Tube	\$ 5.00	1	1090	\$ 5,450.00
FTL Ballast	\$ 20.00	1	383	\$ 7,660.00
HID Fixture Labor Cost	\$ 100.00	1	149	\$ 14,900.00
400W/1000W HID Lamp	\$ 40.00	1	149	\$ 5,960.00
400W/1000W HID Ballast	\$ 60.00	1	149	\$ 8,940.00
5 Year Totals				\$ 56,315