



Theoretical Re-design of the Baker Patillo Student Center Grand Ballroom

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Project Scope

The driving approach to my project was, "How can I design a space that is flexible, efficient, easily sustainable and provides an educational value to the students?" This project began through my Advanced Lighting Technology course where I was provided the opportunity of researching LED technology and determining how to re-structure or re-design a campus facility with that technology.

Moving Fixtures



Mac Quantum Profile

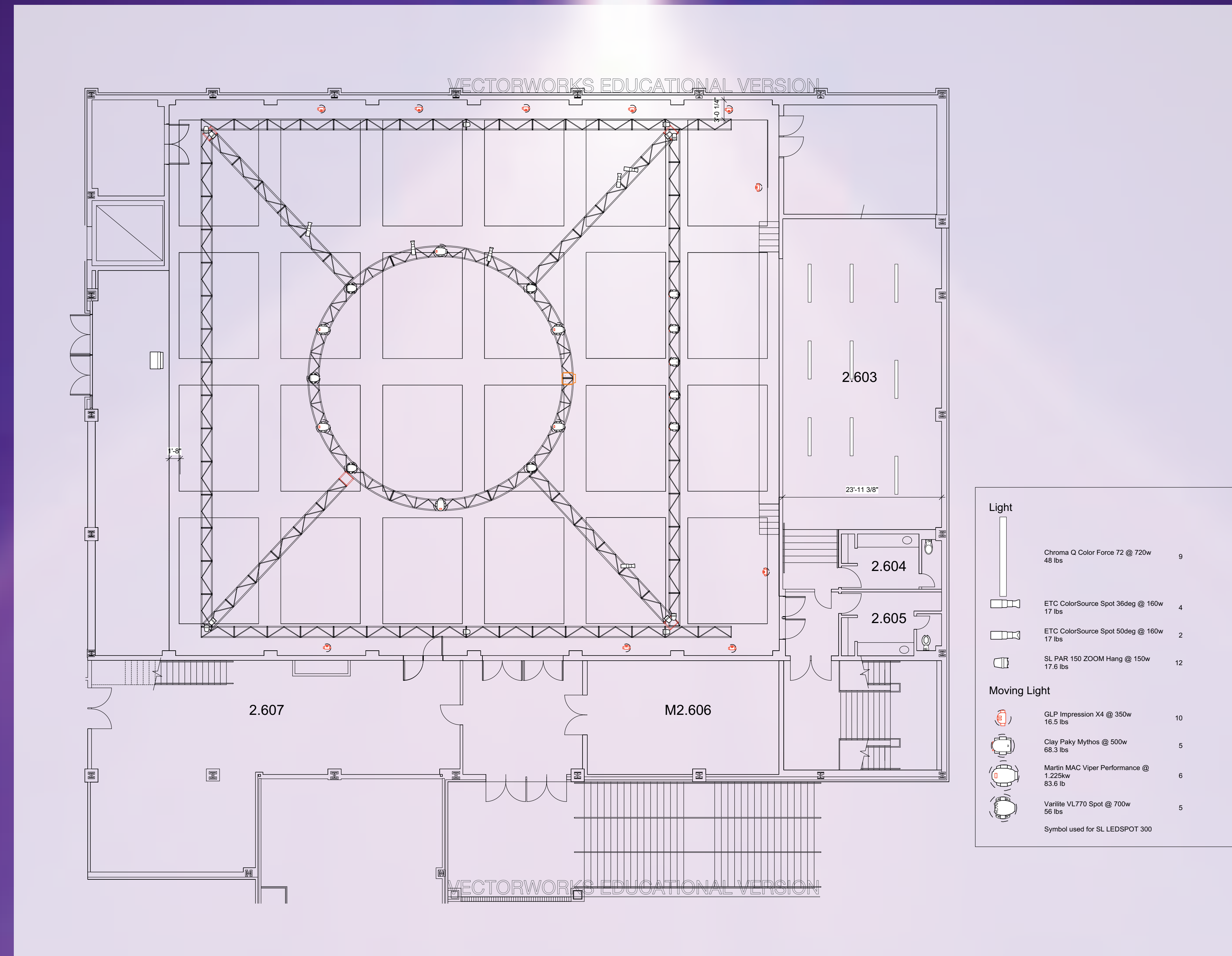


Clay Paky Mythos 2



Showline
SL LEDSPOT 300

Process



LED Lighting



GLP Impression X4



Chroma Q Colorforce
72"



ETC ColorSource Spot



SL Par 150 Zoom

Control



ETC Gio @ 5

Energy Savings

Current Energy Usage

Fixture	Amount	Wattage	Total Wattage	Kilowatt/hour
ETC Source 4 Jr. Zoom	29	575w	16,675w	16.675 Kw/h
T-12 Fluorescent tube	80 (in house)	75w	6000w	6 Kw/h
Total				22.675 Kw/h

Expected Energy Usage with Designed Plot

Fixture	Amount	Wattage	Total Wattage	Kilowatt/hour
ColorSource Spot	6	147w	882w	.882 Kw/h
ColorForce II	9	800w 28w (Idle)	7,200w 252w (Idle)	7.2 Kw/h .252 Kw/h
Clay Paky Mythos II	7	500w	3,500w	3.5 Kw/h
Par 155 Zoom	12	150w	1,800w	1.8 Kw/h
GLP Expression X4	10	350w	3,500w	3.5 Kw/h
LEDspot 300	6	350w	2,100w	2.1 Kw/h
Mac Quantum Profile	6	750w	4,500w	4.5 Kw/h
T-12 LED tube	80	40w	3,200w	3.2 Kw/h
DLHD	1	330w	330w	.33 kw/h
Total			26,682w 19,734w (Idle)	26.682 Kw/h 19.734 Kw/h