

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
S1-S4	60'	60'	4	TLC-LED-900	3.52 kW	A
S5-S8	50'	50'	3	TLC-LED-550	1.62 kW	B
8			28		20.56 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Large Soccer	14.08 kW	16
B	Small Soccer	6.48 kW	12

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-900	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	16
TLC-LED-550	LED 5700K - 75 CRI	540W	67,000	>120,000	>120,000	>120,000	12

Single Luminaire Amperage Draw Chart								
Driver (.90 min power factor)		Max Line Amperage Per Luminaire						
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)	
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3	
TLC-LED-550	3.2	3.0	2.8	2.4	1.9	-	1.4	

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Large Soccer	Horizontal Illuminance	32.6	22	40	1.81	1.48	A	16
Property Line Spill	Horizontal	0	0	0.01	0.00		A,B	28
Property Line Spill	Max Candela (by Fixture)	16.5	0	395	0.00		A,B	28
Property Line Spill	Max Vertical Illuminance Metric	0	0	0.02	0.00		A,B	28
Small Soccer	Horizontal Illuminance	33.8	28	41	1.47	1.21	B	12

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
4	S1-S4	60'	-	60'	TLC-LED-900	4	4
4	TOTALS					16	0

Parnell Park
Whittier, CA

GRID SUMMARY	
Name:	Large Soccer
Size:	218' x 150'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

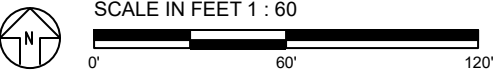
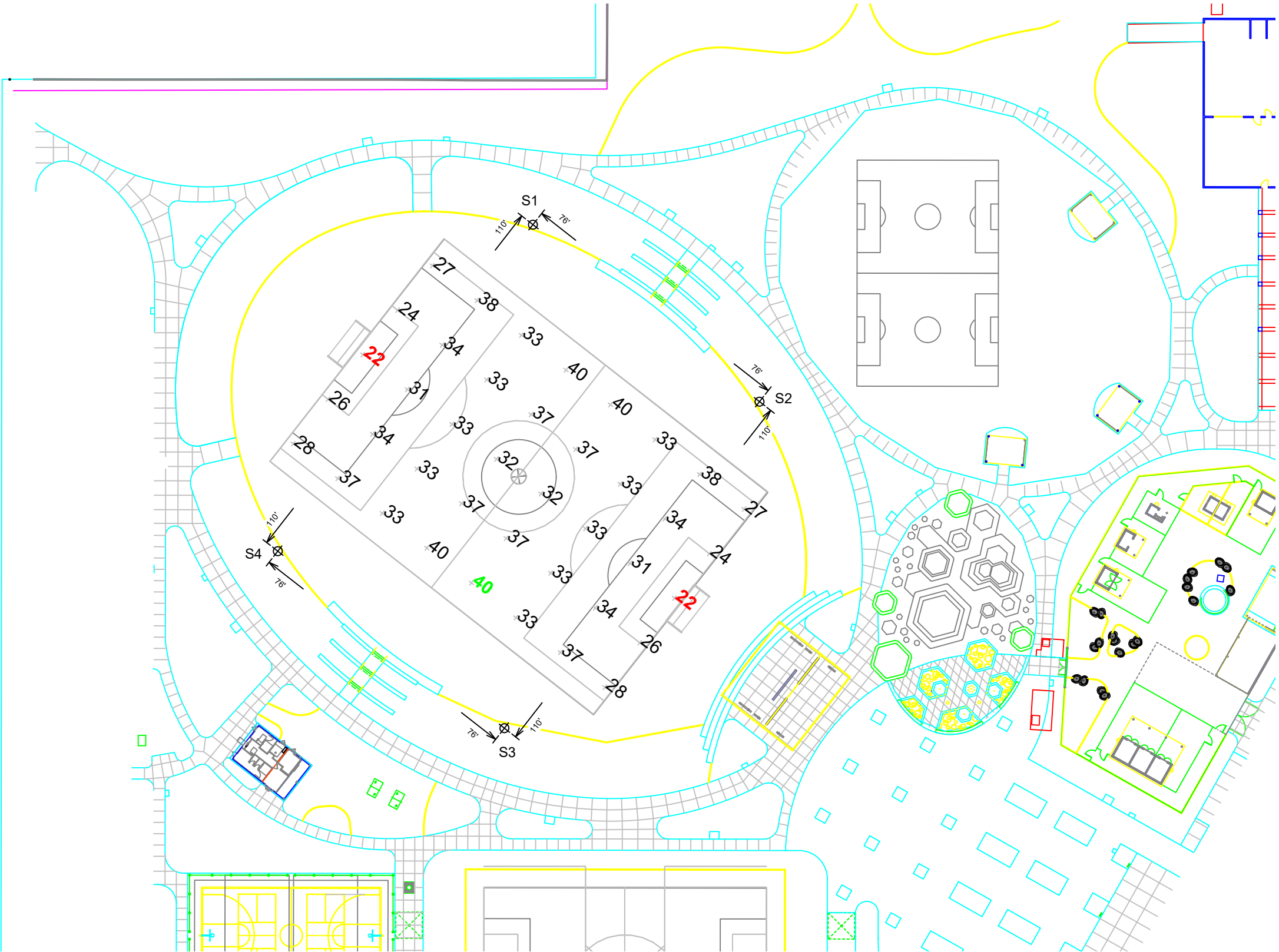
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Guaranteed Average:	30
Scan Average:	32.55
Maximum:	40
Minimum:	22
Avg / Min:	1.47
Guaranteed Max / Min:	2.5
Max / Min:	1.81
UG (adjacent pts):	1.41
CU:	0.72
No. of Points:	40
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	16
Total Load:	14.08 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.



EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S5-S8	50'	-	50'	TLC-LED-550	3	3	0
4	TOTALS					12	12	0

Parnell Park
Whittier,CA

GRID SUMMARY	
Name:	Small Soccer
Size:	150' x 110'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

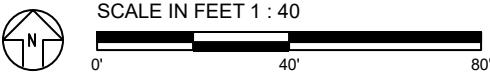
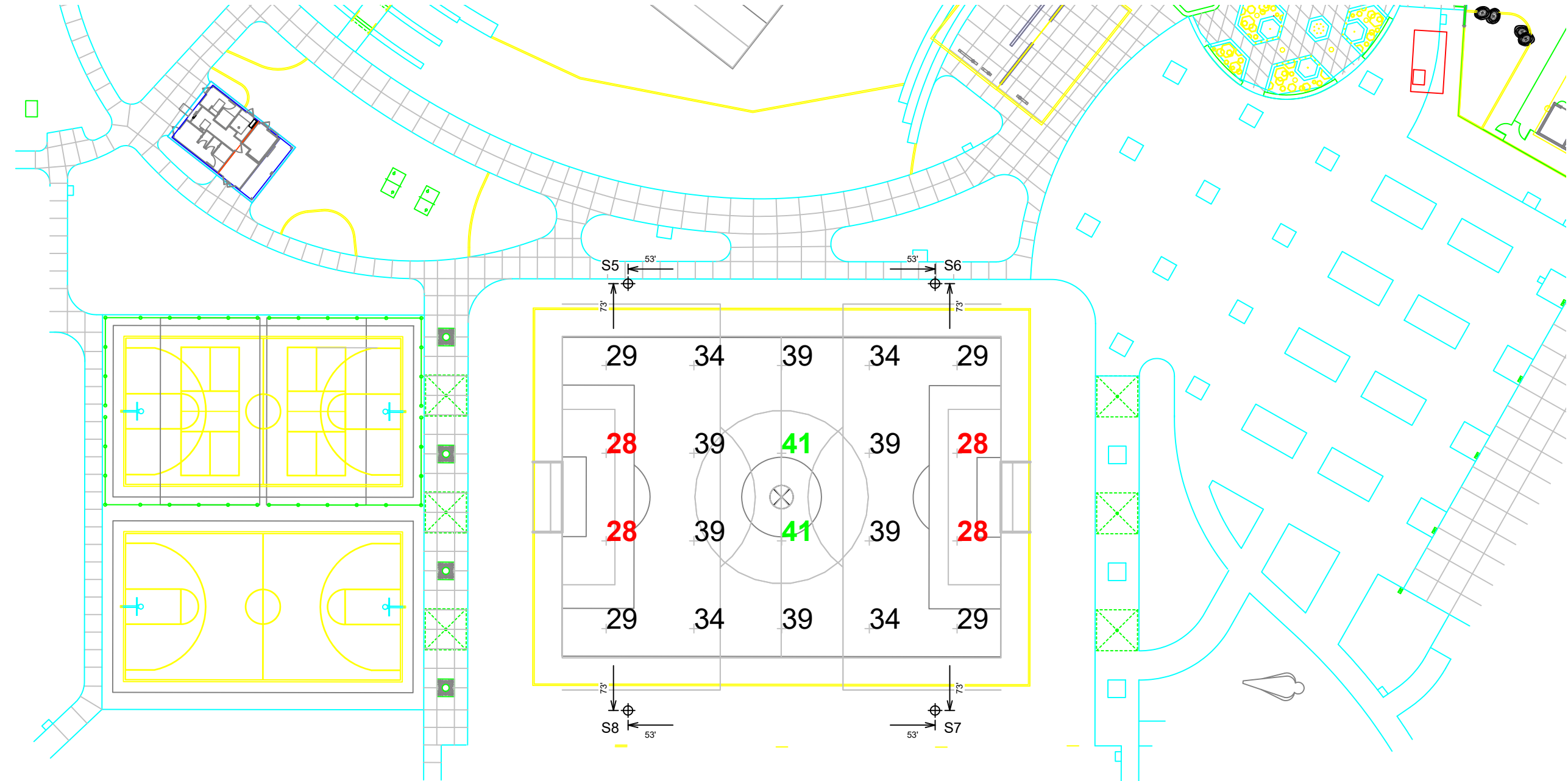
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	30
Scan Average:	33.84
Maximum:	41
Minimum:	28
Avg / Min:	1.21
Guaranteed Max / Min:	2.5
Max / Min:	1.47
UG (adjacent pts):	1.39
CU:	0.76
No. of Points:	20
LUMINAIRE INFORMATION	
Applied Circuits:	B
No. of Luminaires:	12
Total Load:	6.48 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.



ENGINEERED DESIGN By: C.Hensley · File #227319A · 06-May-23

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

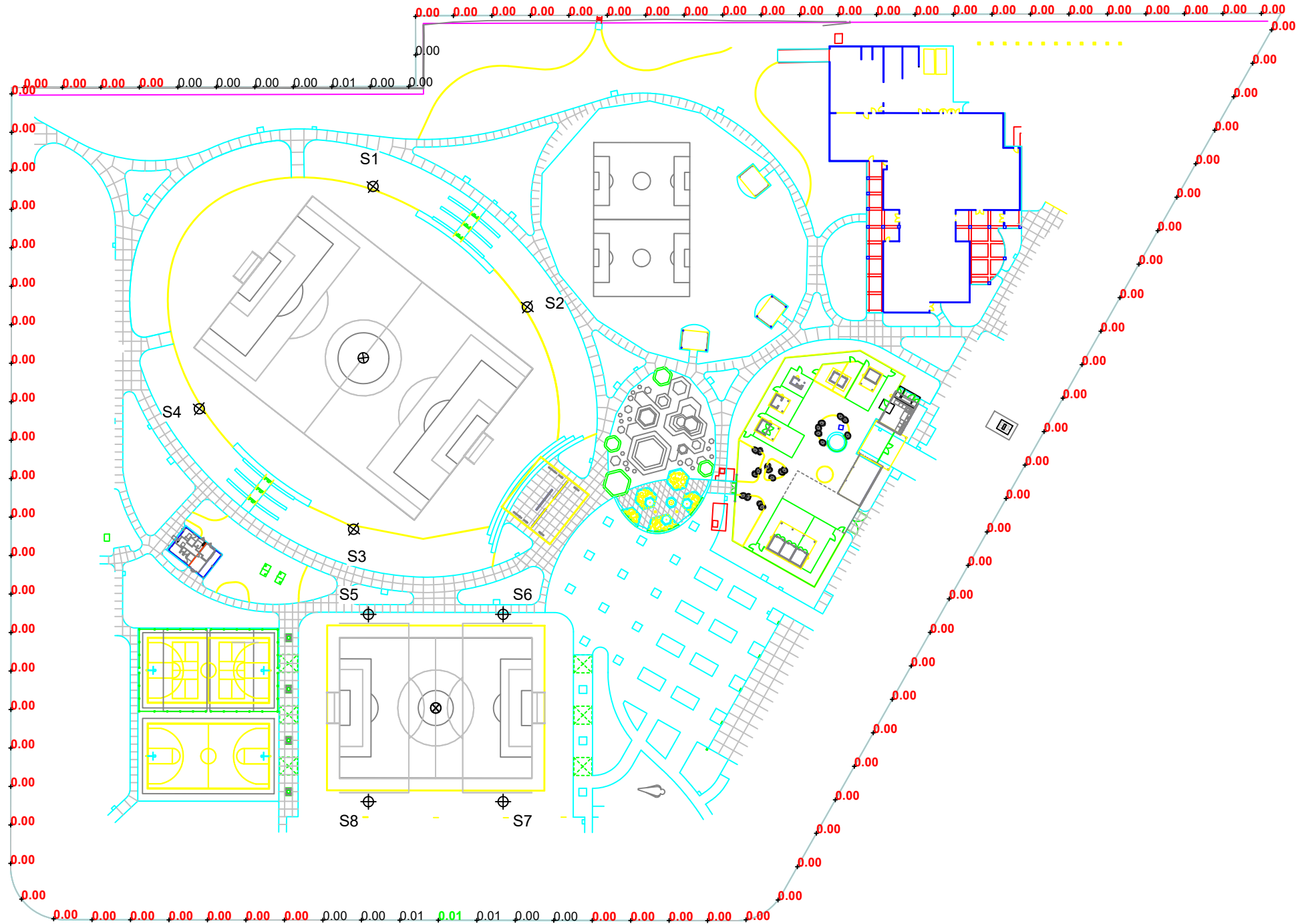


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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S4	60'	-	60'	TLC-LED-900	4	4	0
4	S5-S8	50'	-	50'	TLC-LED-550	3	3	0
8	TOTALS					28	28	0



Parnell Park
Whittier, CA

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

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0004
Maximum:	0.01
Minimum:	0.00
No. of Points:	103
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	28
Total Load:	20.56 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.

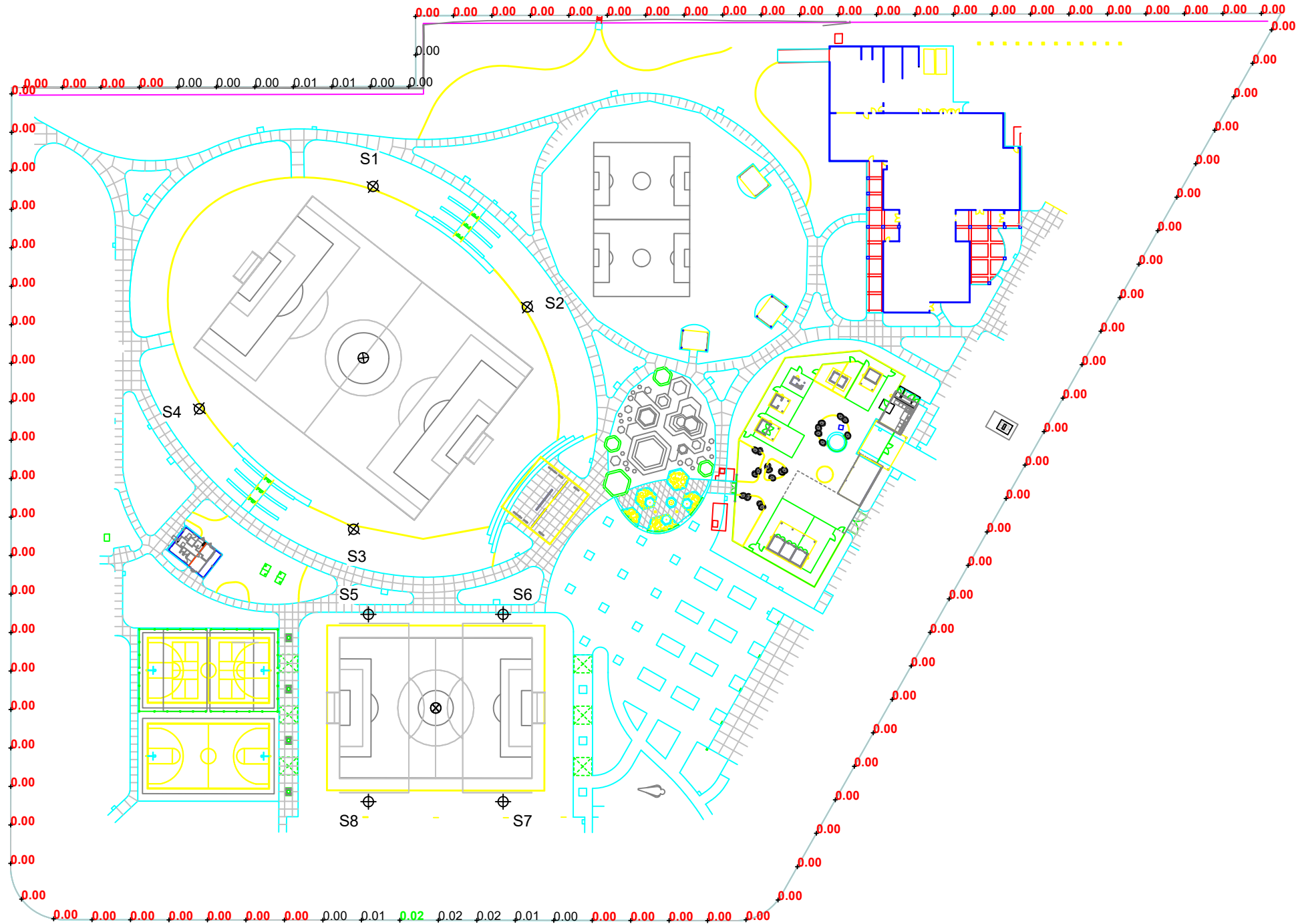
Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S4	60'	-	60'	TLC-LED-900	4	4	0
4	S5-S8	50'	-	50'	TLC-LED-550	3	3	0
8	TOTALS					28	28	0



Parnell Park
Whittier, CA

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

ILLUMINATION SUMMARY	
MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0010
Maximum:	0.02
Minimum:	0.00
No. of Points:	103
LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	28
Total Load:	20.56 kW

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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 $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

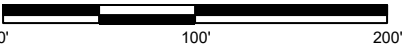


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ILLUMINATION SUMMARY

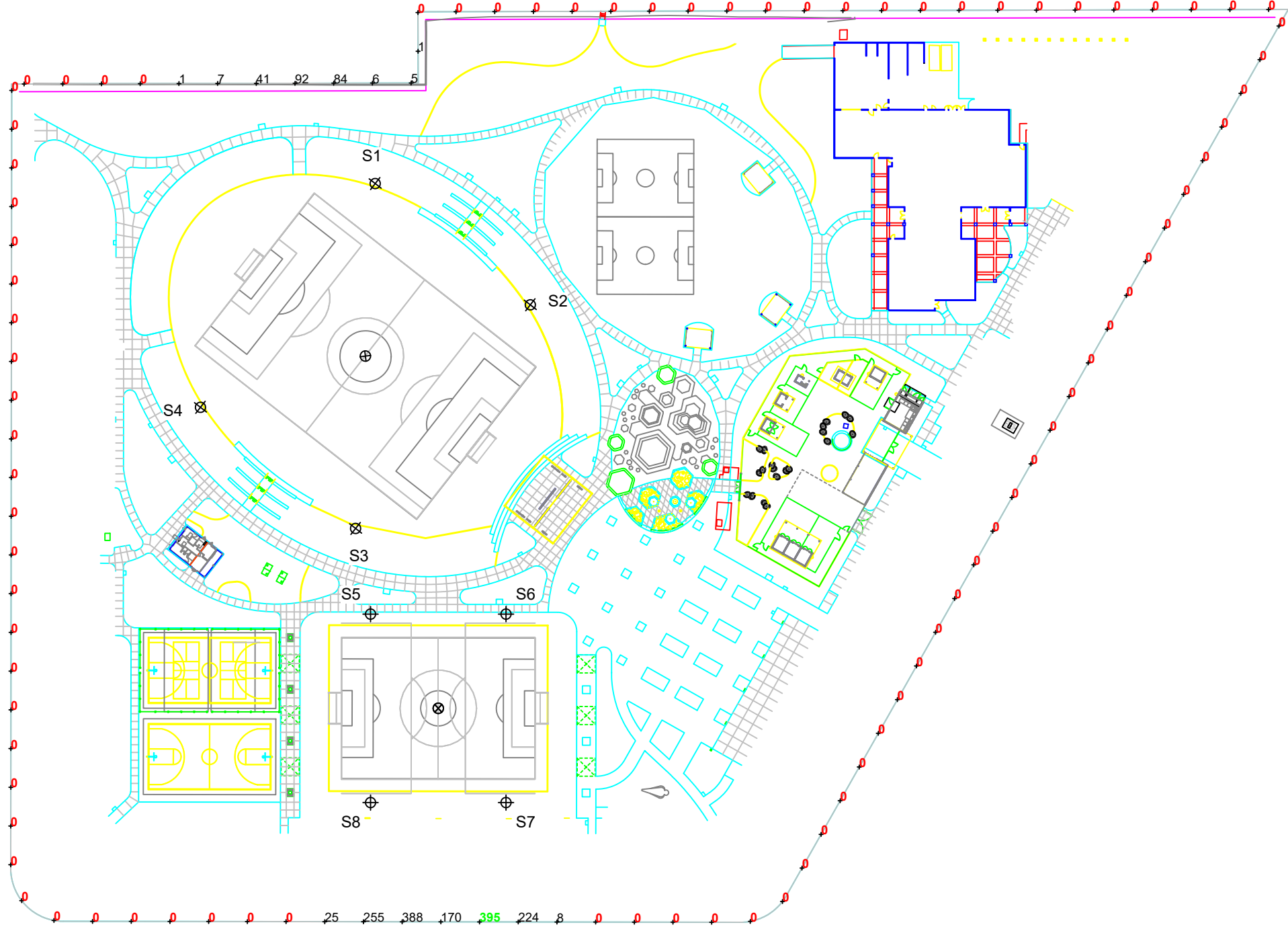


SCALE IN FEET 1 : 100



Pole location(s) \oplus dimensions are relative to 0,0 reference point(s) \otimes

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S4	60'	-	60'	TLC-LED-900	4	4	0
4	S5-S8	50'	-	50'	TLC-LED-550	3	3	0
8	TOTALS					28	28	0



Parnell Park
Whittier, CA

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

ILLUMINATION SUMMARY	
CANDELA (PER FIXTURE)	
Scan Average:	Entire Grid 16.5186
Maximum:	394.86
Minimum:	0.00
No. of Points:	103

LUMINAIRE INFORMATION	
Applied Circuits:	A, B
No. of Luminaires:	28
Total Load:	20.56 kW

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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.

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ILLUMINATION SUMMARY

Parnell Park
Whittier, CA

EQUIPMENT LAYOUT

INCLUDES:

- Large Soccer
- Small Soccer

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

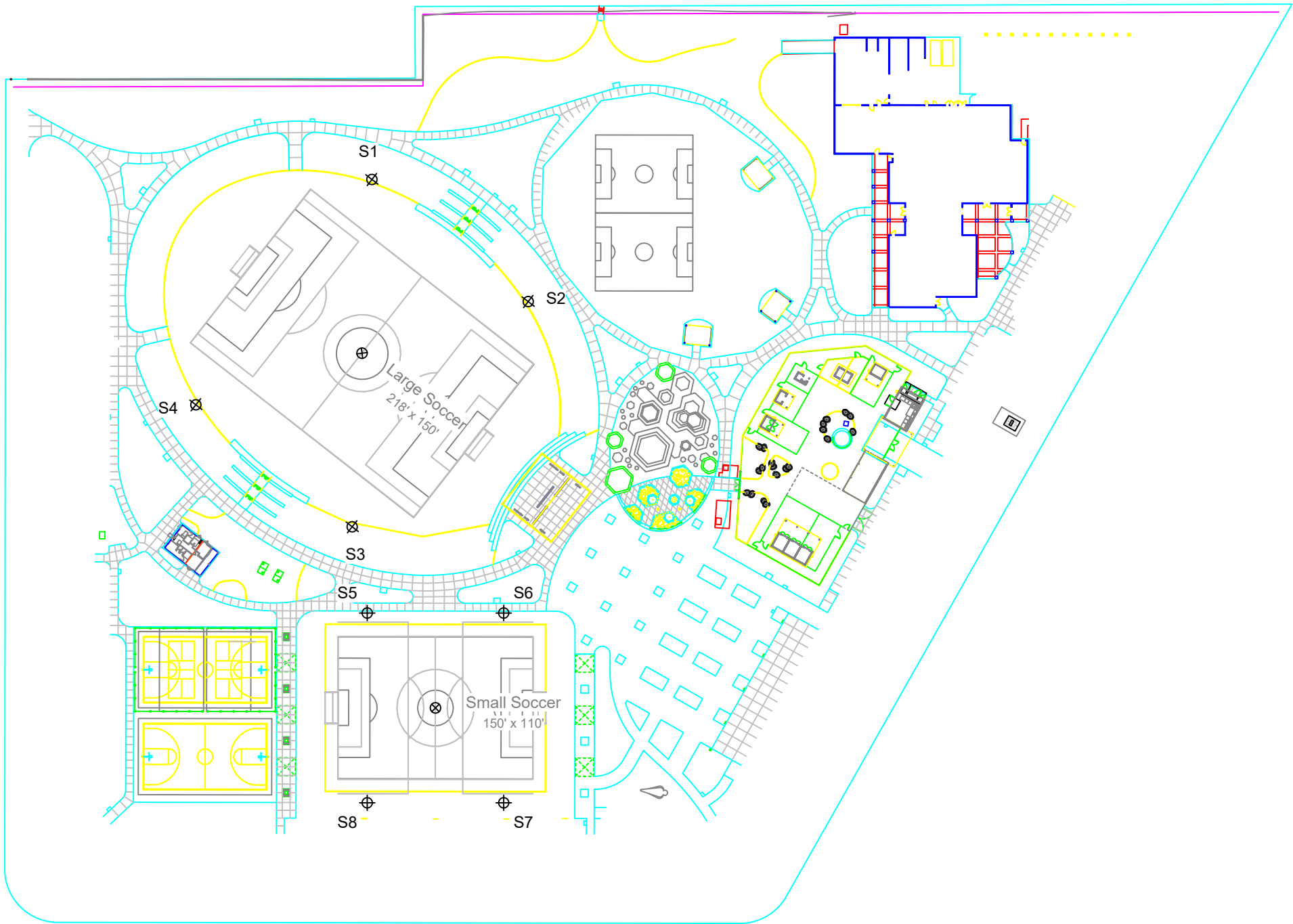
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

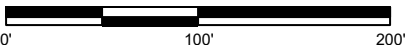
Pole				Luminaires		
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
4	S1-S4	60'	-	60'	TLC-LED-900	4
4	S5-S8	50'	-	50'	TLC-LED-550	3
8	TOTALS					28

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Driver (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage							
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3
TLC-LED-550	3.2	3.0	2.8	2.4	1.9	-	1.4



SCALE IN FEET 1 : 100



ENGINEERED DESIGN By: C.Hensley · File #227319A · 06-May-23

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



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EQUIPMENT LAYOUT