

Appendix D Lighting Plans for Pacific High School

Appendix

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Pacific High School Athletic Fields

San Bernardino, CA

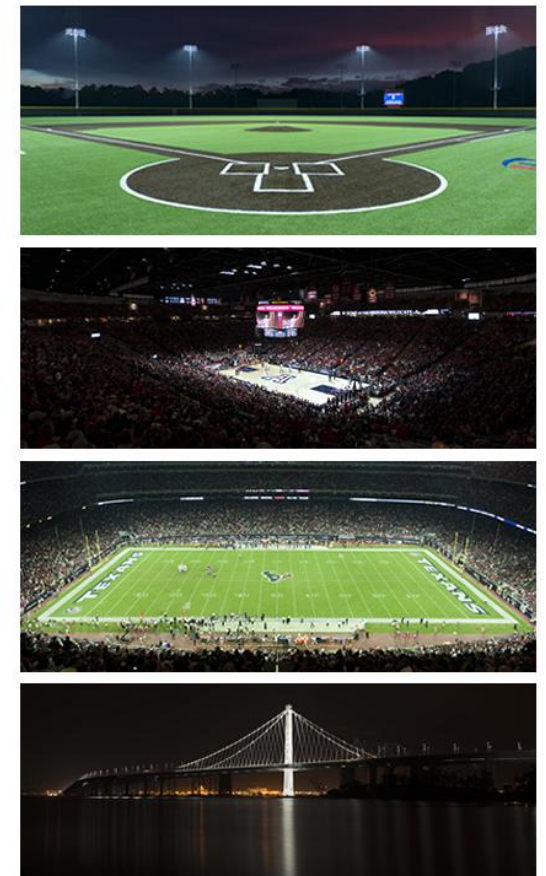
Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	70'	70'	4	TLC-LED-1200	4.68 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
A3	60'	60'	3	TLC-LED-900	2.67 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
A4	60'	60'	3	TLC-LED-900	2.67 kW	B
		16'	1	TLC-BT-575	0.58 kW	B
		60'	1	TLC-LED-400	0.40 kW	G
		60'	2	TLC-LED-900	1.78 kW	F
B1-B2	80'	80'	8	TLC-LED-1500	11.44 kW	A
		80'	1	TLC-LED-400	0.40 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B3-B4	70'	70'	7	TLC-LED-1500	10.01 kW	B
		16'	2	TLC-BT-575	1.15 kW	B
C1-C2	70'	70'	4	TLC-LED-1200	4.68 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
D1	70'	70'	4	TLC-LED-1200	4.68 kW	A
P1	60'	60'	2	TLC-LED-400	0.80 kW	G
		60'	1	TLC-LED-900	0.89 kW	F
P2	60'	60'	2	TLC-LED-400	0.80 kW	G
		60'	1	TLC-LED-400	0.40 kW	F
		60'	1	TLC-LED-600	0.58 kW	F
		60'	1	TLC-LED-900	0.89 kW	F
P3	60'	60'	1	TLC-LED-400	0.40 kW	G
		60'	3	TLC-LED-900	2.67 kW	F
T1-T2	50'	50'	3	TLC-LED-900	2.67 kW	C
T3	50'	50'	3	TLC-LED-900	2.67 kW	D
		50'	3	TLC-LED-900	2.67 kW	C
T4	50'	50'	3	TLC-LED-900	2.67 kW	C
		50'	3	TLC-LED-900	2.67 kW	D
		50'	3	TLC-LED-900	2.67 kW	E
T5	50'	50'	3	TLC-LED-900	2.67 kW	D
		50'	3	TLC-LED-900	2.67 kW	E
T6	60'	60'	3	TLC-LED-900	2.67 kW	D
T7-T8	50'	50'	3	TLC-LED-900	2.67 kW	E
22			123		122.14 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Varsity Baseball	51.68 kW	46
B	Varsity Softball	28.81 kW	26
C	Tennis 1-3	10.68 kW	12
D	Tennis 4-6	10.68 kW	12
E	Tennis 7-9	10.68 kW	12
F	Pool	7.21 kW	9
G	Pool Egress	2.4 kW	6

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	136,000	>120,000	>120,000	>120,000	20
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>120,000	>120,000	>120,000	49
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>120,000	>120,000	>120,000	1
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>120,000	>120,000	>120,000	30
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	14
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>120,000	>120,000	>120,000	9

From Hometown to Professional



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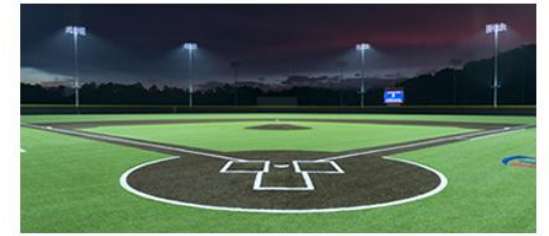
Pacific High School Athletic Fields

San Bernardino, CA

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Blanket Grid	Horizontal	22.1	0	63	2492.77		B	26
Diving Pool	Horizontal	54	35	67	1.91	1.54	F,G	15
East Spill	Horizontal	0.06	0	0.43	0.00		A,B,C,D,E, F,G	123
East Spill	Max Candela (by Fixture)	7046	35.3	28638	811.54	199.67	A,B,C,D,E, F,G	123
East Spill	Max Vertical Illuminance Metric	0.17	0	1.15	10458.62		A,B,C,D,E, F,G	123
Pool Deck	Horizontal	37.9	12	64	5.14	3.16	F,G	15
Pool Egress	Horizontal	11.2	1	23	22.57	11.21	G	6
South Spill	Horizontal	0	0	0	0.00		A,B,C,D,E, F,G	123
South Spill	Max Candela (by Fixture)	7569	0	20381	0.00		A,B,C,D,E, F,G	123
South Spill	Max Vertical Illuminance Metric	0.01	0	0.03	0.00		A,B,C,D,E, F,G	123
Tennis 1-3	Horizontal Illuminance	52.6	37	64	1.73	1.42	C	12
Tennis 4-6	Horizontal Illuminance	52.7	38	68	1.79	1.39	D	12
Tennis 7-9	Horizontal Illuminance	54	39	72	1.87	1.38	E	12
Training Pool	Horizontal	51.8	35	69	1.97	1.48	F,G	15
Varsity Baseball (Infield)	Horizontal Illuminance	52.2	39	62	1.59	1.34	A	46
Varsity Baseball (Outfield)	Horizontal Illuminance	32.8	21	45	2.10	1.56	A	46
Varsity Softball (Infield)	Horizontal Illuminance	51	38	64	1.67	1.34	B	26
Varsity Softball (Outfield)	Horizontal Illuminance	35.2	22	46	2.10	1.60	B	26

From Hometown to Professional

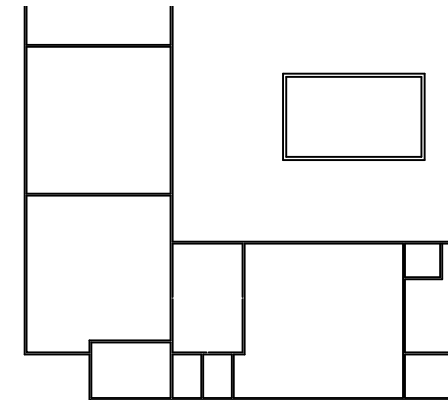


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EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A4	60'	-	15.5'	TLC-BT-575	1	0	1
				60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3/2*	2	3
1	P1	60'	-	60'	TLC-LED-400	2	2	0
				60'	TLC-LED-900	1	1	0
				60'	TLC-LED-900	1	1	0
1	P2	60'	-	60'	TLC-LED-900	1	1	0
				60'	TLC-LED-400	3	3	0
				60'	TLC-LED-600	1	1	0
1	P3	60'	-	60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3	3	0
				TOTALS		19	15	4

* This structure utilizes a back-to-back mounting configuration



Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Training Pool
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

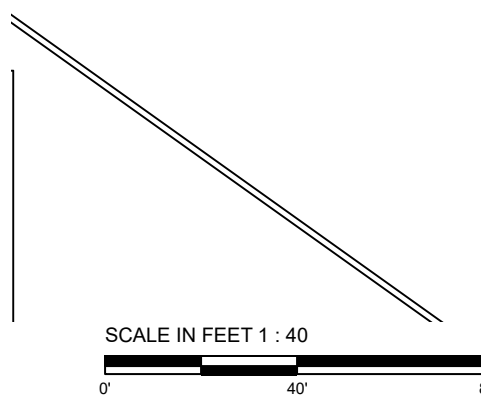
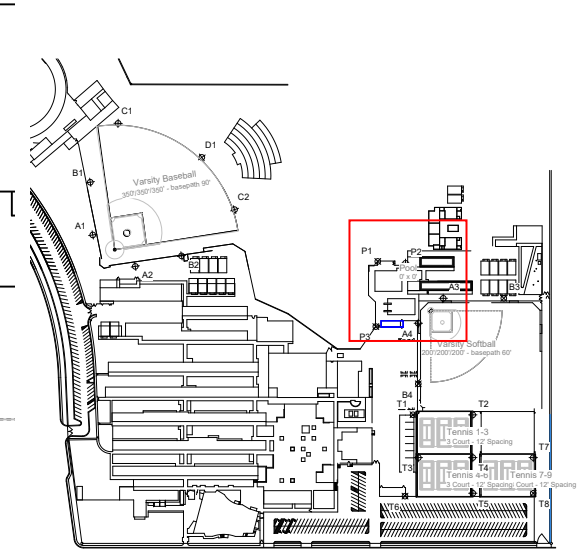
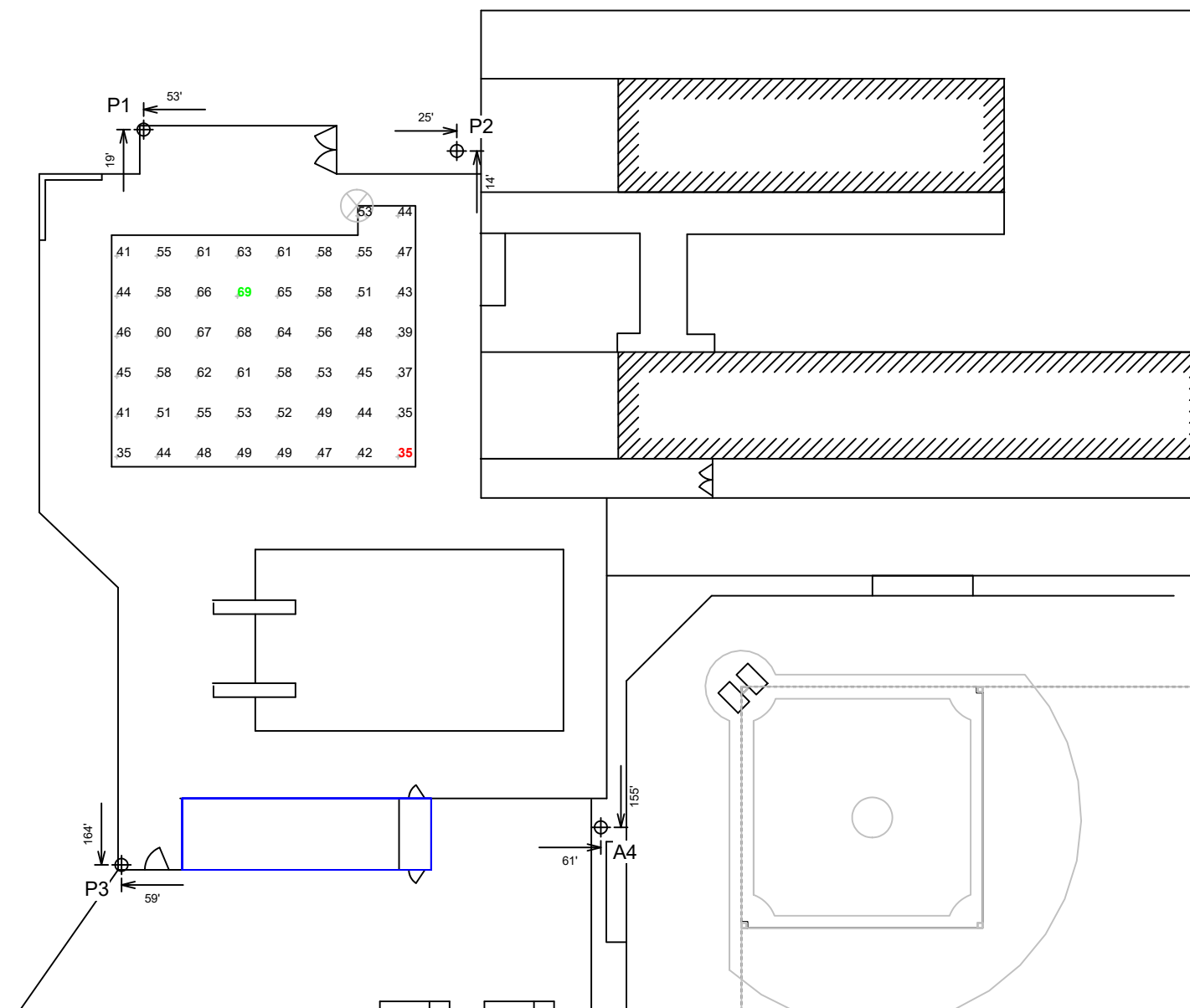
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	51.79
Maximum:	69
Minimum:	35
Avg / Min:	1.48
Max / Min:	1.97
UG (adjacent pts):	1.33
CU:	0.24
No. of Points:	50
LUMINAIRE INFORMATION	
Applied Circuits:	F, G
No. of Luminaires:	15
Total Load:	9.61 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) Ⓧ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A4	60'	-	15.5'	TLC-BT-575	1	0	1
				60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3/2*	2	3
1	P1	60'	-	60'	TLC-LED-400	2	2	0
				60'	TLC-LED-900	1	1	0
				60'	TLC-LED-400	1	1	0
1	P2	60'	-	60'	TLC-LED-900	1	1	0
				60'	TLC-LED-400	3	3	0
				60'	TLC-LED-600	1	1	0
1	P3	60'	-	60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3	3	0
				60'	TLC-LED-900	3	3	0
4	TOTALS					19	15	4

* This structure utilizes a back-to-back mounting configuration

GRID SUMMARY	
Name:	Diving Pool
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	53.96
Maximum:	67
Minimum:	35
Avg / Min:	1.54
Max / Min:	1.91
UG (adjacent pts):	1.19
CU:	0.20
No. of Points:	40

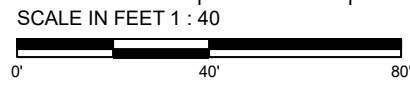
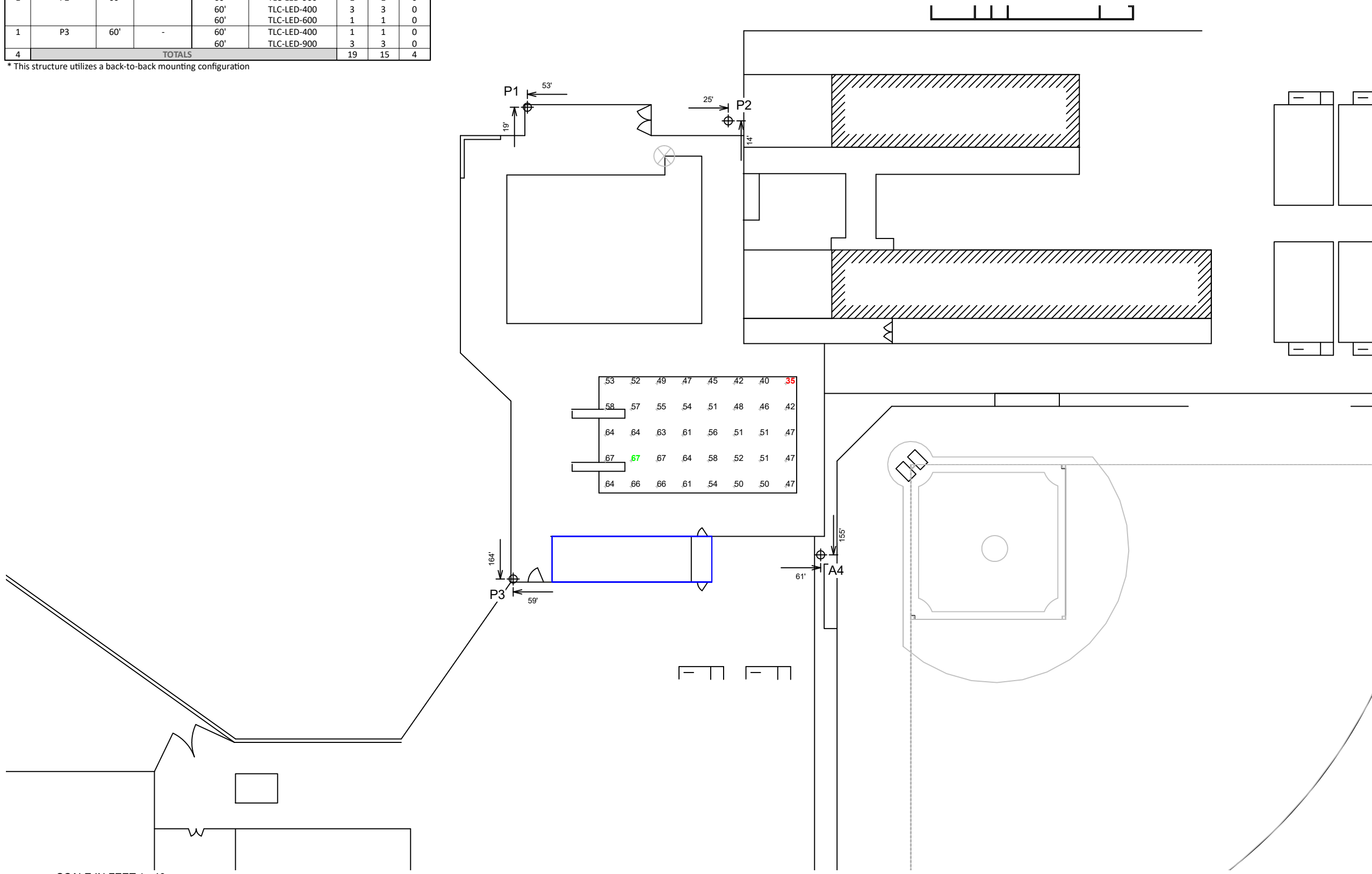
LUMINAIRE INFORMATION	
Applied Circuits:	F, G
No. of Luminaires:	15
Total Load:	9.61 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

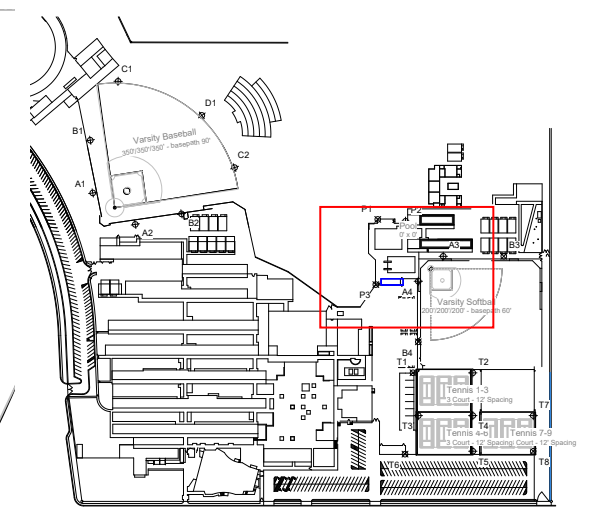
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A4	60'	-	15.5'	TLC-BT-575	1	0	1
				60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3/2*	2	3
1	P1	60'	-	60'	TLC-LED-400	2	2	0
				60'	TLC-LED-900	1	1	0
				60'	TLC-LED-400	1	1	0
1	P2	60'	-	60'	TLC-LED-900	1	1	0
				60'	TLC-LED-400	3	3	0
				60'	TLC-LED-600	1	1	0
1	P3	60'	-	60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3	3	0
				TOTALS	19	15	4	

* This structure utilizes a back-to-back mounting configuration

Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Pool Deck
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

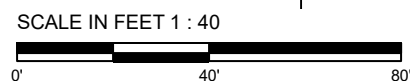
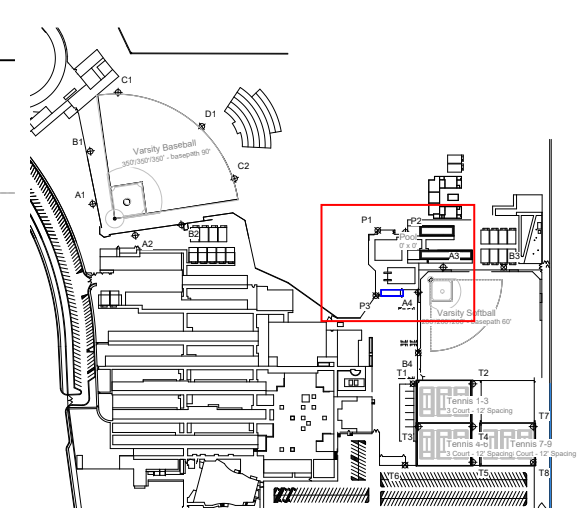
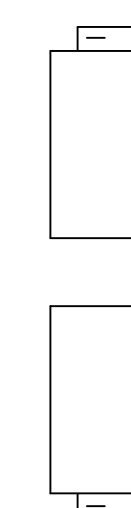
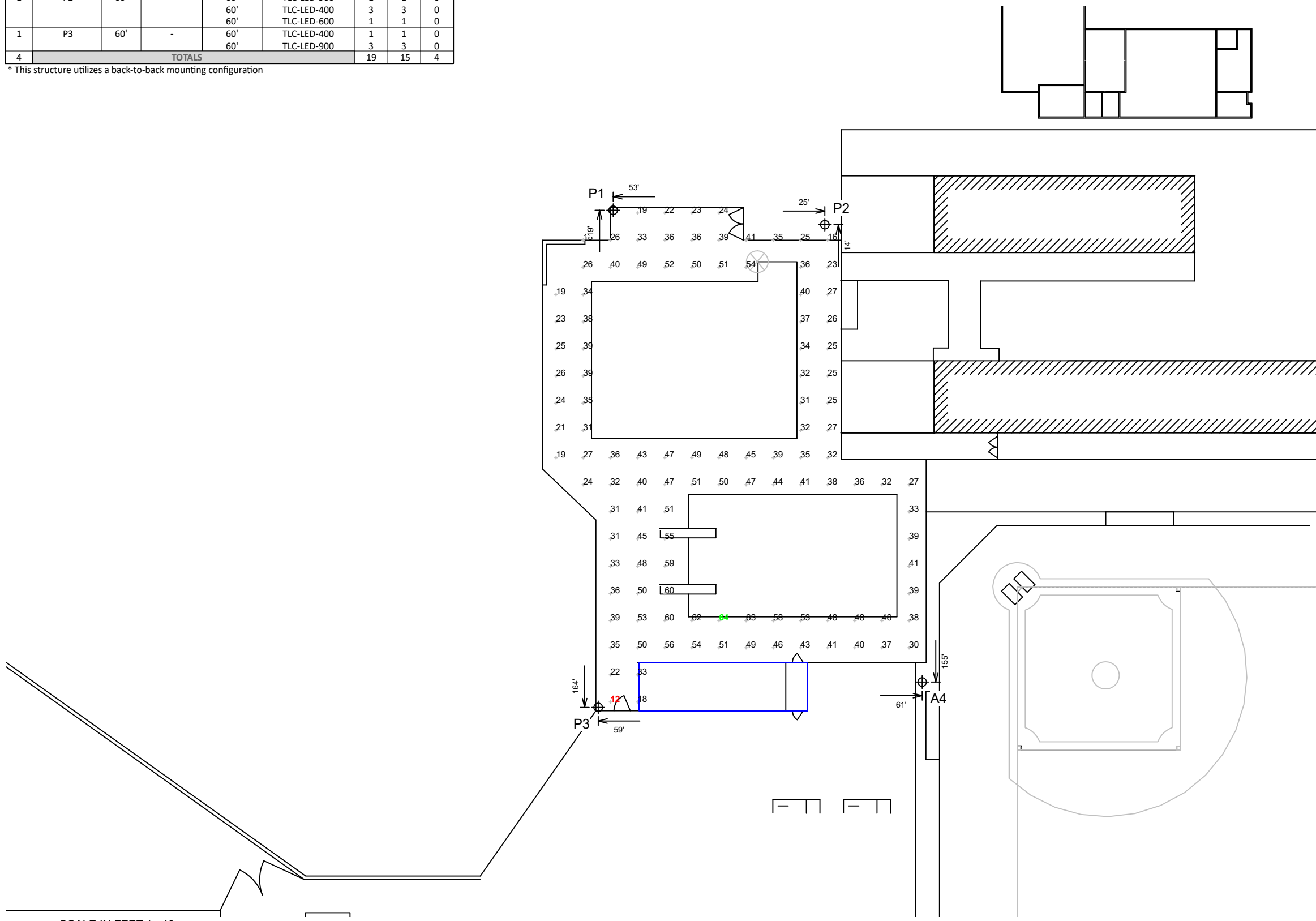
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	37.87
Maximum:	64
Minimum:	12
Avg / Min:	3.06
Max / Min:	5.14
UG (adjacent pts):	1.84
CU:	0.40
No. of Points:	115
LUMINAIRE INFORMATION	
Applied Circuits:	F, G
No. of Luminaires:	15
Total Load:	9.61 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



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EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A4	60'	-	15.5'	TLC-BT-575	1	0	1
				60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3/2*	0	5
1	P1	60'	-	60'	TLC-LED-400	2	2	0
				60'	TLC-LED-900	1	0	1
				60'	TLC-LED-900	1	0	1
1	P2	60'	-	60'	TLC-LED-900	1	0	1
				60'	TLC-LED-400	3	2	1
				60'	TLC-LED-600	1	0	1
1	P3	60'	-	60'	TLC-LED-400	1	1	0
				60'	TLC-LED-900	3	0	3
				TOTALS		19	6	13

* This structure utilizes a back-to-back mounting configuration

Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Pool Egress
Size:	0' x 0'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

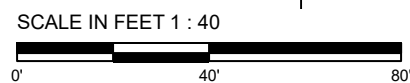
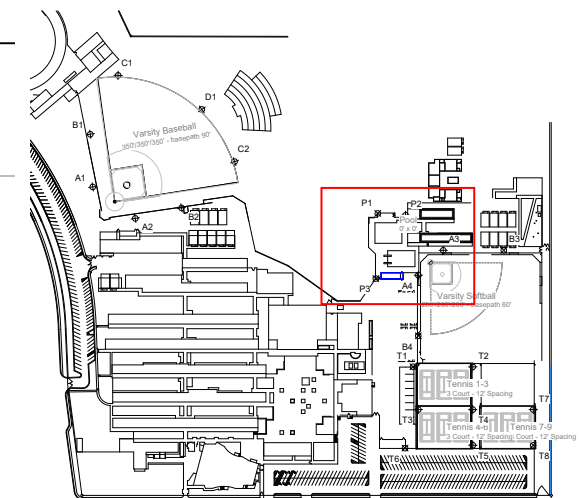
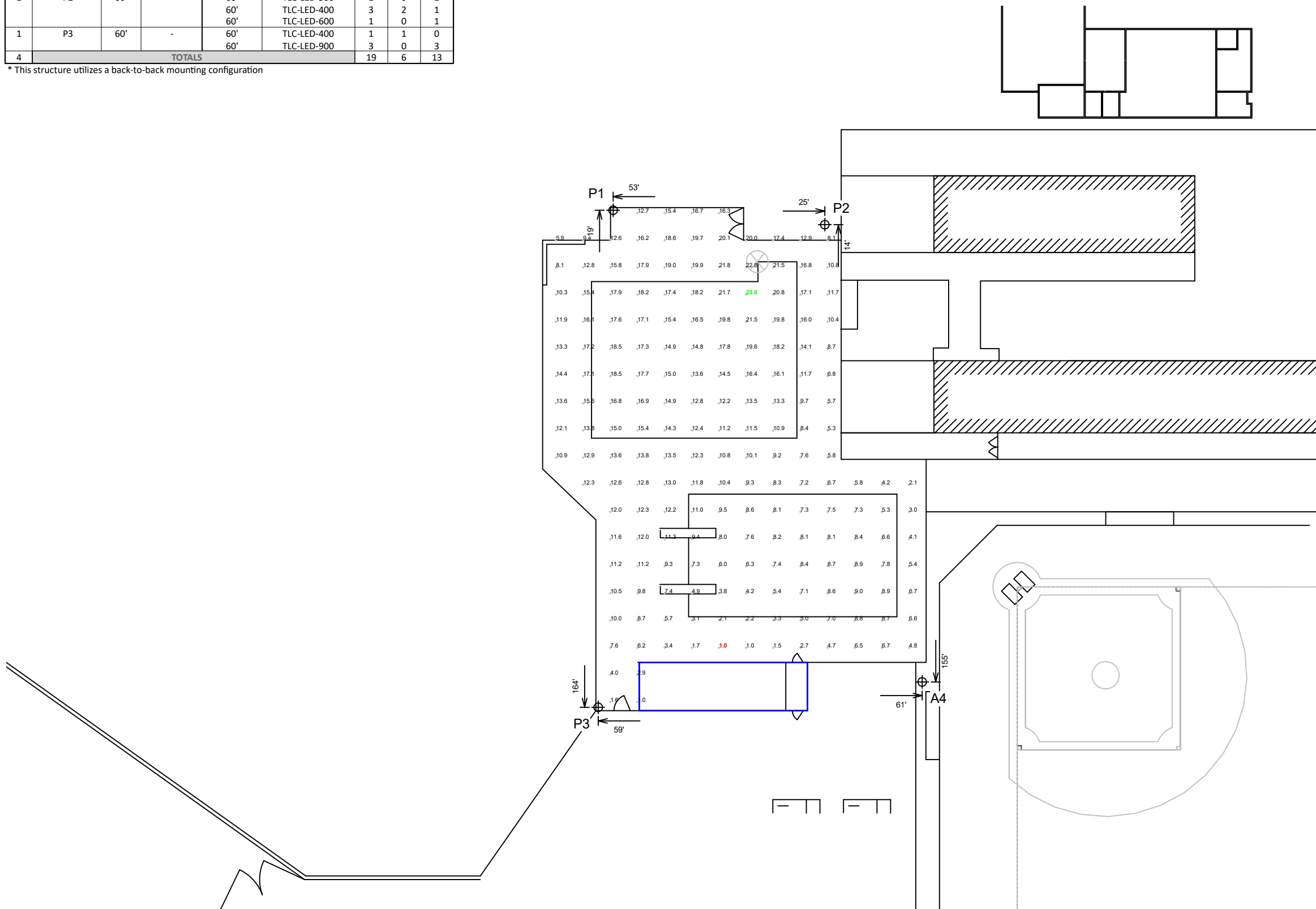
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	11.21
Maximum:	23
Minimum:	1
Avg / Min:	11.01
Max / Min:	22.57
UG (adjacent pts):	2.80
CU:	0.76
No. of Points:	192
LUMINAIRE INFORMATION	
Applied Circuits:	G
No. of Luminaires:	6
Total Load:	2.4 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

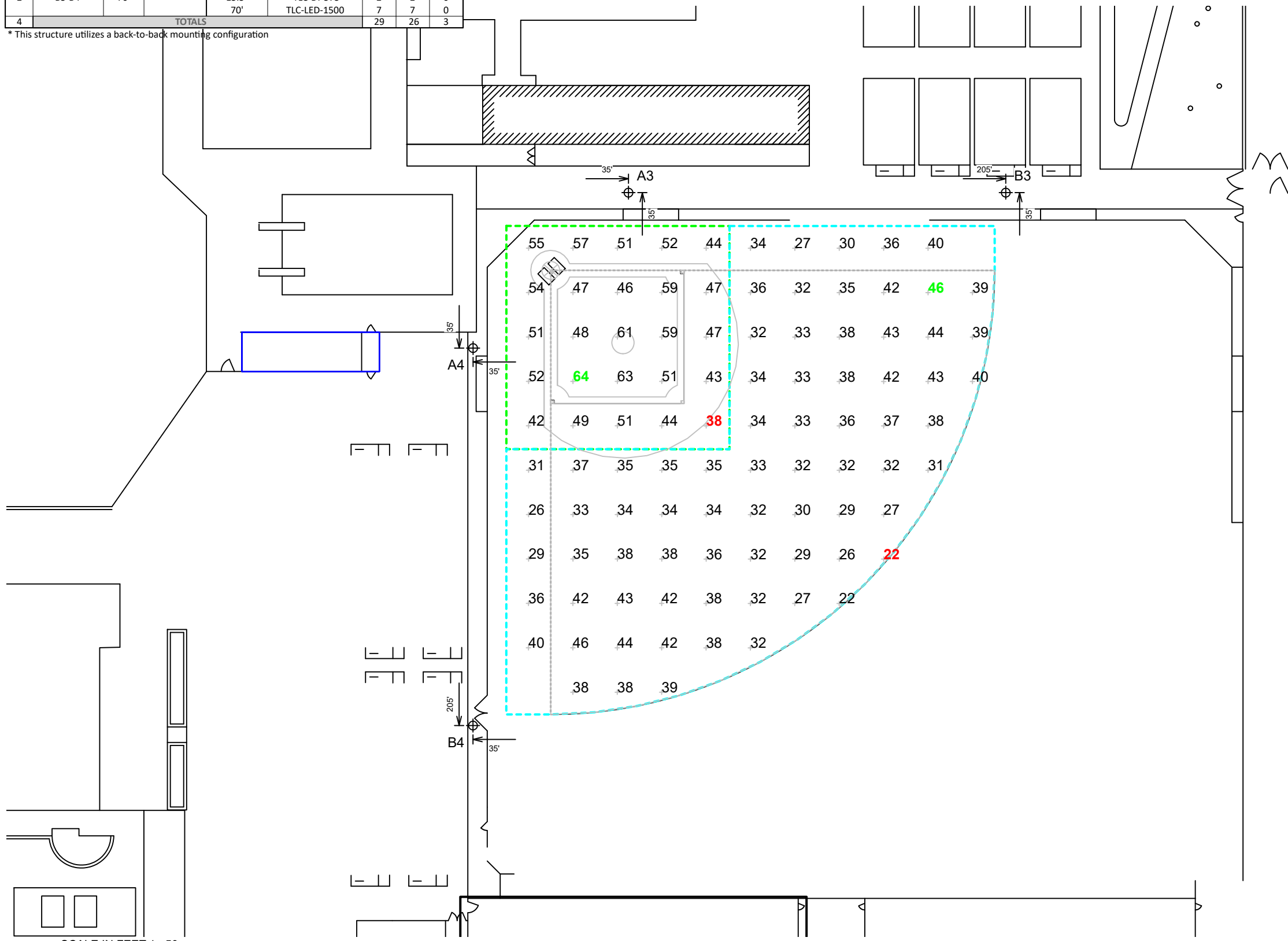


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EQUIPMENT LIST FOR AREAS SHOWN								
Pole			Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	A3	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-900	3	3	0
1	A4	60'	-	15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-400	1	0	1
				60'	TLC-LED-900	3/2*	3	2
2	B3-B4	70'	-	15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1500	7	7	0
4	TOTALS					29	26	3

* This structure utilizes a back-to-back mounting configuration



GRID SUMMARY	
Name:	Varsity Softball
Size:	200'/200'/200' - basepath 60'
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

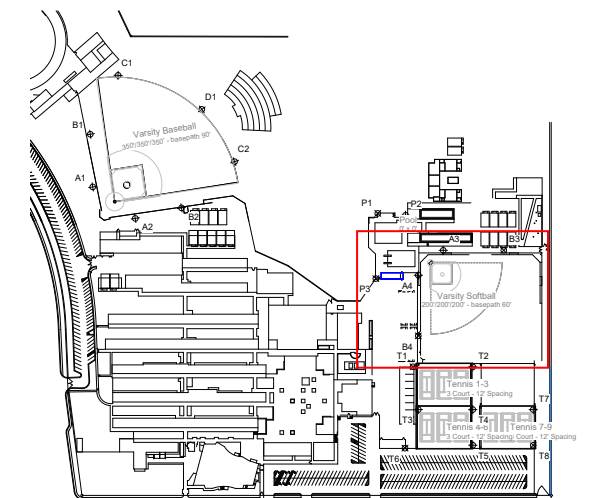
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	51.02	35.19
Maximum:	64	46
Minimum:	38	22
Avg / Min:	1.33	1.59
Guaranteed Max / Min:	2	2.5
Max / Min:	1.67	2.10
UG (adjacent pts):	1.32	1.26
CU:	0.52	
No. of Points:	25	73
LUMINAIRE INFORMATION		
Applied Circuits:	B	
No. of Luminaires:	26	
Total Load:	28.81 kW	

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

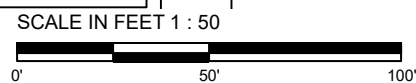
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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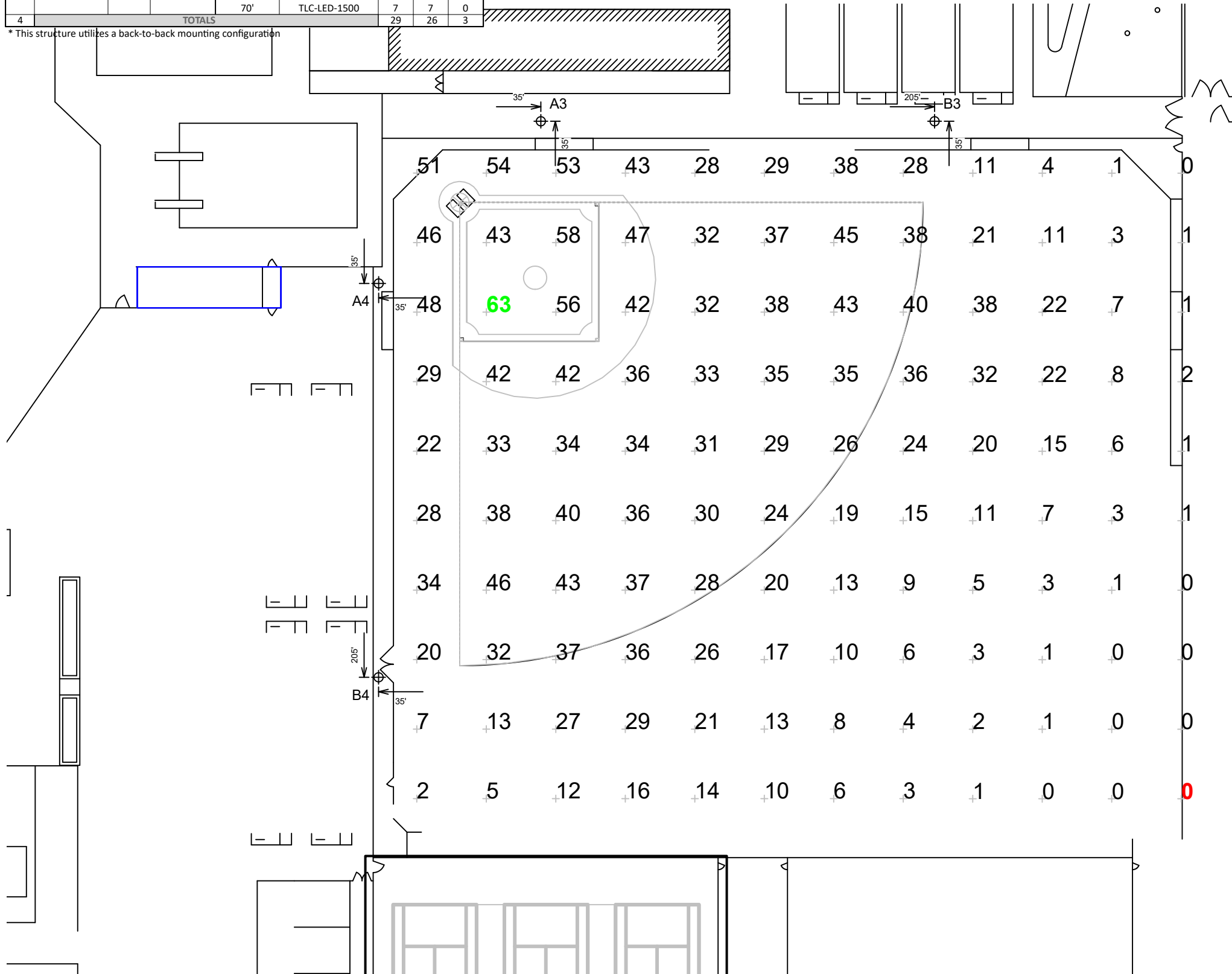
ILLUMINATION SUMMARY



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

EQUIPMENT LIST FOR AREAS SHOWN									
Pole			Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
1	A3	60'	-	15.5'	TLC-BT-575	1	1	0	
				60'	TLC-LED-900	3	3	0	
1	A4	60'	-	15.5'	TLC-BT-575	1	1	0	
				60'	TLC-LED-400	1	0	1	
				60'	TLC-LED-900	3/2*	3	2	
2	B3-B4	70'	-	15.5'	TLC-BT-575	2	2	0	
				70'	TLC-LED-1500	7	7	0	
TOTALS						29	26	3	

* This structure utilizes a back-to-back mounting configuration



GRID SUMMARY	
Name:	Blanket Grid
Size:	200'/200'/200' - basepath 60'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

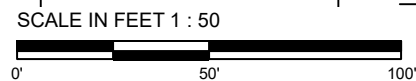
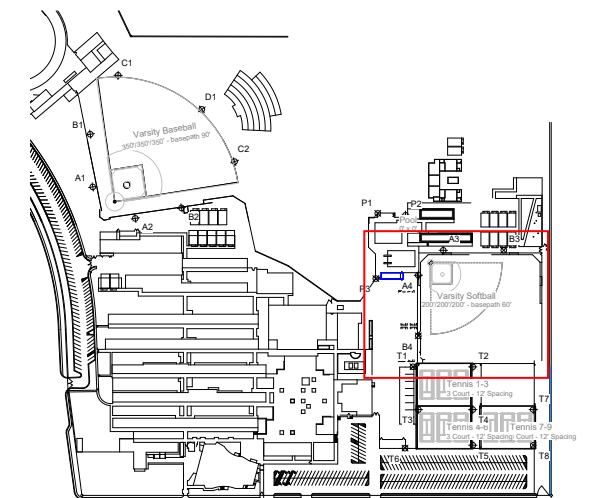
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	22.11
Maximum:	63
Minimum:	0
Avg / Min:	871.59
Max / Min:	2492.77
UG (adjacent pts):	5.68
CU:	0.80
No. of Points:	120
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	26
Total Load:	28.81 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



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EQUIPMENT LIST FOR AREAS SHOWN							
Pole			Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1
				70'	TLC-LED-1200	4	4
2	B1-B2	80'	-	80'	TLC-LED-400	1	1
				15.5'	TLC-BT-575	1	1
				80'	TLC-LED-1500	8	8
2	C1-C2	70'	-	15.5'	TLC-BT-575	2	2
				70'	TLC-LED-1200	4	4
				70'	TLC-LED-1200	4	4
1	D1	70'	-	70'	TLC-LED-1200	4	4
7	TOTALS					46	46

Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Varsity Baseball
Size:	350'/350'/350' - basepath 90'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	52.18	32.77
Maximum:	62	45
Minimum:	39	21
Avg / Min:	1.34	1.53
Guaranteed Max / Min:	2	2.5
Max / Min:	1.59	2.10
UG (adjacent pts):	1.32	1.63
CU:	0.77	
No. of Points:	25	106

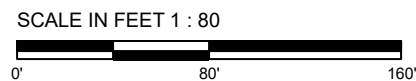
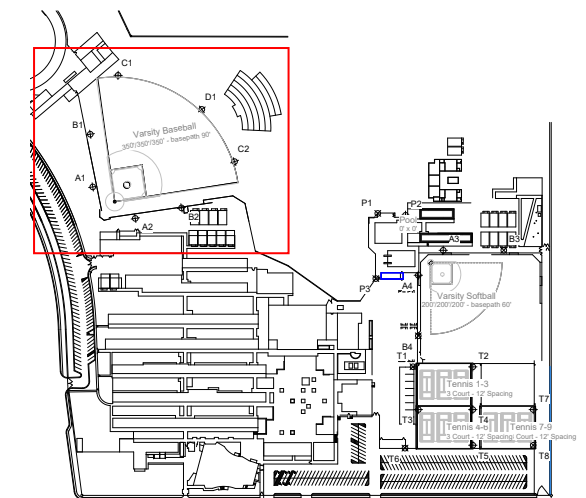
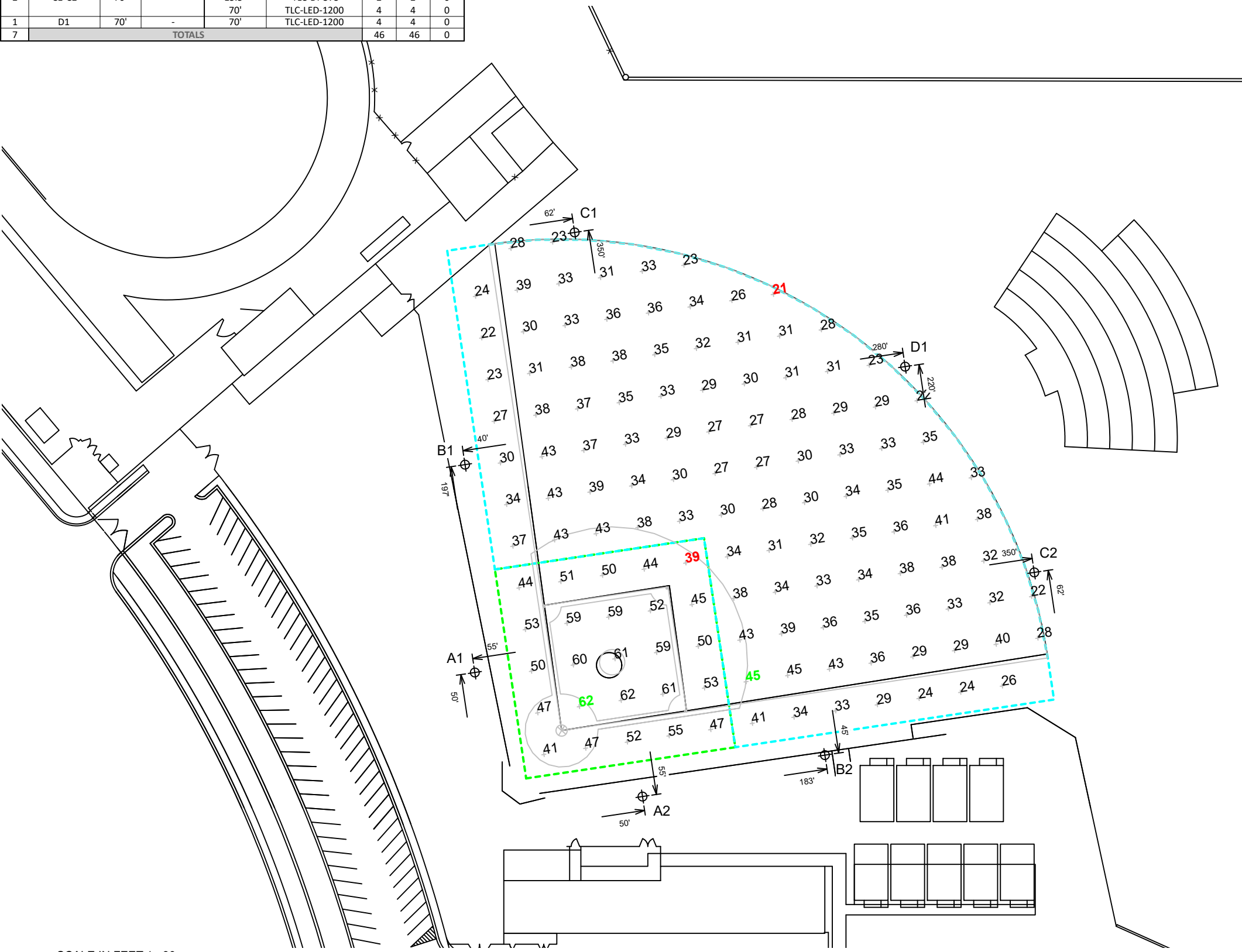
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	46
Total Load:	51.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗

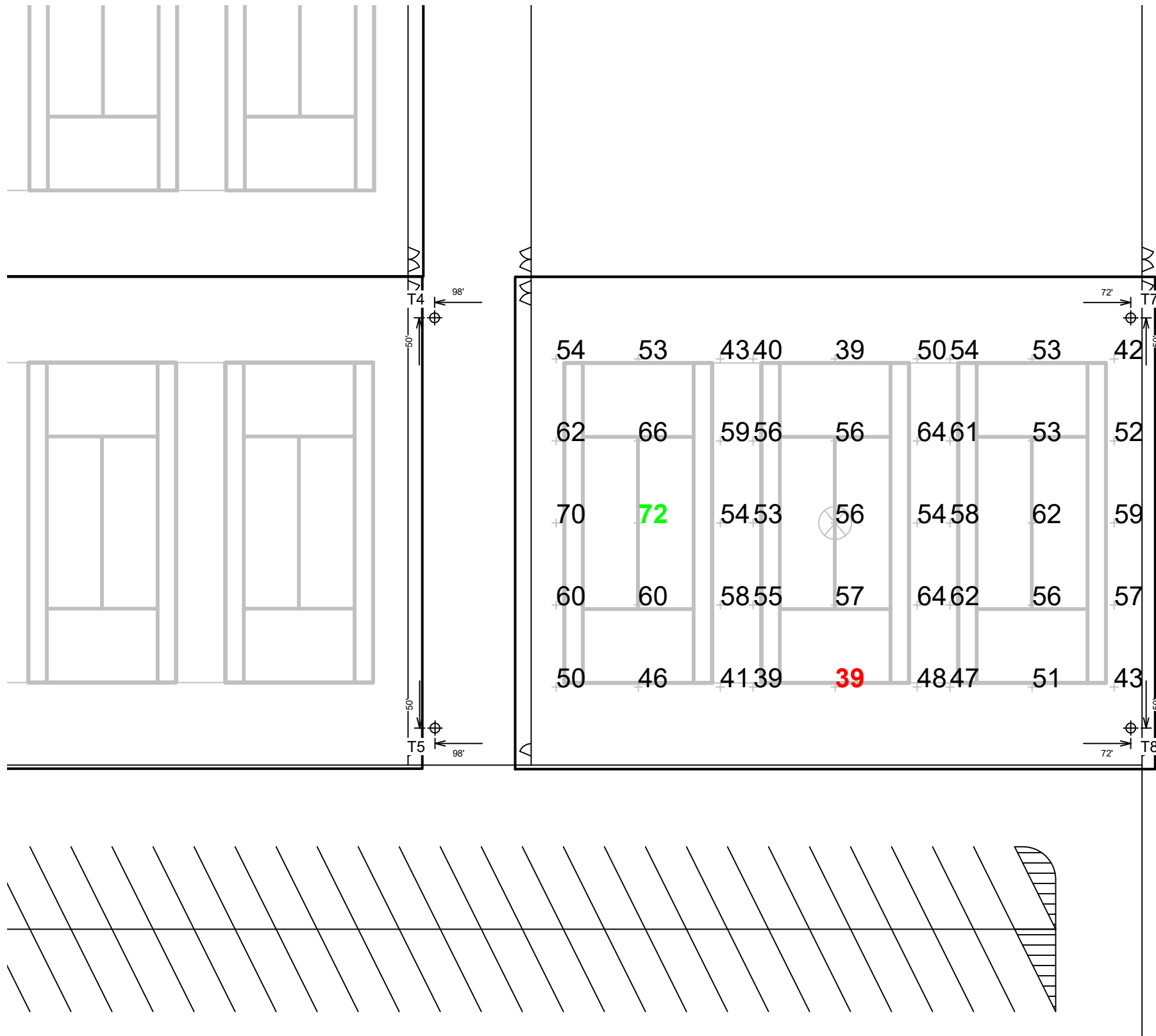


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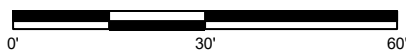
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EQUIPMENT LIST FOR AREAS SHOWN									
Pole				Luminaires					
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
1	T4	50'	-	50'	TLC-LED-900	6/3*	3	6	
1	T5	50'	-	50'	TLC-LED-900	3/3*	3	3	
2	T7-T8	50'	-	50'	TLC-LED-900	3	3	0	
4	TOTALS						21	12	9

* This structure utilizes a back-to-back mounting configuration



SCALE IN FEET 1 : 30



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Tennis 7-9
Size:	3 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

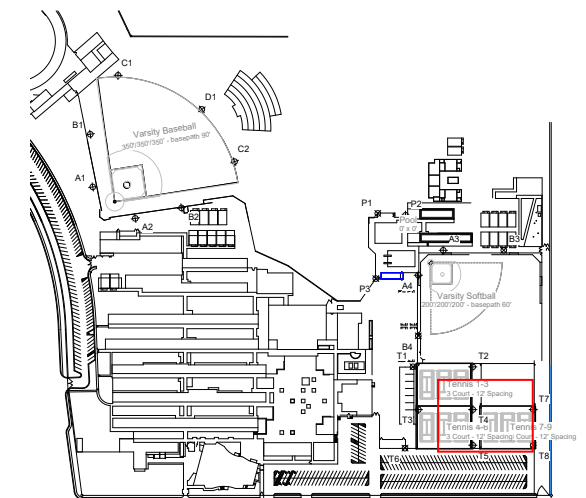
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	54.01
Maximum:	72
Minimum:	39
Avg / Min:	1.40
Guaranteed Max / Min:	2
Max / Min:	1.87
UG (adjacent pts):	0.00
CU:	0.86
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	E
No. of Luminaires:	12
Total Load:	10.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



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EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	T3	50'	-	50'	TLC-LED-900	6	3	3
1	T4	50'	-	50'	TLC-LED-900	6/3*	3	6
1	T5	50'	-	50'	TLC-LED-900	3/3*	3	3
1	T6	60'	-	60'	TLC-LED-900	3	3	0
TOTALS						24	12	12

* This structure utilizes a back-to-back mounting configuration



GRID SUMMARY	
Name:	Tennis 4-6
Size:	3 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

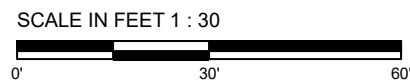
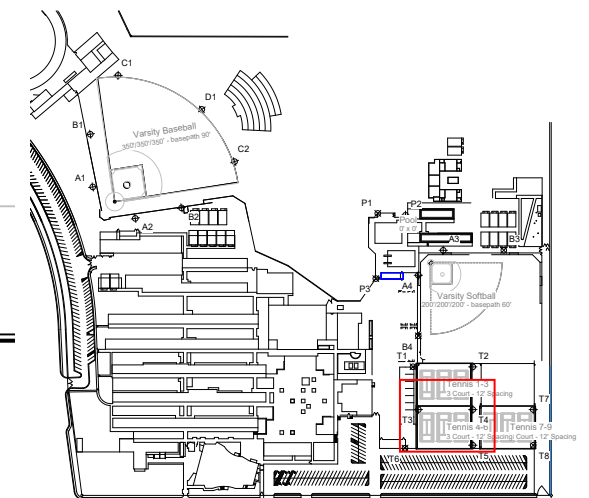
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	52.67
Maximum:	68
Minimum:	38
Avg / Min:	1.39
Guaranteed Max / Min:	2
Max / Min:	1.79
UG (adjacent pts):	0.00
CU:	0.84
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	D
No. of Luminaires:	12
Total Load:	10.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole		Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
2	T1-T2	50'	-	50'	TLC-LED-900	3	3	0	
1	T3	50'	-	50'	TLC-LED-900	6	3	3	
1	T4	50'	-	50'	TLC-LED-900	6/3*	3	6	
4	TOTALS							21	12

* This structure utilizes a back-to-back mounting configuration

Pacific High School Athletic Fields
San Bernardino, CA

GRID SUMMARY	
Name:	Tennis 1-3
Size:	3 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

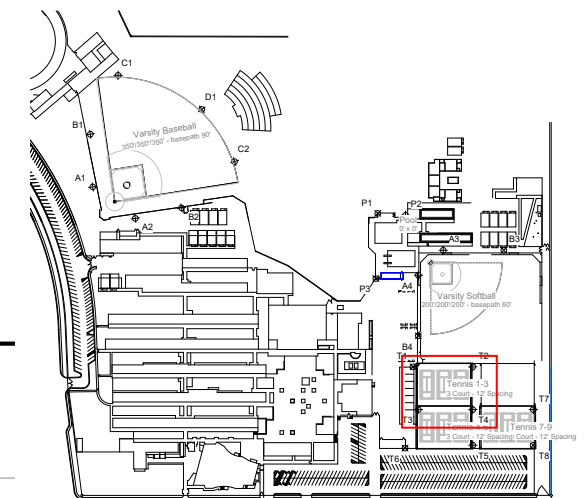
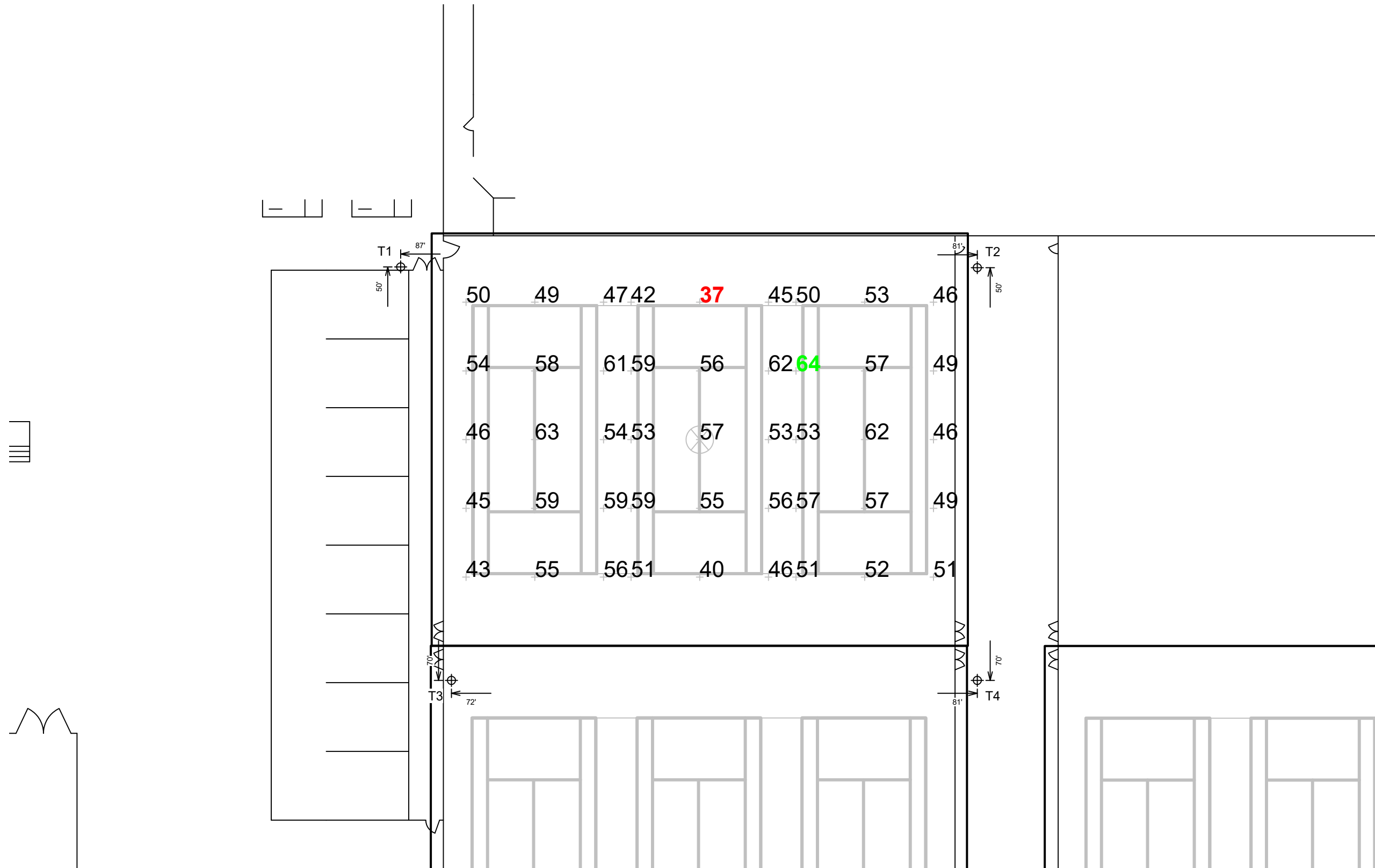
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	50
Scan Average:	52.62
Maximum:	64
Minimum:	37
Avg / Min:	1.42
Guaranteed Max / Min:	2
Max / Min:	1.73
UG (adjacent pts):	0.00
CU:	0.86
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	C
No. of Luminaires:	12
Total Load:	10.68 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



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ILLUMINATION SUMMARY

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗

GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

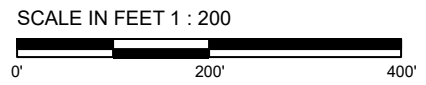
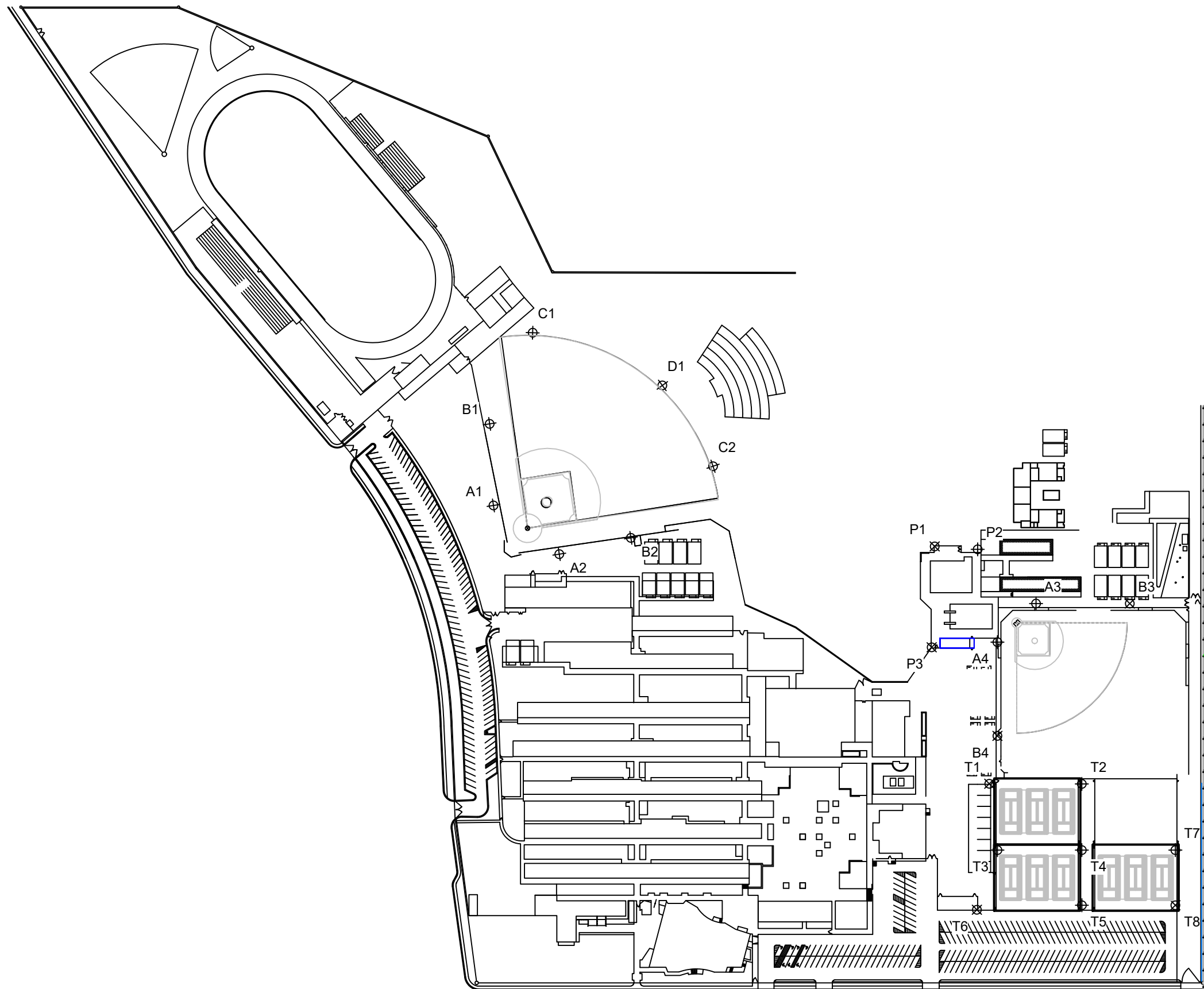
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0639
Maximum:	0.43
Minimum:	0.00
No. of Points:	36
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

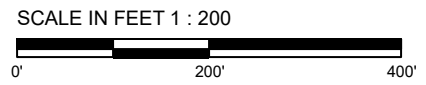
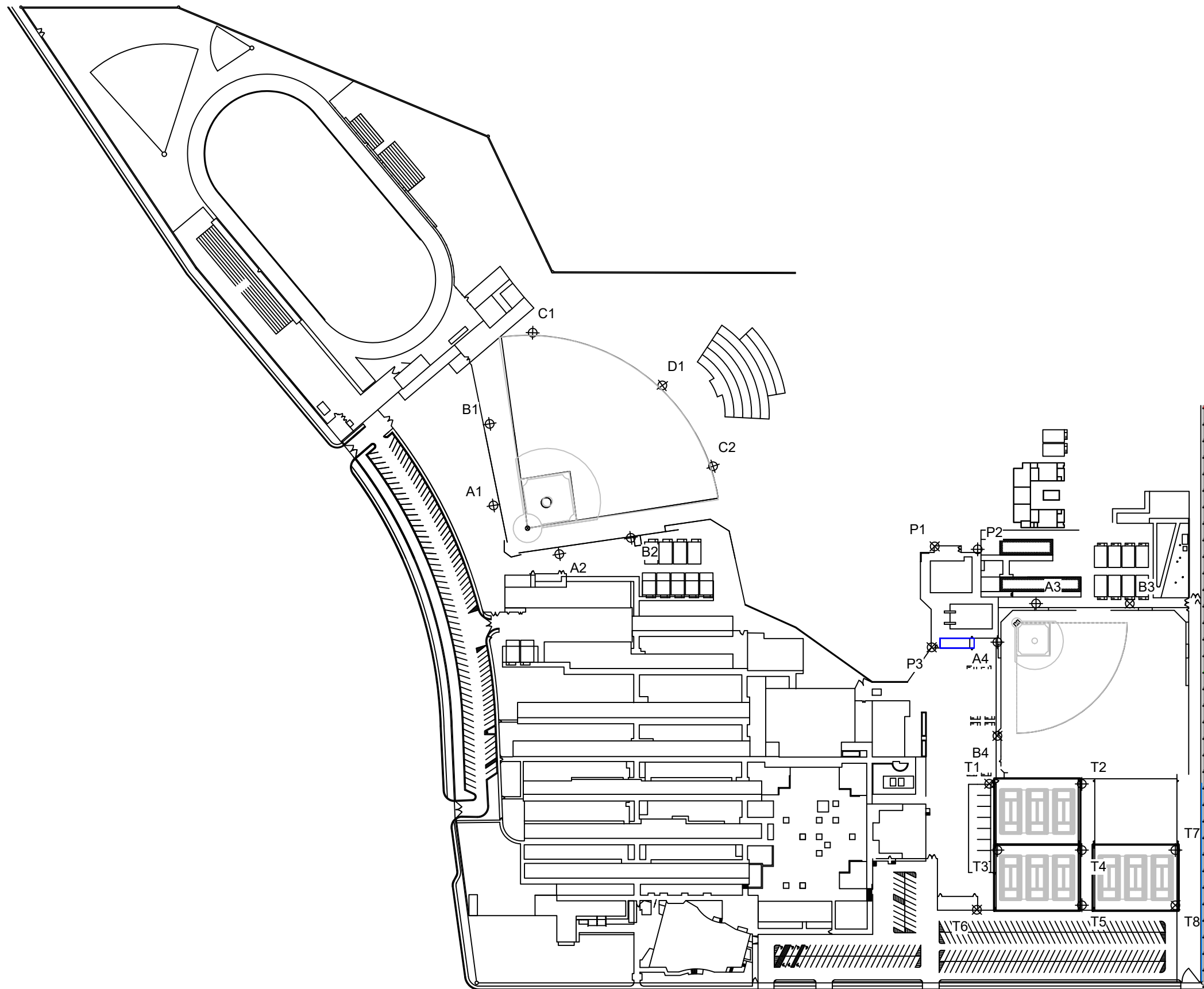
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.1719
Maximum:	1.15
Minimum:	0.00
No. of Points:	36
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



GRID SUMMARY	
Name:	East Spill
Spacing:	30.0'
Height:	3.0' above grade

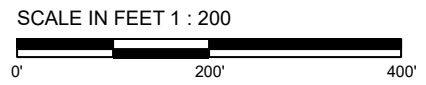
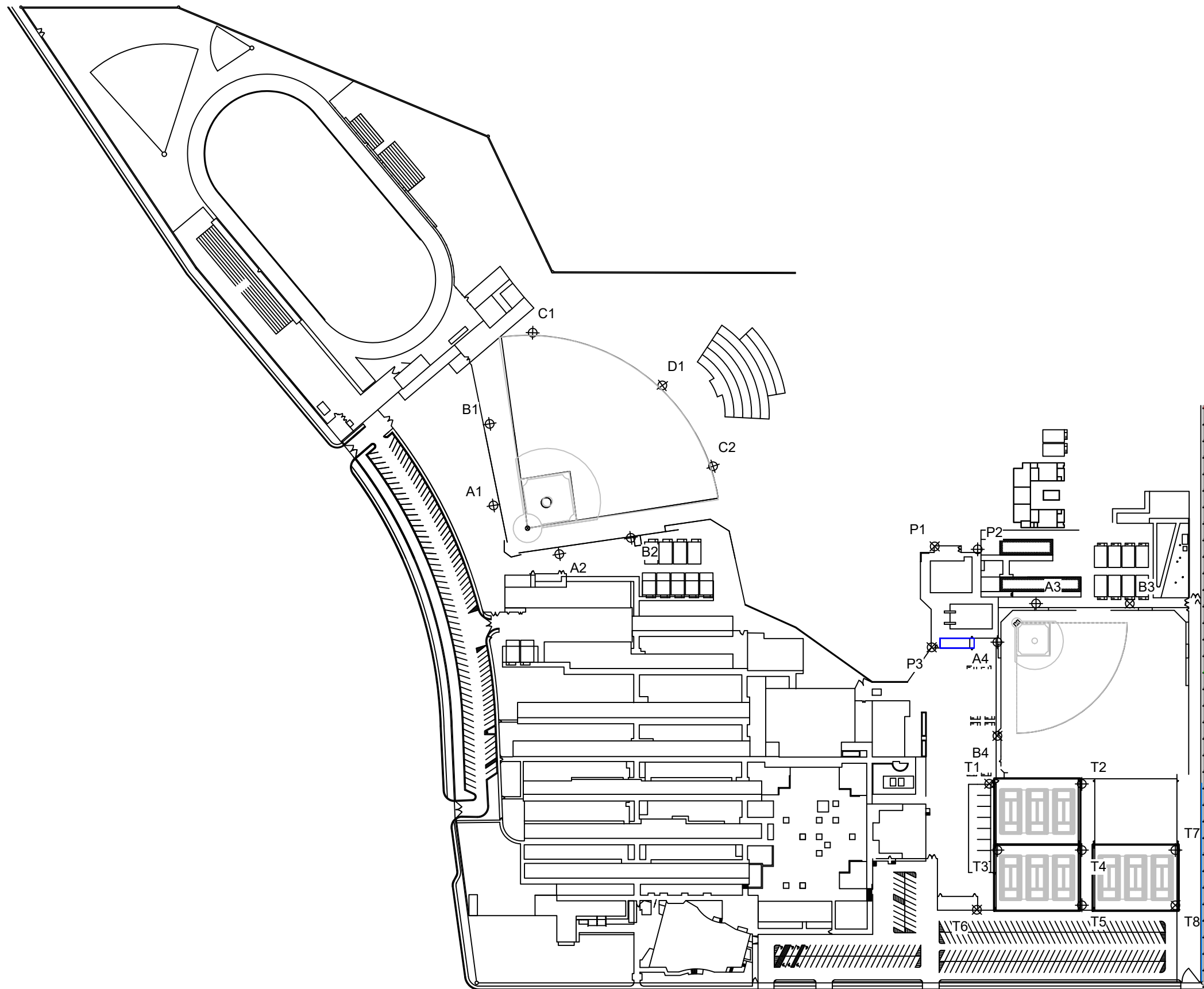
ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 7046.2661
Maximum:	28637.63
Minimum:	35.29
No. of Points:	36
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



Pacific High School Athletic Fields
San Bernardino, CA

GRID SUMMARY	
Name:	South Spill
Spacing:	30.0'
Height:	3.0' above grade

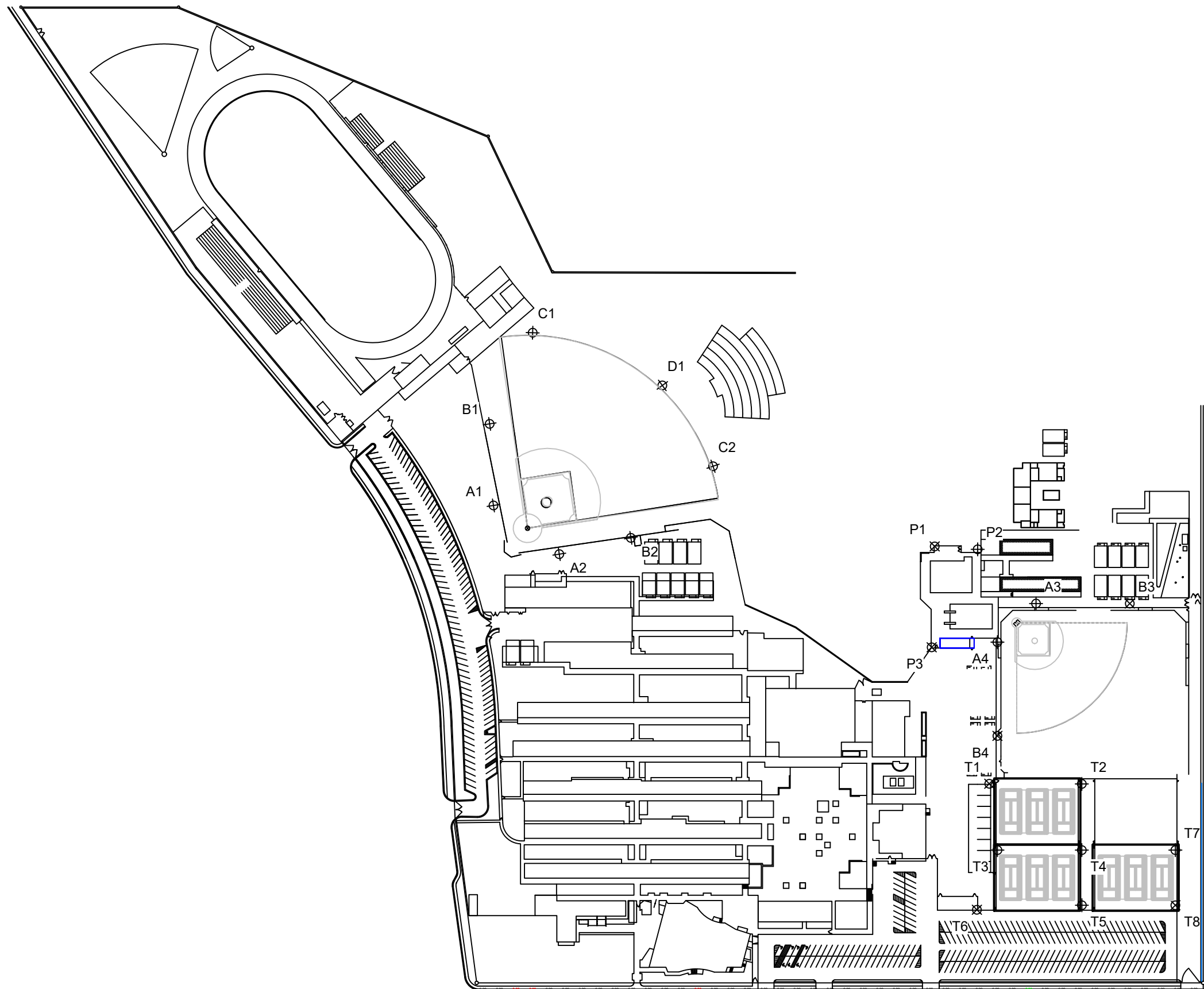
ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	0.0007
Maximum:	0.00
Minimum:	0.00
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



SCALE IN FEET 1 : 200
0' 200' 400'

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



Pacific High School Athletic Fields
San Bernardino, CA

GRID SUMMARY	
Name:	South Spill
Spacing:	30.0'
Height:	3.0' above grade

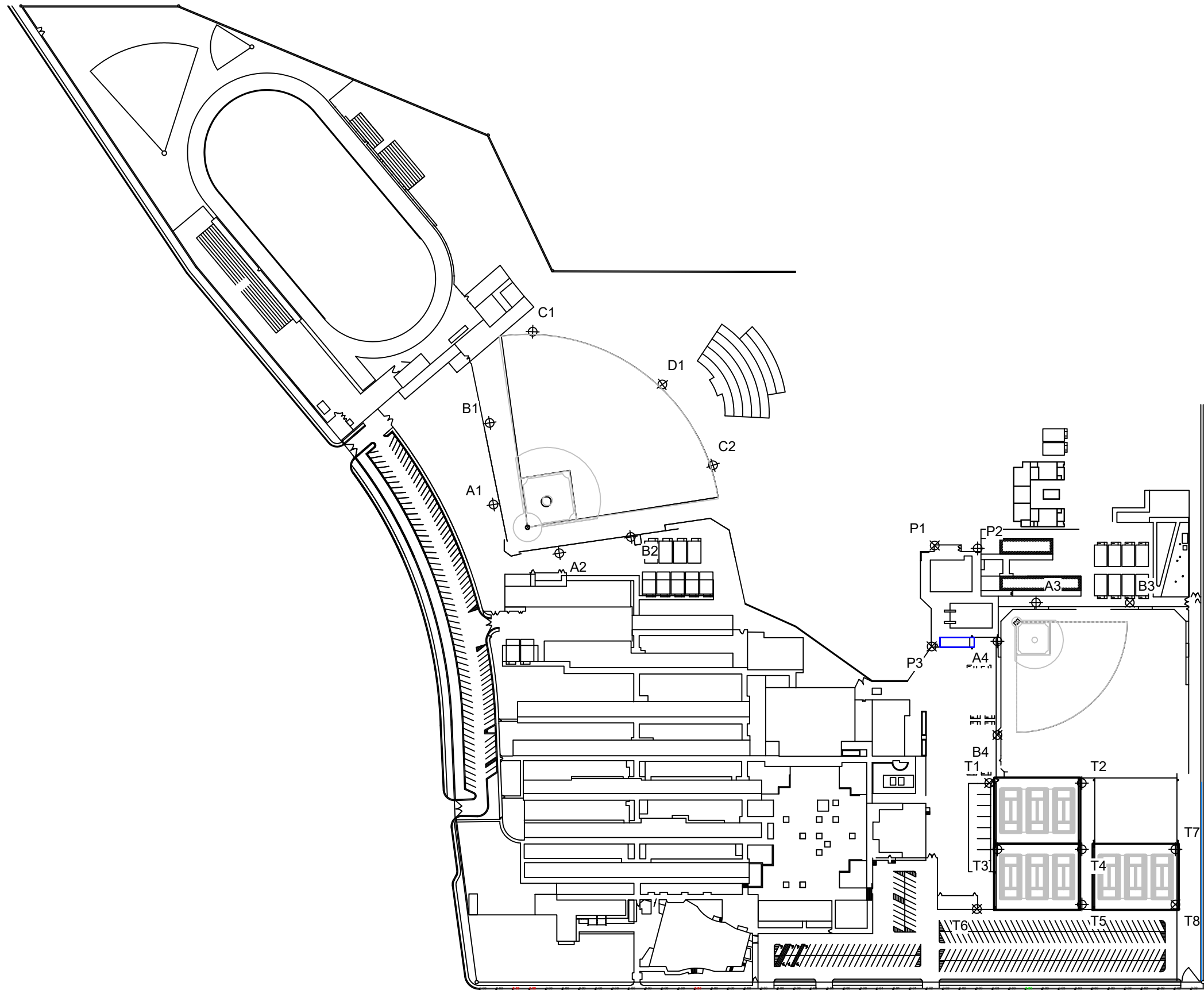
ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
	Entire Grid
Scan Average:	0.0106
Maximum:	0.03
Minimum:	0.00
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



SCALE IN FEET 1 : 200
0' 200' 400'

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



Pacific High School Athletic Fields
San Bernardino, CA

GRID SUMMARY	
Name:	South Spill
Spacing:	30.0'
Height:	3.0' above grade

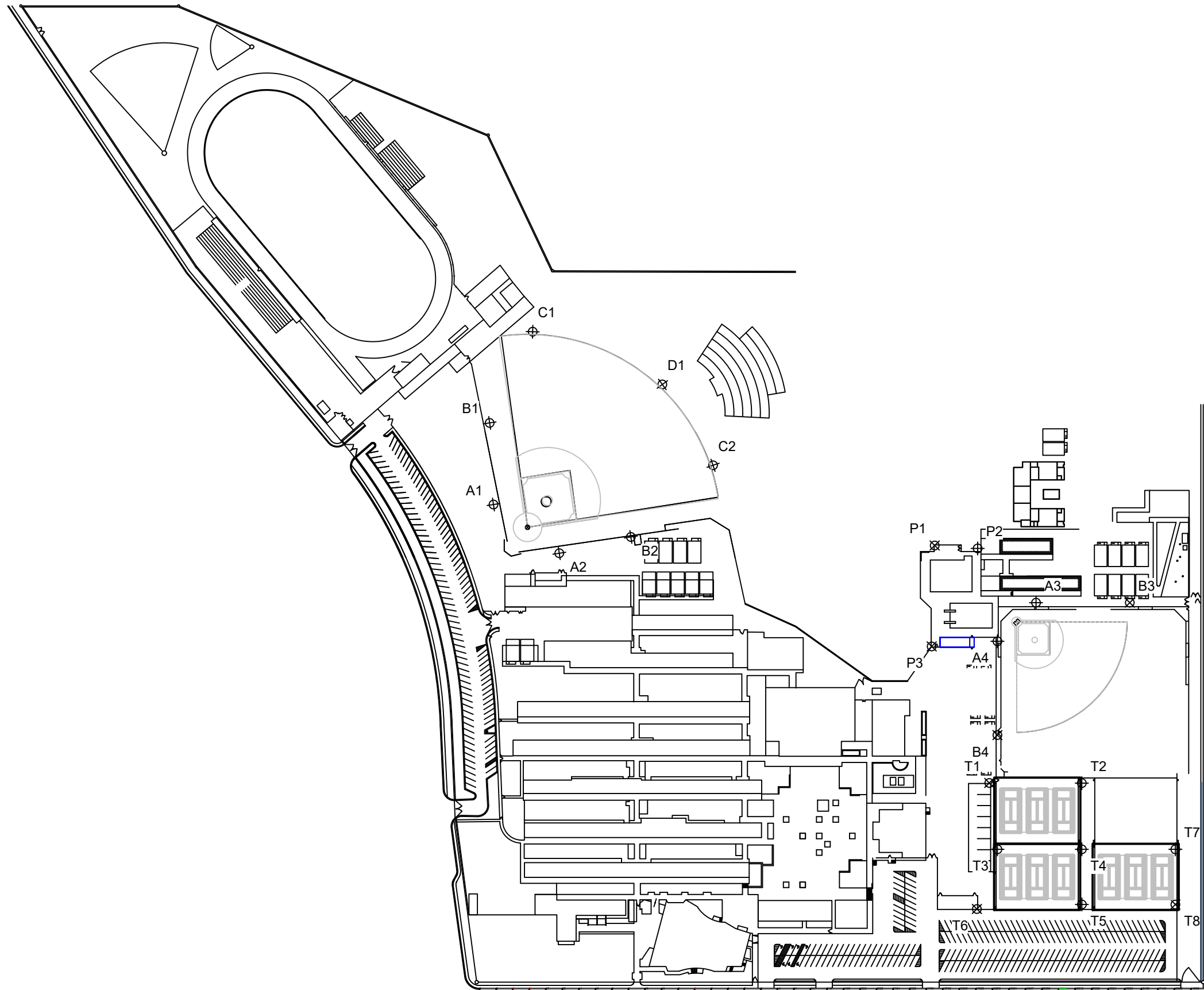
ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 7569.0693
Maximum:	20381.13
Minimum:	0.00
No. of Points:	45
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



SCALE IN FEET 1 : 200
0' 200' 400'

Pole location(s) Ⓢ dimensions are relative to 0,0 reference point(s) ⊗



EQUIPMENT LAYOUT

INCLUDES:

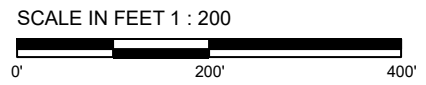
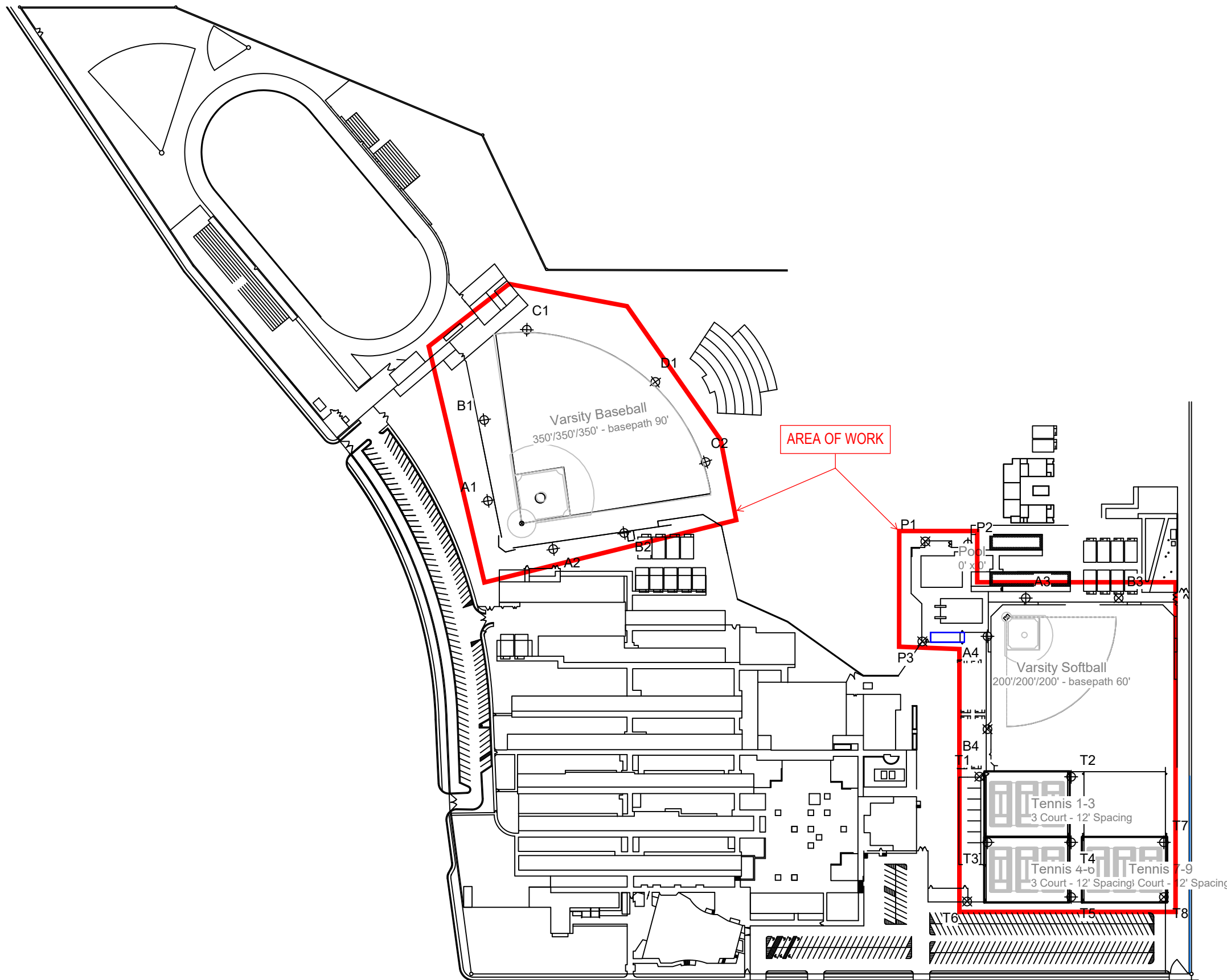
- Pool
- Tennis 1-3
- Tennis 4-6
- Tennis 7-9
- Varsity Baseball
- Varsity Softball

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

SINGLE LUMINAIRE AMPERAGE DRAW CHART
(.90 min power factor)

Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1200	7.0	6.6	6.1	5.2	4.2	4.0	3.0
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-600	3.4	3.2	3.0	2.6	2.0	1.9	1.5
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-400	2.3	2.2	2.0	1.7	1.4	1.3	1.0



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



Pacific High School Athletic Fields

San Bernardino, CA

GRID SUMMARY	
Name:	Grid
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

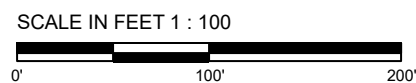
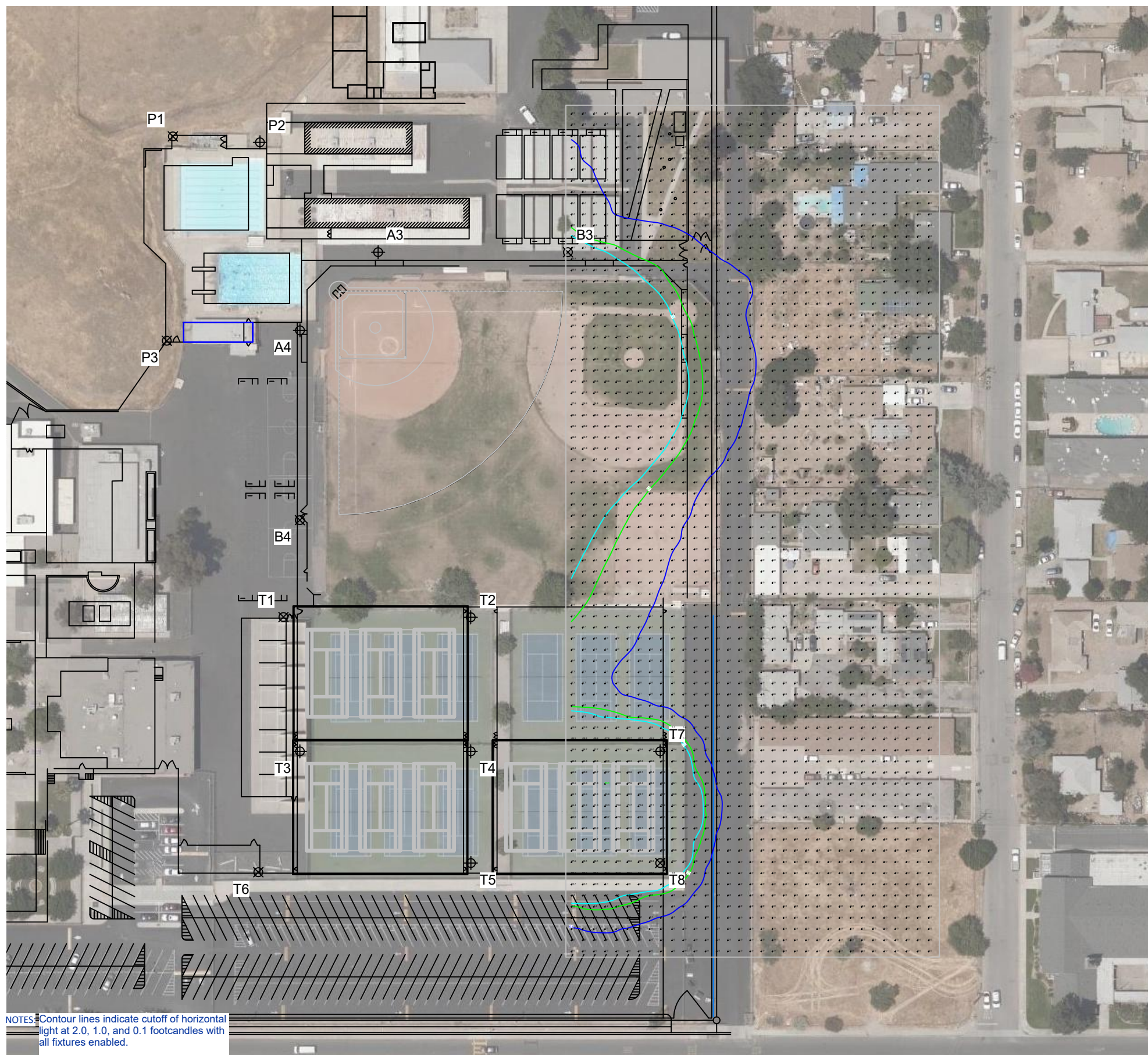
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Scan Average:	3.98
Maximum:	73
Minimum:	0
Avg / Min:	-
Max / Min:	-
UG (adjacent pts):	35.53
CU:	0.07
No. of Points:	2508
LUMINAIRE INFORMATION	
Applied Circuits:	A, B, C, D, E, F, G
No. of Luminaires:	123
Total Load:	122.14 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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



Pole location(s) ⊕ dimensions are relative to 0,0 reference point(s) ⊗



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