



## **D-Series Size 1** Mast Arm Mount LED Area Luminaire



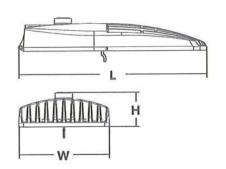




## d"series

## **Specifications**

0.9 ft<sup>2</sup> EPA: (0.08 m²) 27" Length: (68.6 cm) 13" Width: (33.0 cm) 5" Height: (12.7 cm) Weight 26 lbs (max):



#### Catalog Number

Notes

Driveway & parking fixture

Type

#### Introduction

The modern styling of the D-Series is striking vet unobtrusive - making a bold, progressive statement even as it blends seamlessly with its environment.

The D-Series distills the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire. The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. It is ideal for replacing 100 -400W metal halide in pedestrian and area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

## EXAMPLE: DSX1 LED 2 30B700/40K SR3 MVOLT MA DDBXD

#### DSX1 LED

Series	Light Engines	Performance Package 1			Mounting		Finish equ	
DSX1 LED	1 One engine (30 LEDs) 2 Two engines (60 LEDs)	530 mA options: 30B530/30K 3000K 30B530/40K 4000K 30B530/50K 5000K 700 mA options: 30B700/30K 3000K 30B700/40K 4000K 30B700/50K 5000K	SR2 Type II SR3 Type III SR4 Type IV SR5 Type V FT Forward throw	MVOLT <sup>2</sup> 120 <sup>2</sup> 208 <sup>2</sup> 240 <sup>2</sup> 277 <sup>2</sup> 347 <sup>3</sup> 480 <sup>3</sup>	MA Mastarm ready	Shipped installed (blank) No NEMA twist-lock receptacle (decorative cover), wildlife shield, trigger latch, and bridge fitter.  DMG 0-10V dirmming driver (no controls) <sup>4</sup> PER NEMA twist-lock receptacle only (no controls)  DCR Dirmmable and controllable via ROAM® (no controls) <sup>5</sup> HS House-side shield <sup>6</sup> WTB Utility terminal block DS Dual switching <sup>7,8</sup> BUBLVL External bubble level	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark bronze Black Natural aluminum White Textured dark bronze Textured black Textured naturaluminum Textured white

#### Accessories

Ordered and shipped separately.

580R 10 00P BZ 3V SEOR 6 ODP 82 39

Pole-mounted motion/ambient sensor, 8-15' mounting height, MVOLT (specify finish)

DLL127F 1.5 JU

Pole-mounted motion/ambient sensor, 15-30' mounting height, MVOLT

(specify finish)

Photocell - SSL twist-lock, MVOLT \* DLL347F 1.5 CUL JU Photocell - SSL twist-lock (347V) 3 DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) 3

SCU Shorting cap 5

House-side shield (one per light engine)

For more control options, visit Sensor Swards, DTL and ROAM online.

Visit Lithonia Lighting's POLES CENTRAL to see our wide selection of poles, accessories and educational tools.

- Configured with 4000K (/40K) provides the shortest lead times. Consult factory for 3000K (/30K) and 5000K (/50K) lead times.
- MVOLT driver operates on any line voltage from 120-277V (50/60Hz).
- Not available with single board, 530 mA product (1 30B530).
- Not available with 347 or 480V.
- Specifies a ROAM® enabled luminaire with 0-10V dimming capability, requires NEMA twist-lock receptacle. Not available with 347 or 480V. Additional hardware and services required for ROAM® deployment; must be purchased separately. Call 1-800-442-6745 or email: sales@roamservices.net. Also available as a separate accessory; see Accessories information at left.
- Requires two light engines. Provides 50% dimming capability via two independent drivers, each operating half the luminaire. N/A with PER, DCR, DMG, WTB or 530mA with 347v or 480v.
- Requires an additional switched line.
- Requires luminaire to be specified with PER option. Ordered and shipped as a separate line item.



#### **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Actual performance may differ as a result of enduser environment and application. Contact factory for performance data on any configurations not shown here.

	Drive		1000		I SATES									
	Current	Performance Parkage	System Watts	Dist. Type		(410)	K. 67 (	RI)		974	(500)	ж, 67 (		
						8	H	5		lumens	В		G	10
				SR2	4634	1	0	1	84	5056	1	0	1	92
				SR3	4695	1	0	2	85	5123	1	0	2	9
				SR3 HS	3425	0	0	1	61	3737	0	0	1	6
	530	30B530/K	55W	SR4	4694	1	0	2	85	5122	1	0	2	9
1				SR4 HS	3459	0	0	1	62	3774	0	0	2	6
				SRS	4696	3	0	1	85	5124	3	0	1	9
1				FT	4694	1	0	1	85	5122	1	0	2	9
12002202				SR2	5679	1	0	1	77	6223	2	0	2	8
(30 LEDs)				SR3	5835	1	0	2	79	6394	2	0	2	8
			73W	SR3 HS	4239	0	0	2	58	4645	0	0	2	6
	700	30B700/K		SR4	5798	1	0	2	79	6354	1	0	2	8
	1,000			SR4 HS	4294	0	0	2	58	4706	0	0	2	1 0
				SRS	5769	3	0	1	79	6322	3	0	2	1 8
				FT	5820	1	0	2	79	6378	1	0	2	8
			106W	SR2	9109	1 2	0	2	86	9929	2	0	2	5
				SR3	9257	2	0	2	87	10,010	2	0	3	9
		30B530/K		SR3 HS	6717	0	0	2	64	7302	0	0	2	1
	530			SR4	9204	2	0	2	87	10,010	2	0	2	1
	2000	100000000000000000000000000000000000000	20000	SR4 HS	6800	0	0	2	64	7446	0	0	2	1
				SR5	9223	4	0	2	87	10,198	4	0	2	1 9
2				FT	9183	1 2	0	2	87	10,020	2	0	2	1 5
				SR2	11,170	2	0	1 2	78	12,312	3	0	3	1
(60 LEDs)				SR3	11,391	1 2	0	3	80	12,462	2	0	3	1
				SR3 HS	8285	0	0	2	58	9047	0	0	2	1
	700	308700/K	143W	SR4	11,332	1 2	0	2	79	12,368	2	0	3	1
	(1.000)	TREETERS OF	Column 1	SR4 HS	8318	0	0	2	58	9149	0	0	2	1
				SR5	11,723	1 4	0	1 2	82	12,455	4	0	2	1
				FT	11,662	1 2	0	3	82	12,531	2	0	3	1

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

0°C	32°F	1.02
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	1.00
40°C	104°F	0.99

#### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **DSX1 LED 2 30B700** platform in a 40°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

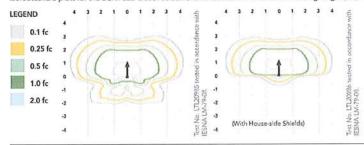
Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	0.95	0.92	0.87

#### **Electrical Load**

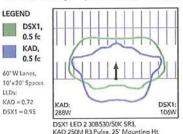
			120					
	DriverChirent (mA)		120	208	240	277	347	480
1	530	55 W	0.46	0.26	0.23	0.20	0.16	0.11
1	700	73 W	0.61	0.35	0.30	0.26	0.21	0.15
	530	106W	0.89	0.51	0.44	0.38	0.31	0.22
2	700	143 W	1.19	0.69	0.60	0.52	0.41	0.30

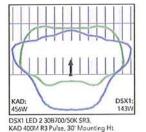
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's D-Series Area Size 1 homepage.

Isofootcandle plots for the DSX1 LED 2 30B700/50K SR3. Distances are in units of mounting height (20').



Distribution overlay comparisons to 250W and 400W metal halide.





#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and

#### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED driver is mounted in direct contact with the casting to promote low operating temperature and long life. Low EPA  $(0.9 \, \text{ft})$  for optimized pole wind loading.

#### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

#### **OPTICS**

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000K (80 CRI), 4000K (67 CRI) or 5000K (67 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly<sup>™</sup> product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight

Light engine(s) consist of 30 high-efficacy LEDs mounted to a metal-core circuit board to maximize heat dissipation and promote long life (100,000 hrs at 40°C, L87). Class 1 electronic driver has a power factor >90%, THD <20%, and has an expected life of 100,000 hours with <1% failure rate. Easily-serviceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

Four-bolt mast arm mount provides easy, secure installation for nominal 1-1/4" to 2"diameter arms (1-5/8" to 2-3/8" O.D.) and enables the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. Housing includes cast-in wildlife shield. Die-cast trigger latch on door provides tool-less entry for easy and secure opening with one hand; top-side leveling crosshairs and internal bubble level assist with installation.

#### LISTINGS

CSA certified to U.S. and Canadian standards. Light engines are IP66 rated. Rated for -40°C minimum ambient. U.S. D663,462 S. International patents pending.

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org t confirm which versions are qualified.

#### WARRANTY

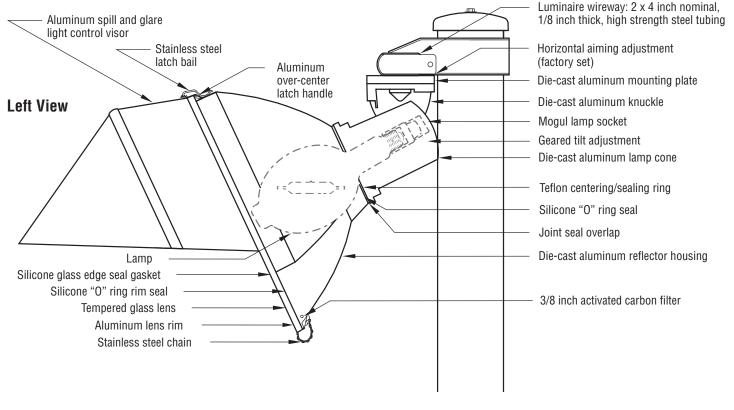
Five year limited warranty. Full warranty terms located at www.acuitylorands.com/

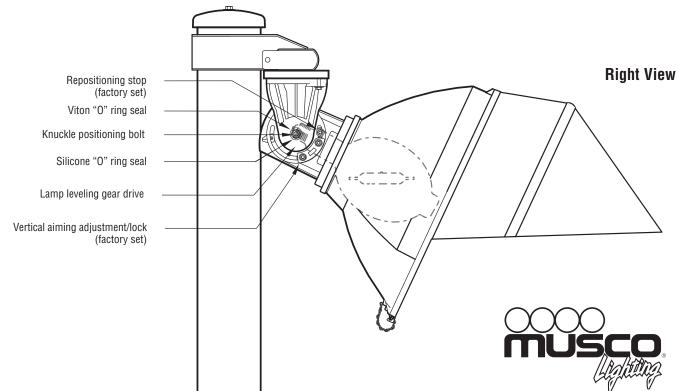
Note: Specifications subject to change without notice.



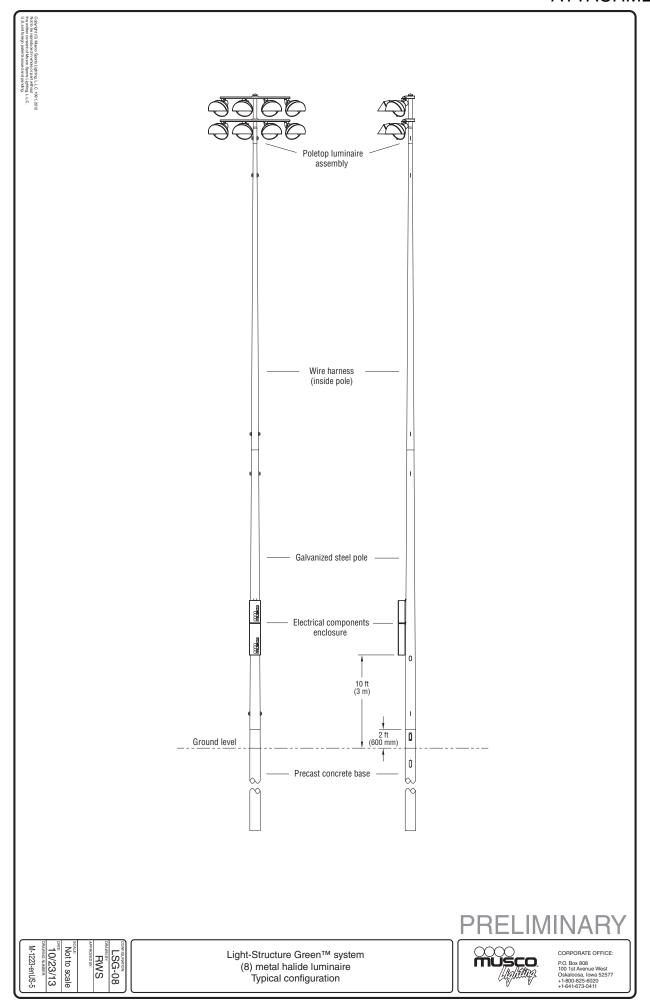
# Light.Structure

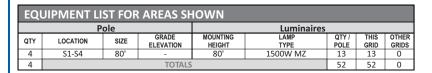
## **Luminaire Assembly**





800/825-6030 www.musco.com lighting@musco.com







Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Soccer
Size: 330' x 165'
Spacing: 30.0' x 30.0'
Height: 3.0' above grade

CONSTANT ILLUMINATION

Design Lumens: 134,000 Avg Lamp Tilt Factor: 1.000 No. of Luminaires: 52

#### HORIZONTAL FOOTCANDLES SUMMARY **Entire Grid Guaranteed Average:** 50.7 Scan Average: Maximum: 69 37 Minimum: 1.36 Avg / Min: Guaranteed Max / Min: 1.84 Max / Min: UG (adjacent pts): 1.32 CU: 0.43 No. of Points: 66 LUMINAIRE INFORMATION Luminaire Type: Green Generation Rated Lamp Life: 5,000 hours

**Guaranteed Performance:** The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Avg KW: 81.33 (88.4 max)

**Field Measurements:** Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

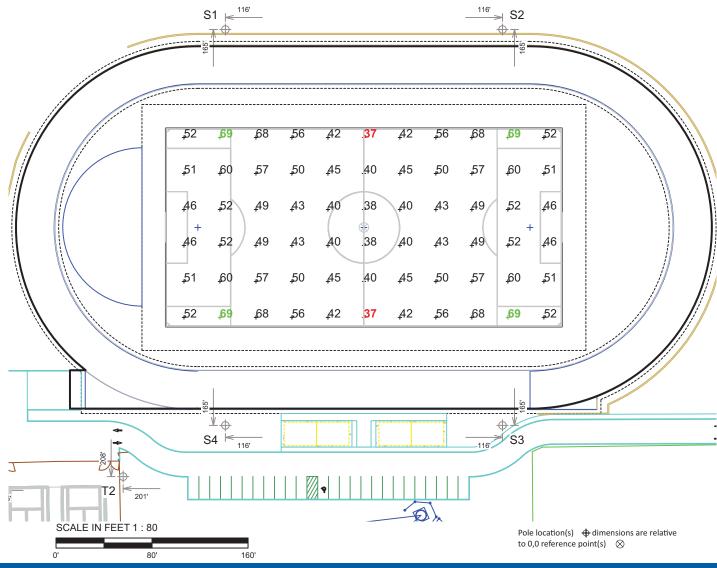
**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3%
 nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

### ENGINEERED DESIGN

**By:** Eric Svenby
File # / Date: 167924B

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EQI	EQUIPMENT LIST FOR AREAS SHOWN											
	Pole Luminaires											
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS				
2	T1-T2	50'	-	50'	1000W MZ	2	2	0				
2	T3-T4	50'	-	50'	1000W MZ	4	2	2				
4		12	8	4								

SCALE IN FEET 1:60



**MY PROJECT** 

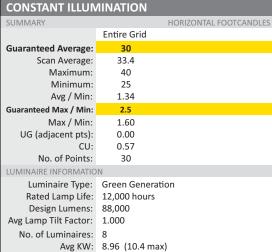
Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Tennis 1-2

Size: 2 Court - 12' Spacing Spacing: 20.0' x 20.0' Height: 3.0' above grade



Guaranteed Performance: The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

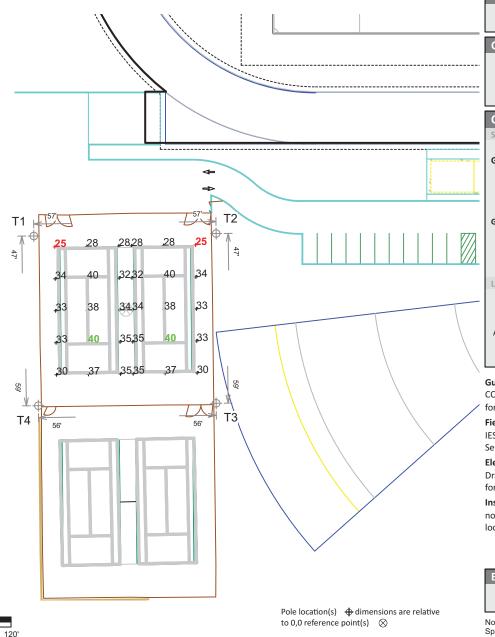
Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

ENGINEERED DESI	GN	
By:	Eric Svenby	
File # / Date:	167924B	27-Feb-14

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EQI	EQUIPMENT LIST FOR AREAS SHOWN											
	P	ole			Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS				
2	T3-T4	50'	-	50'	1000W MZ	4	2	2				
2	T5-T6	50'	-	50'	1000W MZ	2	2	0				
4		TOTALS										

T4

T5

**3**0

.32

32

34

.36

37

39

35,35

36,36

3232

40

37

39





Name: Peoria Central High School Complex

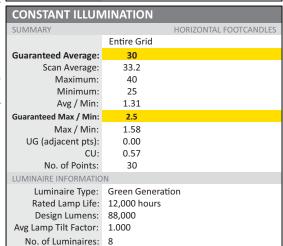
Location: Peoria,IL

**GRID SUMMARY** 

Name: Tennis 3-4

Size: 2 Court - 12' Spacing Spacing: 20.0' x 20.0'

Height: 3.0' above grade



Guaranteed Performance: The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Avg KW: 8.96 (10.4 max)

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.



to 0,0 reference point(s)  $\otimes$ 

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EQI	EQUIPMENT LIST FOR AREAS SHOWN											
	P	ole		Luminaires								
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS				
4	S1-S4	80'	-	80'	1500W MZ	13	13	0				
4	4 TOTALS							0				



Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Track Size: Irregular Spacing: 30.0' x 30.0' Height: 3.0' above grade

**CONSTANT ILLUMINATION** 

SUMMARY HORIZONTAL FOOTCANDLES **Entire Grid** Scan Average:

40 Maximum: Minimum: Avg / Min: 6.22 13.86

Max / Min: UG (adjacent pts): 0.00

CU: 0.11 No. of Points: 46 LUMINAIRE INFORMATION

Luminaire Type: Green Generation Rated Lamp Life: 5,000 hours

Design Lumens: 134,000 Avg Lamp Tilt Factor: 1.000

No. of Luminaires: 52 Avg KW: 81.33 (88.4 max)

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary"

for electrical sizing.

**Installation Requirements:** Results assume +/- 3% nominal voltage at line side of the ballast and structures < located within 3 feet (1m) of design locations.

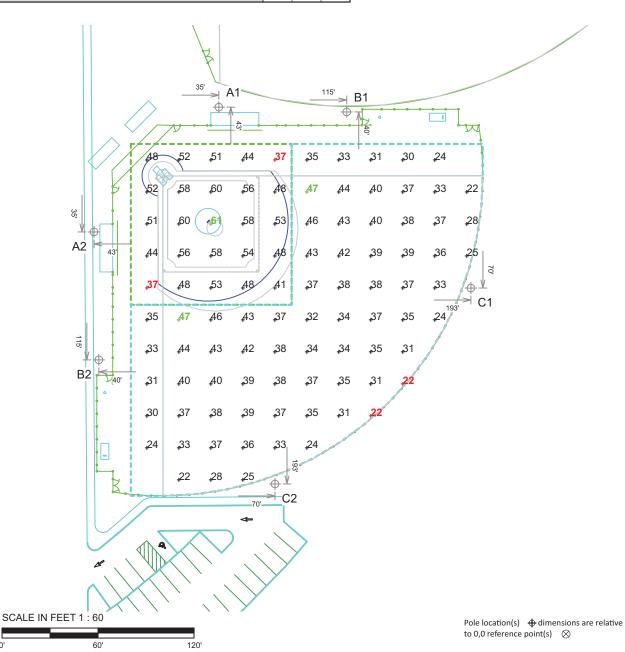
**ENGINEERED DESIGN** 

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<sub>+</sub>16 SCALE IN FEET 1:80 to 0,0 reference point(s)  $\otimes$ 

EQI	EQUIPMENT LIST FOR AREAS SHOWN										
	Р	ole			Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS			
6	A1-A2	60'	-	60'	1500W MZ	3	3	0			
	B1-B2										
	C1-C2										
6		TOTALS									





Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Softball

Size: 200'/200'/200' - basepath 60'

Spacing: 20.0' x 20.0'

Height: 3.0' above grade

CONSTANT ILLUN	NOITANIN		
SUMMARY		HORIZONTAL FO	OOTCANDLES
	Infield	Outfield	
Guaranteed Average:	50	30	
Scan Average:	51.0	35.0	
Maximum:	61	47	
Minimum:	37	22	
Avg / Min:	1.39	1.62	
Guaranteed Max / Min:	2	2.5	
Max / Min:	1.67	2.17	
UG (adjacent pts):	1.32	1.51	
CU:	0.64		
No. of Points:	25	73	
LUMINAIRE INFORMATIO	N		
Luminaire Type: Rated Lamp Life: Design Lumens:	Green Gener 5,000 hours 134,000	ation	
Avg Lamp Tilt Factor:	1.000		
No. of Luminaires: Avg KW:	18 28.15 (30.6)	max)	

Guaranteed Performance: The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

**ENGINEERED DESIGN** 

By: Eric Svenby

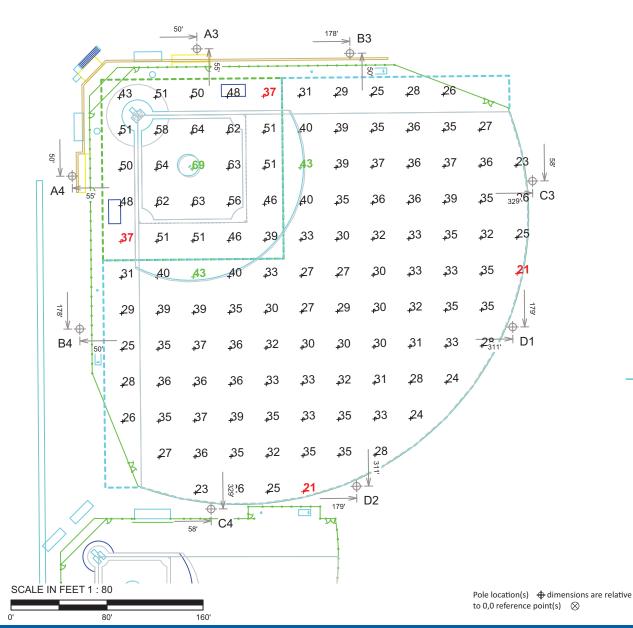
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27-Feb-14

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EQI	EQUIPMENT LIST FOR AREAS SHOWN										
	P	ole			Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS			
2	A3-A4	70'	-	70'	1500W MZ	5	5	0			
2	B3-B4	80'	-	80'	1500W MZ	8	8	0			
4	C3-C4 D1-D2	70'	-	70'	1500W MZ	4	4	0			
8		TOTALS									





Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Baseball

Size: 310'/360'/310' - basepath 90'

Spacing: 30.0' x 30.0'

Height: 3.0' above grade

CONSTANT ILLUN	INATION		
SUMMARY		HORIZONTA	AL FOOTCANDLES
	Infield	Outfield	
<b>Guaranteed Average:</b>	50	30	
Scan Average:	52.3	32.3	
Maximum:	69	43	
Minimum:	37	21	
Avg / Min:	1.41	1.54	
Guaranteed Max / Min:	2	2.5	
Max / Min:	1.85	2.05	
UG (adjacent pts):	1.36	1.67	
CU:	0.71		
No. of Points:	25	96	
LUMINAIRE INFORMATIO	N		
Luminaire Type: Rated Lamp Life: Design Lumens: Avg Lamp Tilt Factor: No. of Luminaires: Avg KW:	Green Gener 5,000 hours 134,000 1.000 42 65.69 (71.4 r		

Guaranteed Performance: The Guaranteed Average CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

**ENGINEERED DESIGN** 

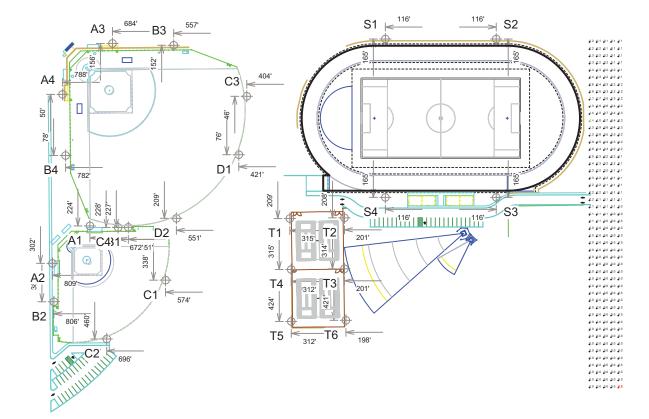
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EQI	EQUIPMENT LIST FOR AREAS SHOWN												
	P	ole			Luminaires								
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS					
6	A1-A2	60'	-	60'	1500W MZ	3	3	0					
	B1-B2												
	C1-C2												
2	A3-A4	70'	-	70'	1500W MZ	5	5	0					
2	B3-B4	80'	-	80'	1500W MZ	8	8	0					
4	C3-C4	70'	-	70'	1500W MZ	4	4	0					
	D1-D2												
4	S1-S4	80'	-	80'	1500W MZ	13	13	0					
4	T1-T2	50'	-	50'	1000W MZ	2	2	0					
	T5-T6												
2	T3-T4	50'	-	50'	1000W MZ	4	4	0					
24			TOTALS			128	128	0					

SCALE IN FEET 1:200

200





**MY PROJECT** 

Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

 Name:
 Spill @ North St

 Size:
 330' x 165'

 Spacing:
 15.0' x 15.0'

 Height:
 10.0' above grade

CONSTANT ILLUMINATION

HORIZONTAL FOOTCANDLES SUMMARY **Entire Grid** Scan Average: 1 Maximum: Minimum: 0 Avg / Min: 34.03 275.85 Max / Min: UG (adjacent pts): 1.66 0.00 CU: 245 No. of Points: LUMINAIRE INFORMATION Luminaire Type: Green Generation Rated Lamp Life: 5,000 / 12,000 hrs Design Lumens: 134,000 / 88,000 Avg Lamp Tilt Factor: 1.000 No. of Luminaires: 128

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Avg KW: 193.09 (211.2 max)

**Field Measurements:** Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary.

See the Warranty document for details.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

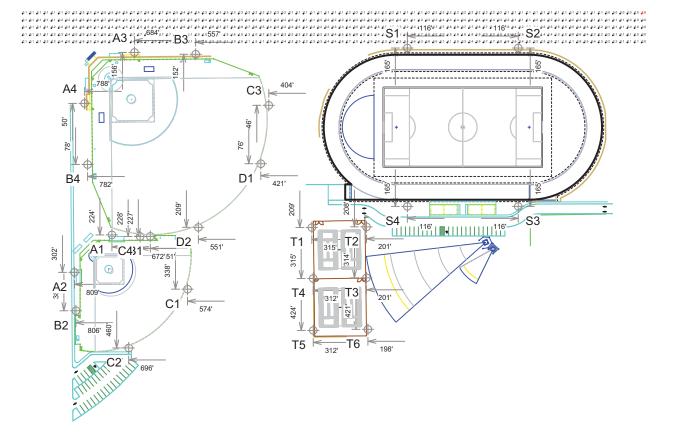
 ENGINEERED DESIGN

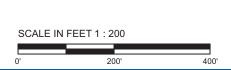
 By:
 Eric Svenby

 File # / Date:
 167924B
 27-Feb-14

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EQI	EQUIPMENT LIST FOR AREAS SHOWN												
	P	ole			Luminaires								
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS					
6	A1-A2	60'	-	60'	1500W MZ	3	3	0					
	B1-B2												
	C1-C2												
2	A3-A4	70'	-	70'	1500W MZ	5	5	0					
2	B3-B4	80'	-	80'	1500W MZ	8	8	0					
4	C3-C4	70'	-	70'	1500W MZ	4	4	0					
	D1-D2												
4	S1-S4	80'	-	80'	1500W MZ	13	13	0					
4	T1-T2	50'	-	50'	1000W MZ	2	2	0					
	T5-T6												
2	T3-T4	50'	-	50'	1000W MZ	4	4	0					
24			TOTALS			128	128	0					





Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 



**MY PROJECT** 

Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Spill @ W Nebraska Ave Size: 330' x 165'

Spacing: 15.0' x 15.0' Height: 10.0' above grade

CONSTANT ILLUMINATION							
SUMMARY	HORIZONTAL FOOTCANDLES						
	Entire Grid						
Scan Average:	1.0						
Maximum:	7						
Minimum:	0						
Avg / Min:	39.34						
Max / Min:	281.10						
UG (adjacent pts):	12.40						
CU:	0.01						
No. of Points:	435						
LUMINAIRE INFORMATIO	N						
Luminaire Type:	Green Generation						
Rated Lamp Life:	5,000 / 12,000 hrs						
Design Lumens:	134,000 / 88,000						
Avg Lamp Tilt Factor:	1.000						
No. of Luminaires:	128						
Avg KW:	193.09 (211.2 max)						

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

**Field Measurements:** Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary.

See the Warranty document for details.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

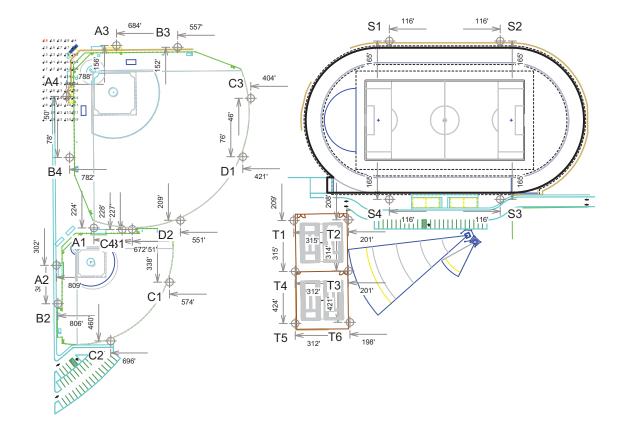
**ENGINEERED DESIGN** 

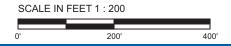
By: Eric Svenby
File # / Date: 167924B

27-Feb-14

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EQI	EQUIPMENT LIST FOR AREAS SHOWN												
	P	ole			Luminaires								
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS					
6	A1-A2	60'	-	60'	1500W MZ	3	3	0					
	B1-B2												
	C1-C2												
2	A3-A4	70'	-	70'	1500W MZ	5	5	0					
2	B3-B4	80'	-	80'	1500W MZ	8	8	0					
4	C3-C4	70'	-	70'	1500W MZ	4	4	0					
	D1-D2												
4	S1-S4	80'	-	80'	1500W MZ	13	13	0					
4	T1-T2	50'	-	50'	1000W MZ	2	2	0					
	T5-T6												
2	T3-T4	50'	-	50'	1000W MZ	4	4	0					
24			TOTALS			128	128	0					





Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 



**MY PROJECT** 

Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Spill @ BB 1st Base
Size: 330' x 165'
Spacing: 15.0' x 15.0'

Height: 10.0' above grade

**CONSTANT ILLUMINATION** HORIZONTAL FOOTCANDLES SUMMARY **Entire Grid** Scan Average: 31 Maximum: Minimum: 1 14.08 Avg / Min: 52.15 Max / Min: UG (adjacent pts): 2.39 0.01 CU: 60 No. of Points: LUMINAIRE INFORMATION Luminaire Type: Green Generation Rated Lamp Life: 5,000 / 12,000 hrs Design Lumens: 134,000 / 88,000 Avg Lamp Tilt Factor: 1.000 No. of Luminaires: 128 Avg KW: 193.09 (211.2 max)

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

**Field Measurements:** Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "**Musco Control System Summary**"

for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures

located within 3 feet (1m) of design locations.

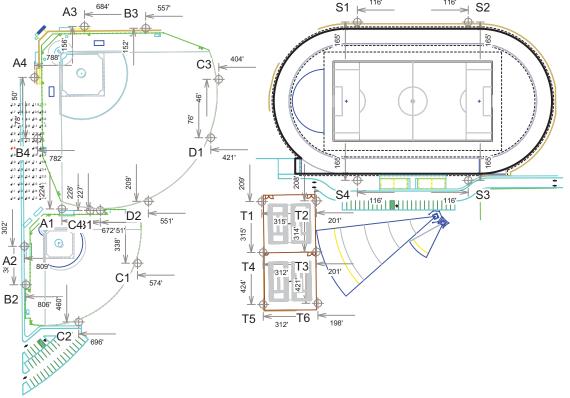
**ENGINEERED DESIGN** 

By: Eric Svenby
File # / Date: 167924B

167924B 27-Feb-14

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EQI	EQUIPMENT LIST FOR AREAS SHOWN											
Pole					Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS				
6	A1-A2	60'	-	60'	1500W MZ	3	3	0				
	B1-B2											
	C1-C2											
2	A3-A4	70'	-	70'	1500W MZ	5	5	0				
2	B3-B4	80'	-	80'	1500W MZ	8	8	0				
4	C3-C4	70'	-	70'	1500W MZ	4	4	0				
	D1-D2											
4	S1-S4	80'	-	80'	1500W MZ	13	13	0				
4	T1-T2	50'	-	50'	1000W MZ	2	2	0				
	T5-T6											
2	T3-T4	50'	-	50'	1000W MZ	4	4	0				
24	TOTALS 128 128 0											





200'

to 0,0 reference point(s)  $\otimes$ 



**MY PROJECT** 

Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Spill @ BB Left Field

Size: 330' x 165' Spacing: 15.0' x 15.0' Height: 5.0' above grade

CONSTANT ILLUMINATION							
SUMMARY	HORIZONTAL FOOTCANDLES						
	Entire Grid						
Scan Average:	5.1						
Maximum:	20						
Minimum:	1						
Avg / Min:	6.23						
Max / Min:	23.95						
UG (adjacent pts):	2.51						
CU:	0.00						
No. of Points:	70						
LUMINAIRE INFORMATIO	N						
Luminaire Type:	Green Generation						
Rated Lamp Life:	5,000 / 12,000 hrs						
Design Lumens:	134,000 / 88,000						
Avg Lamp Tilt Factor:	1.000						
No. of Luminaires:	128						
Avg KW:	193.09 (211.2 max)						

Guaranteed Performance: The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

Field Measurements: Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary. See the Warranty document for details.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary"

for electrical sizing.

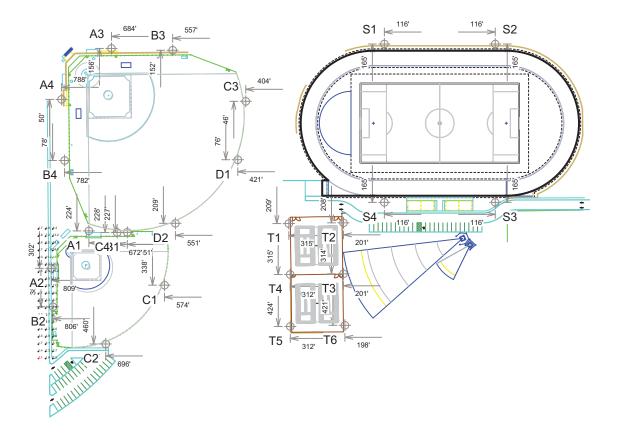
**Installation Requirements:** Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

**ENGINEERED DESIGN** 

By: Eric Svenby File # / Date: 167924B

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EQI	EQUIPMENT LIST FOR AREAS SHOWN											
Pole					Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE	THIS GRID	OTHER GRIDS				
6	A1-A2	60'	-	60'	1500W MZ	3	3	0				
	B1-B2											
	C1-C2											
2	A3-A4	70'	-	70'	1500W MZ	5	5	0				
2	B3-B4	80'	-	80'	1500W MZ	8	8	0				
4	C3-C4	70'	-	70'	1500W MZ	4	4	0				
	D1-D2											
4	S1-S4	80'	-	80'	1500W MZ	13	13	0				
4	T1-T2	50'	-	50'	1000W MZ	2	2	0				
	T5-T6											
2	T3-T4	50'	-	50'	1000W MZ	4	4	0				
24	TOTALS 128 128 0											





Name: Peoria Central High School Complex

Location: Peoria,IL

**GRID SUMMARY** 

Name: Spill @ SB 1st Base/Left Field

Size: 330' x 165' Spacing: 15.0' x 15.0' Height: 3.0' above grade

**CONSTANT ILLUMINATION** HORIZONTAL FOOTCANDLES SUMMARY **Entire Grid** Scan Average: 26 Maximum: Minimum: 1 6.07 Avg / Min: 23.85 Max / Min: UG (adjacent pts): 2.85 0.01 CU: 57 No. of Points: LUMINAIRE INFORMATION Luminaire Type: Green Generation Rated Lamp Life: 5,000 / 12,000 hrs Design Lumens: 134,000 / 88,000 Avg Lamp Tilt Factor: 1.000 No. of Luminaires: 128 Avg KW: 193.09 (211.2 max)

**Guaranteed Performance:** The CONSTANT ILLUMINATION described above is guaranteed for the rated life of the lamp.

**Field Measurements:** Illumination measured in accordance with IESNA LM-5-04 and CIBSE LG4. Individual values may vary.

See the Warranty document for details.

**Electrical System Requirements:** Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

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27-Feb-14

SCALE IN FEET 1 : 200

0' 200' 400'

Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 





Name: Peoria Central High School Complex

Location: Peoria,IL

#### **EQUIPMENT LAYOUT**

#### **INCLUDES:**

- · Baseball
- ·Soccer
- · Softball
- · Tennis 1-2
- · Tennis 3-4
- · Track

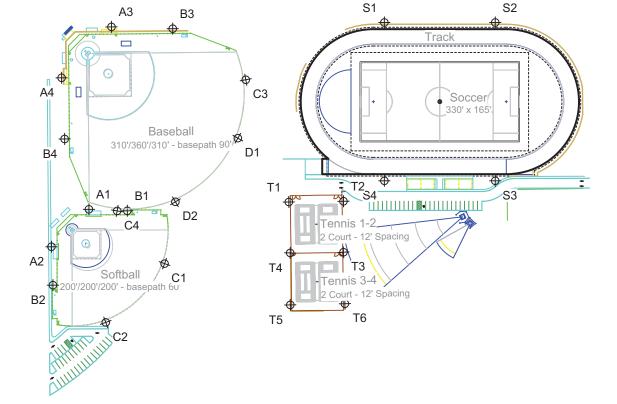
**Electrical System Requirements:** Refer to Amperage

Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume +/- 3% nominal voltage at line side of the ballast and structures located within 3 feet (1m) of design locations.

EQ	EQUIPMENT LIST FOR AREAS SHOWN											
	Po	ole			Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LAMP TYPE	QTY / POLE						
6	A1-A2	60'	-	60'	1500W MZ	3						
	B1-B2											
	C1-C2											
2	A3-A4	70'	-	70'	1500W MZ	5						
2	B3-B4	80'	-	80'	1500W MZ	8						
4	C3-C4	70'	-	70'	1500W MZ	4						
	D1-D2											
4	S1-S4	80'	-	80'	1500W MZ	13						
4	T1-T2	50'	-	50'	1000W MZ	2						
	T5-T6											
2	T3-T4	50'	-	50'	1000W MZ	4						
24			TOTAL	S	·	128						

SINGLE LUMINAIRE AMPERAGE DRAW CHART										
Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)									
Single Phase Voltage	208	220	240	277	347 (60)	380	480			
1500 watt MZ	8.6	8.3	7.5	6.5	5.1	4.7	3.7			
1000 watt MZ	6.5	6.4	5.8	4.9	4.0	3.6	2.9			



SCALE IN FEET 1 : 200

0' 200' 400'

Pole location(s)  $\bigoplus$  dimensions are relative to 0,0 reference point(s)  $\bigotimes$ 

 ENGINEERED DESIGN

 By:
 Eric Svenby

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 27-Feb-14

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