

Seacoast United Maine Campus

Falmouth, ME

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
S1-S2	80'	80'	7	TLC-LED-1150	8.05 kW	A
S3-S4	80'	80'	7	TLC-LED-1150	8.05 kW	A
		80'	7	TLC-LED-1150	8.05 kW	B
S5-S6	80'	80'	7	TLC-LED-1150	8.05 kW	B
6			56		64.40 kW	

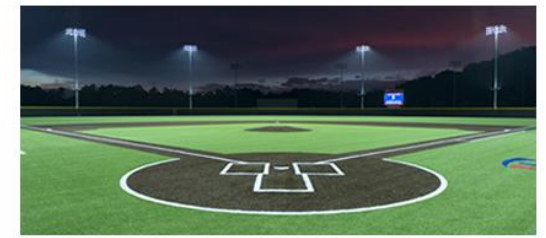
Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Soccer 1	32.2 kW	28
B	Soccer 2	32.2 kW	28

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1150	LED 5700K - 75 CRI	1150W	121,000	>81,000	>81,000	>81,000	56

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Property Line	Horizontal	0	0	0	0.00		A,B	56
Property Line	Max Candela (by Fixture)	0	0	0	0.00		A,B	56
Property Line	Max Vertical Illuminance Metric	0	0	0	0.00		A,B	56
Soccer 1	Horizontal Illuminance	34.1	28	39	1.40	1.22	A	28
Soccer 2	Horizontal Illuminance	34.2	28	39	1.41	1.22	B	28
Zero Grid	Horizontal	0.70	0	14	0.00		A,B	56
Zero Grid	Max Candela (by Fixture)	18653	0	275038	0.00		A,B	56
Zero Grid	Max Vert Illuminance (by Light Bank)	0.90	0	15	0.00		A,B	56

From Hometown to Professional



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN

Pole		Luminaires						
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	S1-S2	80'	-	80'	TLC-LED-1150	7	7	0
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	7	7
TOTALS						42	28	14

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

Seacoast United Maine Campus

Falmouth, ME

GRID SUMMARY	
Name:	Soccer 1
Size:	360' x 216'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	30
Scan Average:	34.1
Maximum:	39
Minimum:	28
Avg / Min:	1.22
Guaranteed Max / Min:	2.5
Max / Min:	1.40
UG (adjacent pts):	1.35
CU:	0.87
No. of Points:	96

LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	28		
Total Load:	32.2 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

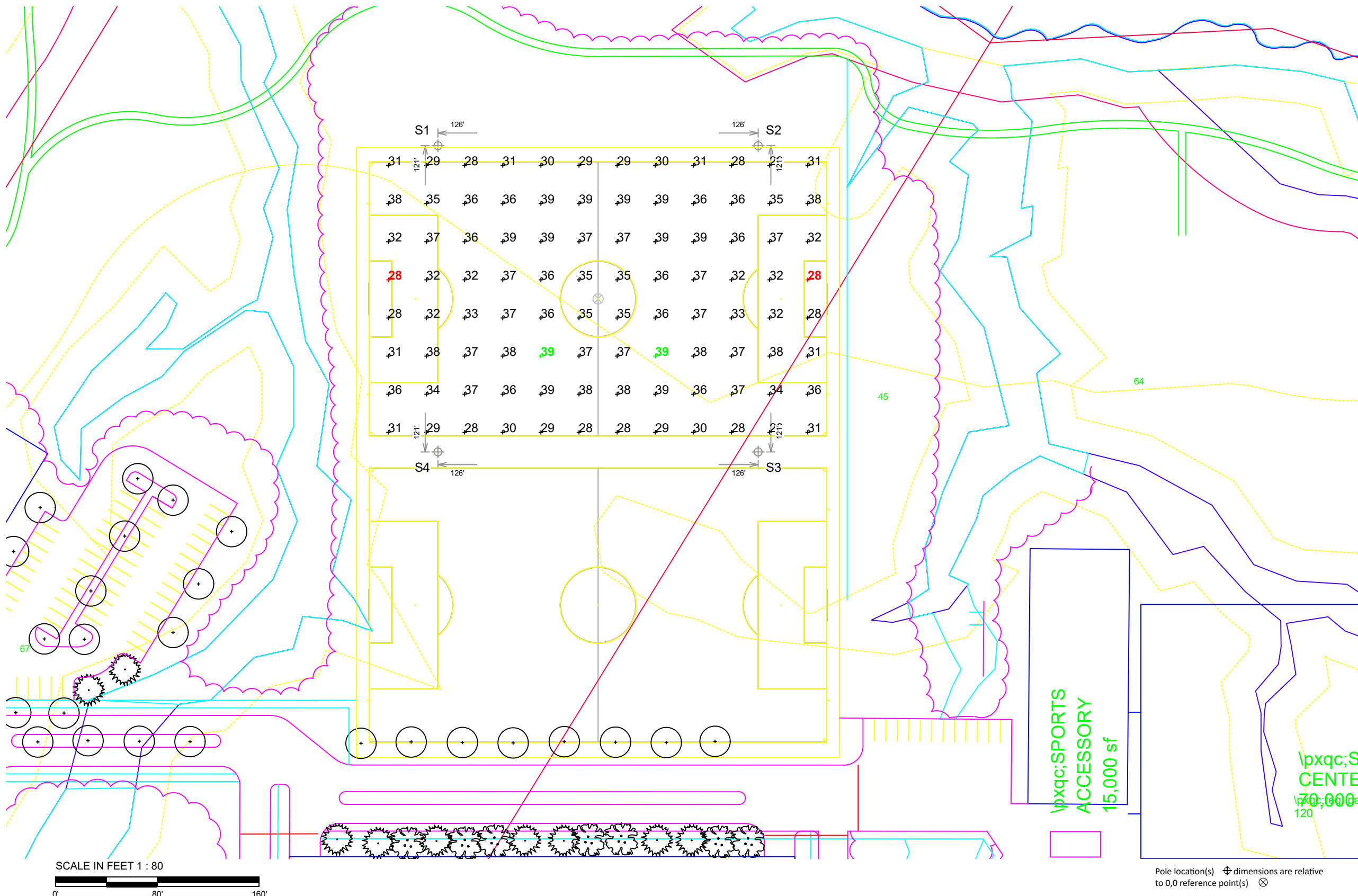
Reported per TM-21-11. See luminaire datasheet for details.

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.



SCALE IN FEET 1 : 80
0' 80' 160'

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



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

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	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	7	7
2	S5-S6	80'	-	80'	TLC-LED-1150	7	7	0
TOTALS						42	28	14

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

Seacoast United Maine Campus

Falmouth, ME

GRID SUMMARY	
Name:	Soccer 2
Size:	360' x 216'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	30
Scan Average:	34.2
Maximum:	39
Minimum:	28
Avg / Min:	1.23
Guaranteed Max / Min:	2.5
Max / Min:	1.41
UG (adjacent pts):	1.34
CU:	0.88
No. of Points:	96

LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	28		
Total Load:	32.2 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

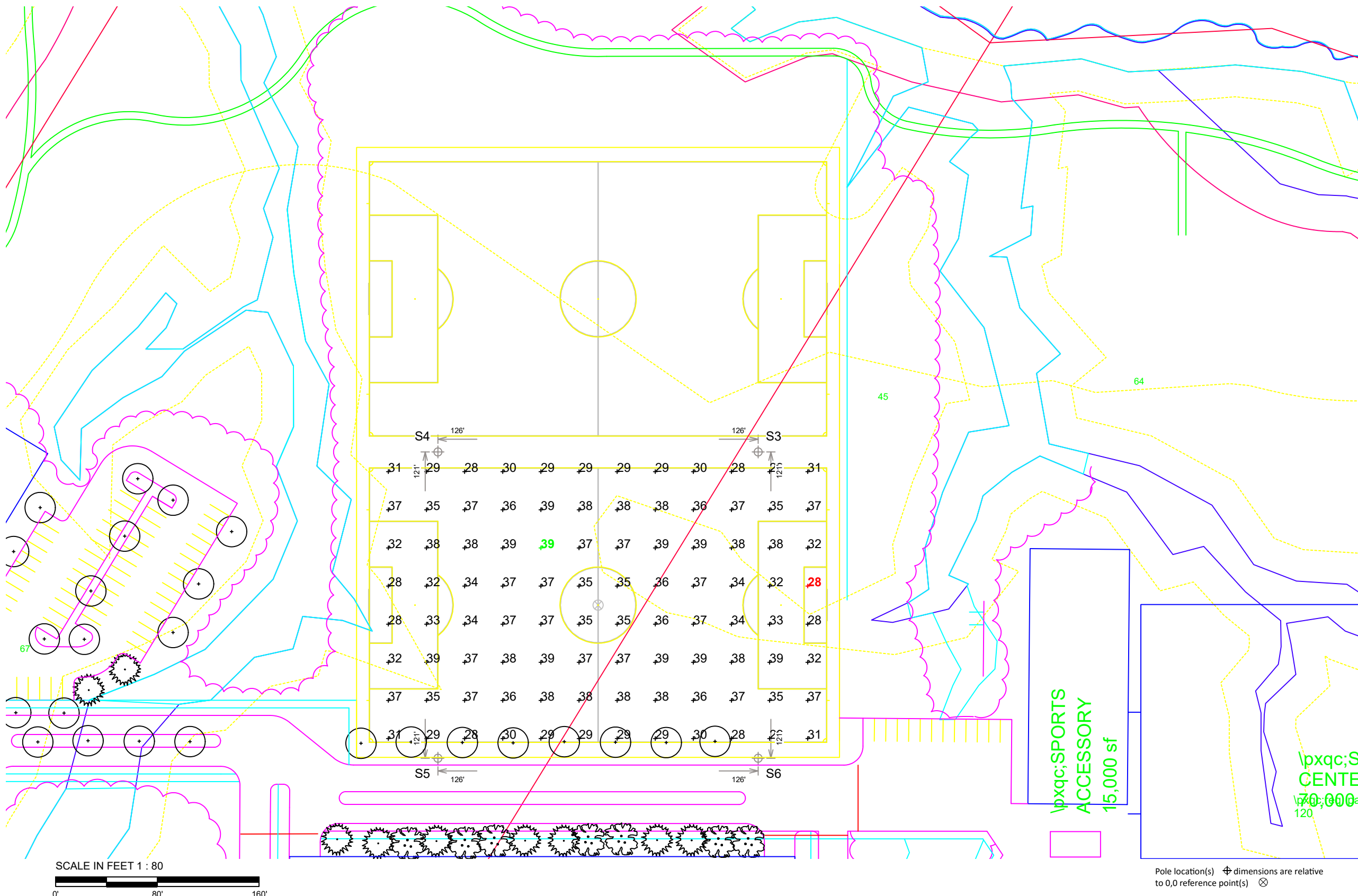
Reported per TM-21-11. See luminaire datasheet for details.

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.



10x40; SPORTS ACCESSORY 15,000 sf

10x40; SF CENTER 70,000 sf 120'



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

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-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0
6	TOTALS					56	56	0

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

Seacoast United Maine Campus

Falmouth, ME

GRID SUMMARY	
Name:	Zero Grid
Size:	360' x 216'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

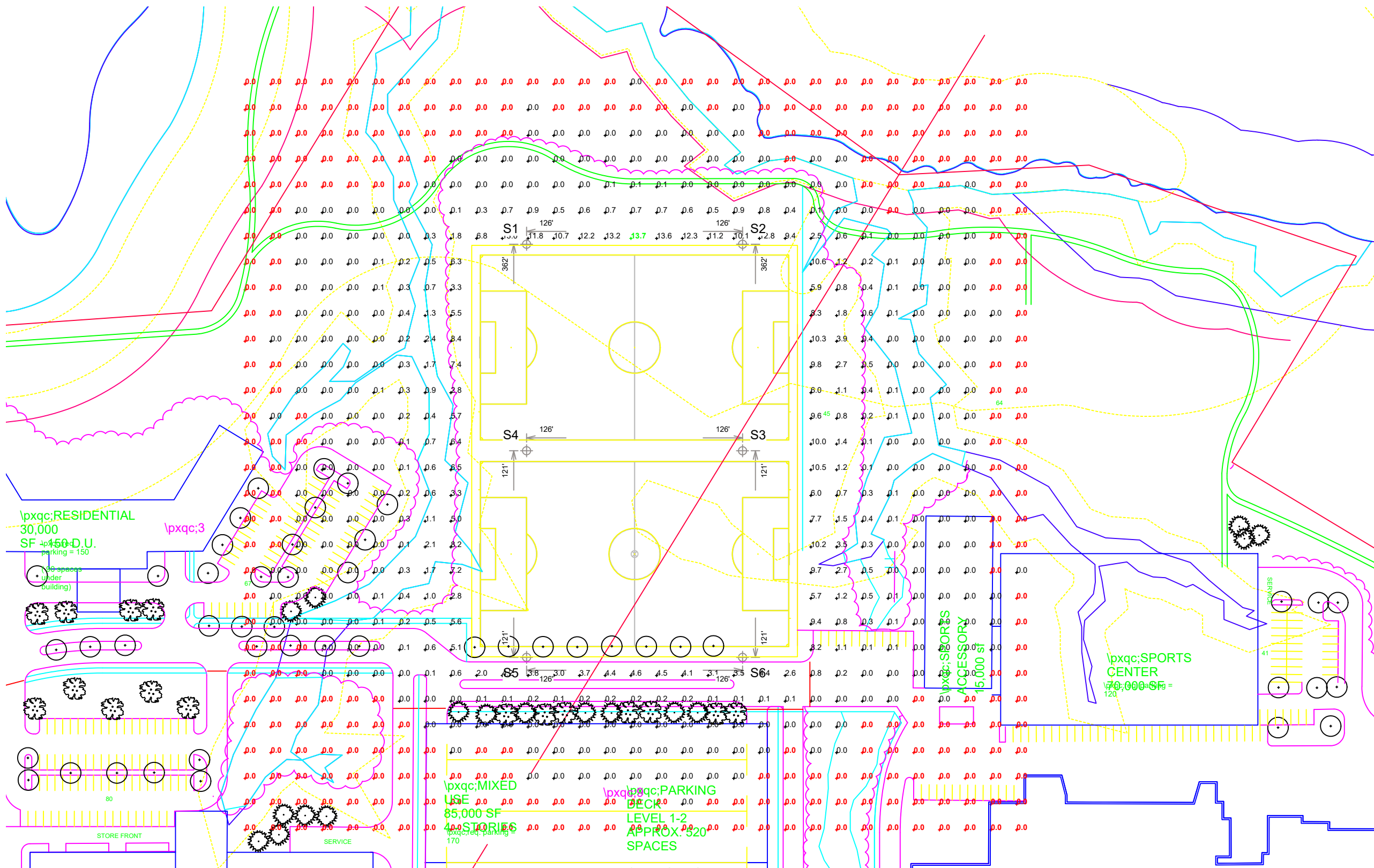
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
Entire Grid			
Scan Average:	0.7		
Maximum:	14		
Minimum:	0		
Avg / Min:	-		
Max / Min:	-		
UG (adjacent pts):	454.48		
CU:	0.07		
No. of Points:	722		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	56		
Total Load:	64.4 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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

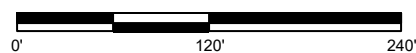
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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.



SCALE IN FEET 1 : 120



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



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

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-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0
6	TOTALS					56	56	0

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

Seacoast United Maine Campus Falmouth, ME

GRID SUMMARY	
Name:	Zero Grid
Size:	360' x 216'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

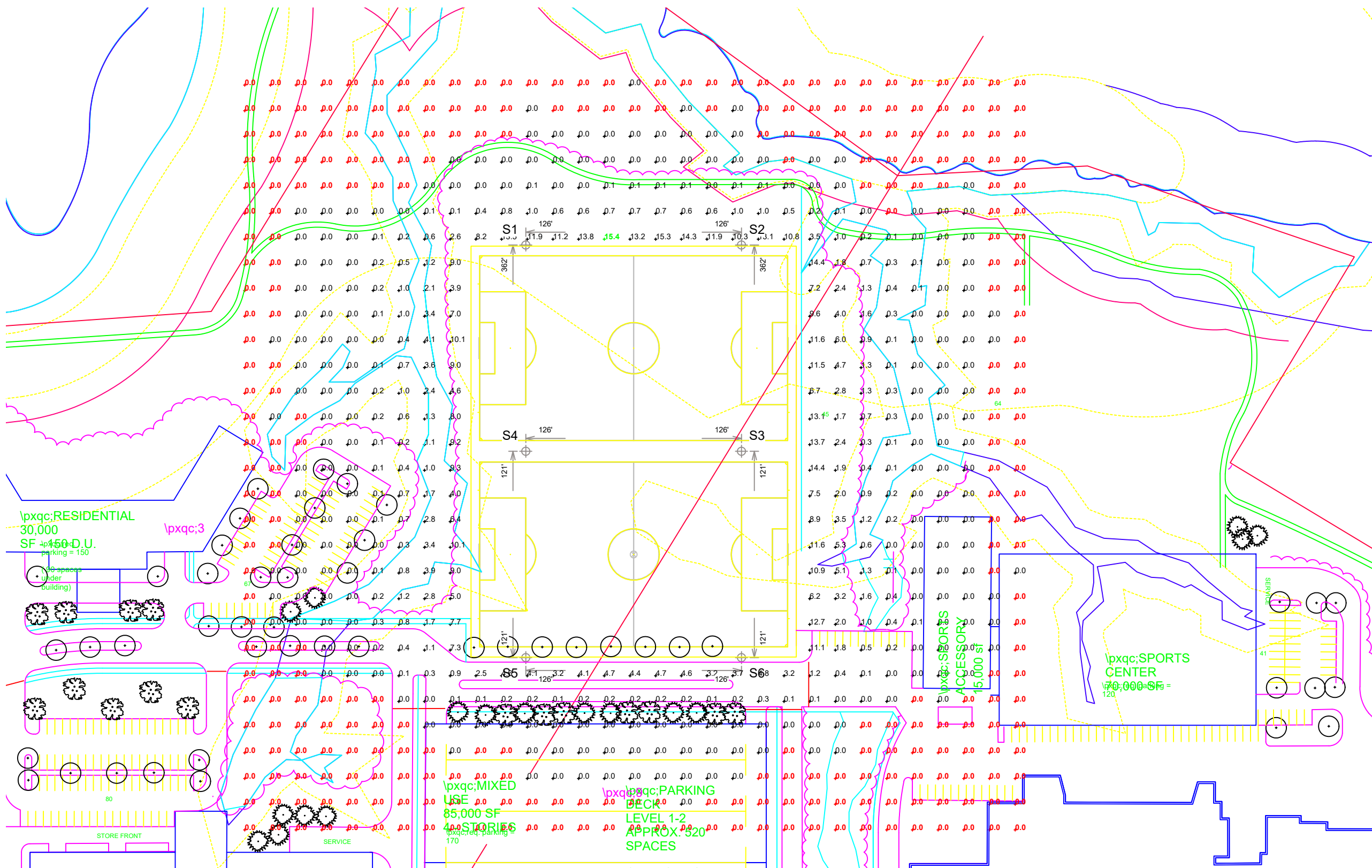
ILLUMINATION SUMMARY			
MAINTAINED MAX VERTICAL FOOTCANDLES			
Entire Grid			
Scan Average:	0.9		
Maximum:	15		
Minimum:	0		
Avg / Min:	-		
Max / Min:	-		
UG (adjacent pts):	1200.09		
CU:	0.07		
No. of Points:	722		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	56		
Total Load:	64.4 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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

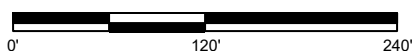
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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.



SCALE IN FEET 1 : 120



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



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

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-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0	
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0	
6	TOTALS						56	56	0

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

Seacoast United Maine Campus

Falmouth, ME

GRID SUMMARY	
Name:	Zero Grid
Size:	360' x 216'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

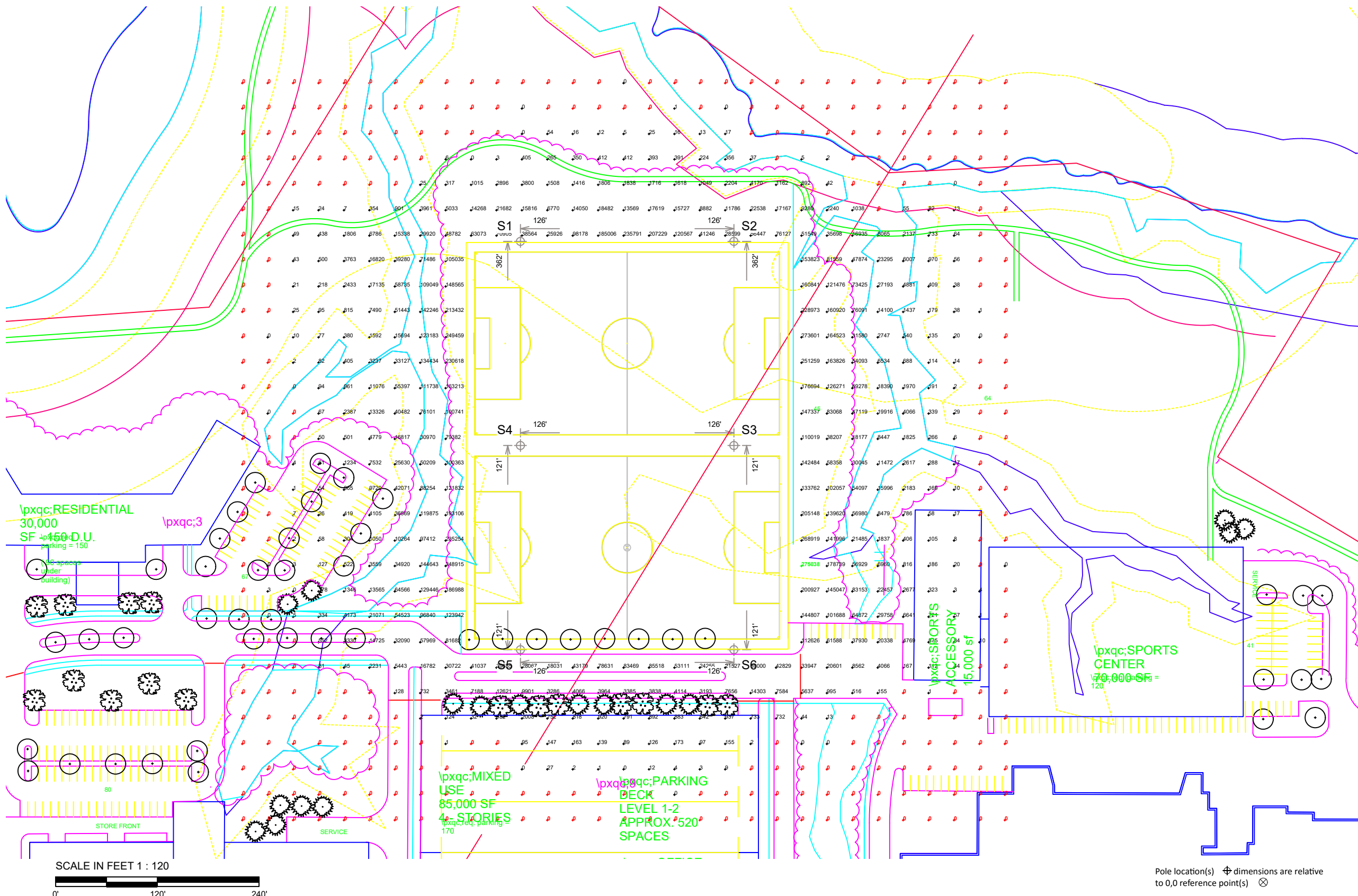
ILLUMINATION SUMMARY			
MAINTAINED CANDELA (PER FIXTURE)			
Entire Grid			
Scan Average:	18653.1		
Maximum:	275038		
Minimum:	0		
Avg / Min:	-		
Max / Min:	-		
UG (adjacent pts):	8404.75		
CU:	0.07		
No. of Points:	722		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	56		
Total Load:	64.4 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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.



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

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-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0
6	TOTALS							
						56	56	0

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

Seacoast United Maine Campus Falmouth, ME

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

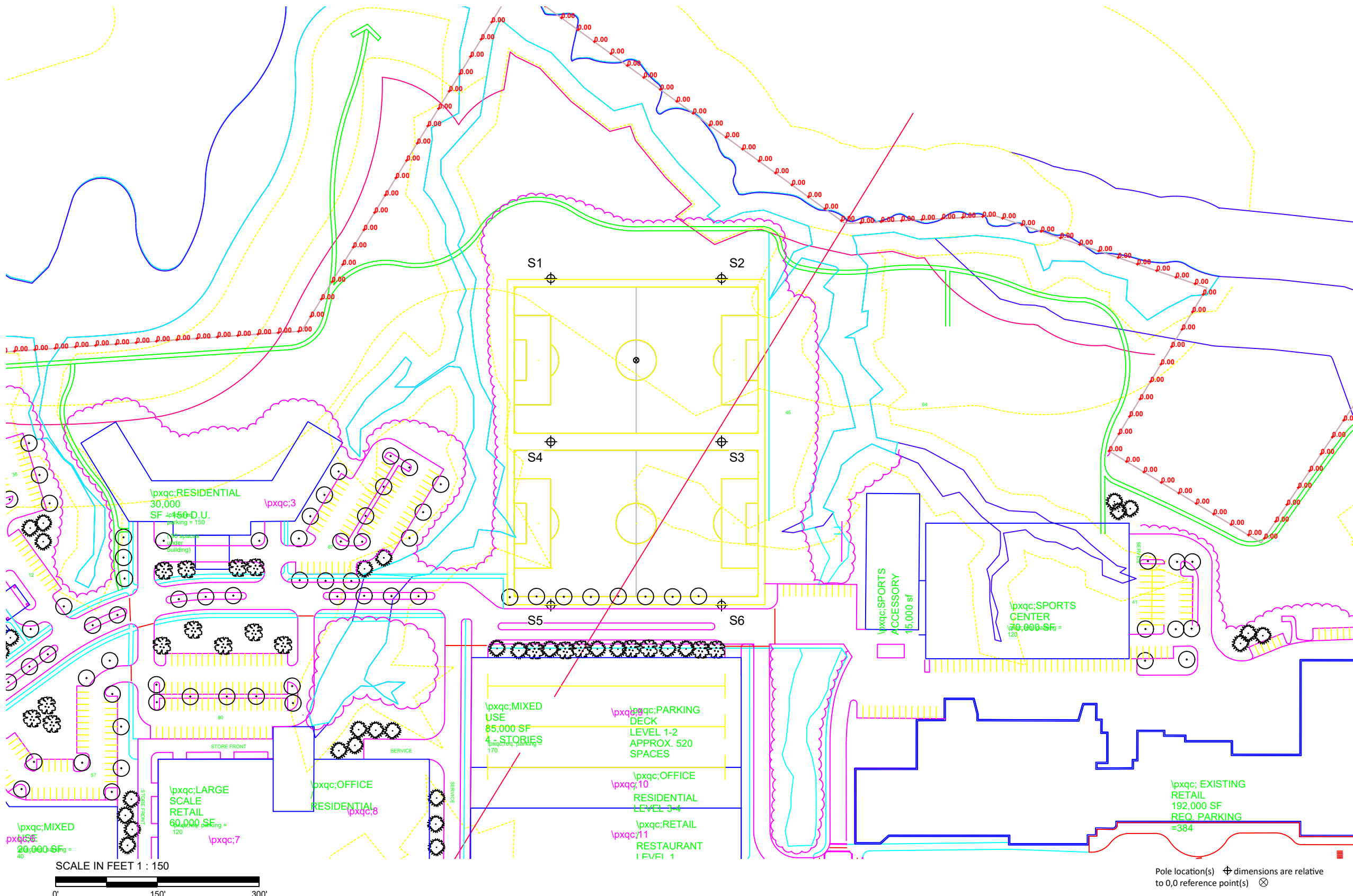
ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
Scan Average:		Entire Grid	
		0.000	
Maximum:		0.00	
Minimum:		0.00	
No. of Points:		292	
LUMINAIRE INFORMATION			
Color / CRI:		5700K - 75 CRI	
Luminaire Output:		121,000 lumens	
No. of Luminaires:		56	
Total Load:		64.4 kW	
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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.



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

EQUIPMENT LIST FOR AREAS SHOWN

Pole		Luminaires							
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS	
4	S1-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0	
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0	
6	TOTALS							56	56

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

Seacoast United Maine Campus

Falmouth, ME

GRID SUMMARY

Name: Property Line
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED MAX VERTICAL FOOTCANDLES	
Scan Average:	Entire Grid 0.000
Maximum:	0.00
Minimum:	0.00
No. of Points:	292

LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	56		
Total Load:	64.4 kW		

Luminaire Type	Lumen Maintenance		
	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000

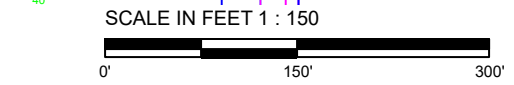
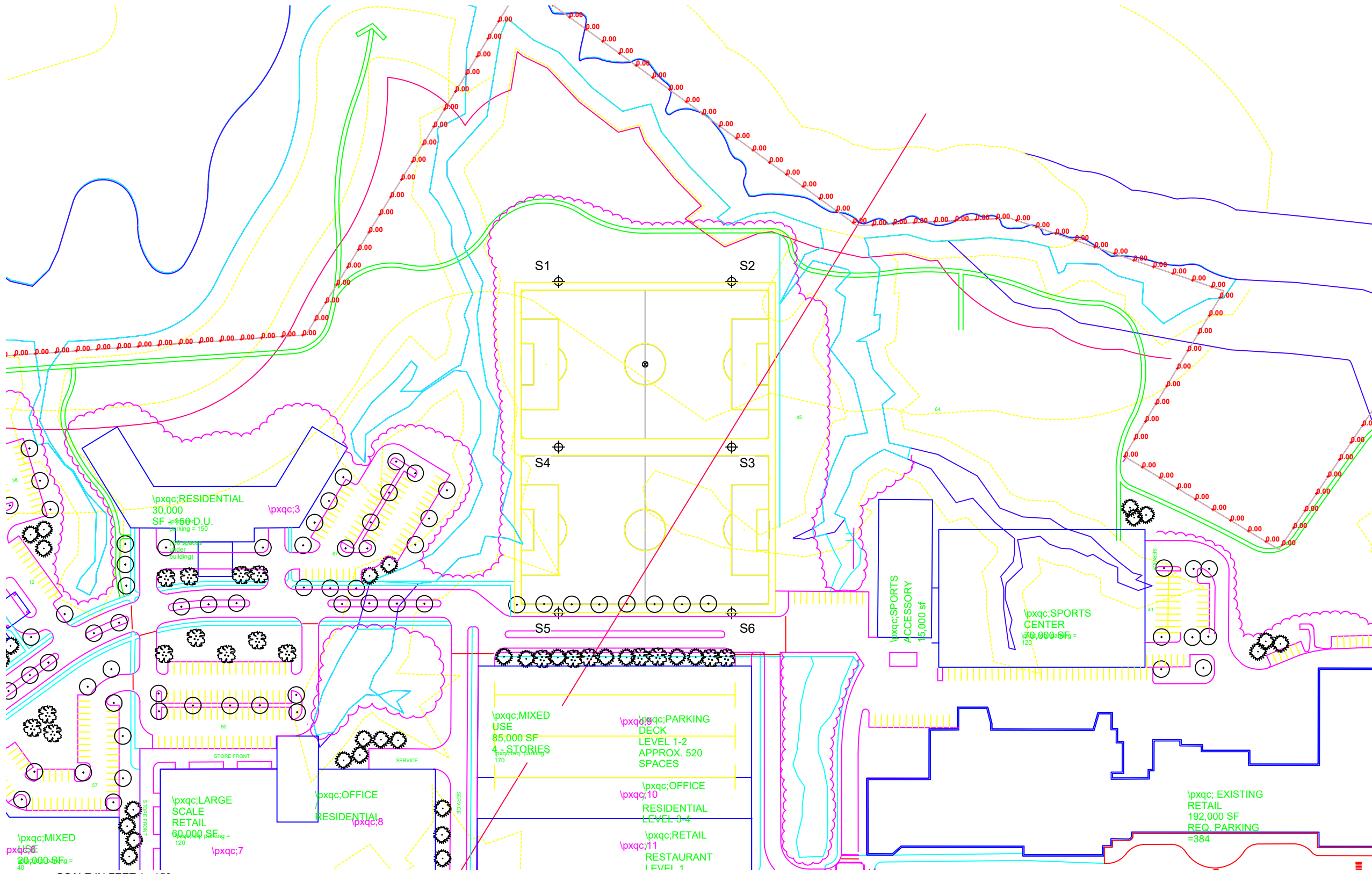
Reported per TM-21-11. See luminaire datasheet for details.

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) ⊗



We Make It Happen.

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	S1-S2 S5-S6	80'	-	80'	TLC-LED-1150	7	7	0
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*	14	0
6	TOTALS					56	56	0

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

Seacoast United Maine Campus

Falmouth, ME

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

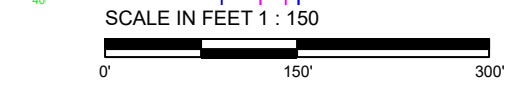
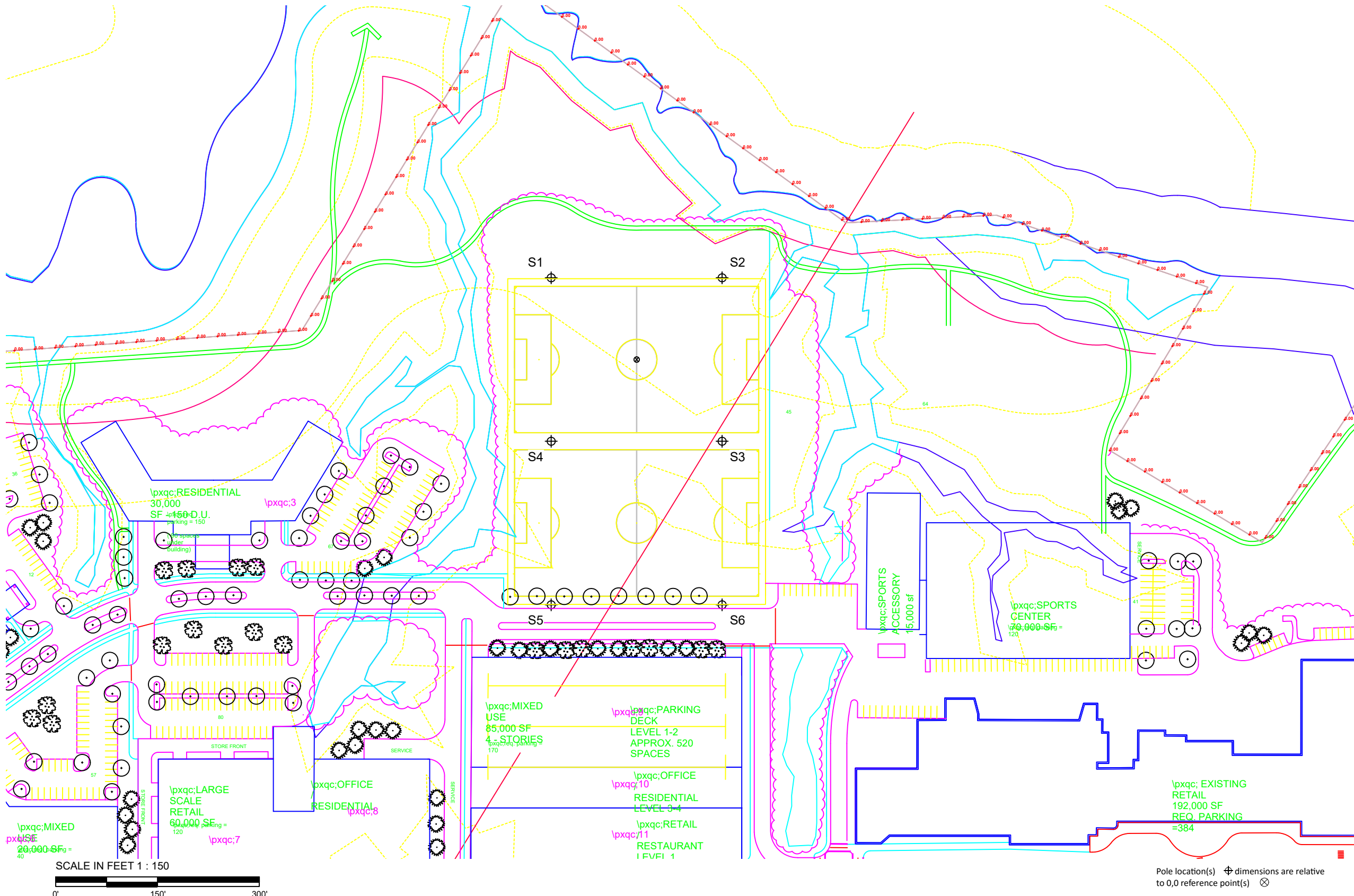
ILLUMINATION SUMMARY			
MAINTAINED CANDELA (PER FIXTURE)			
Scan Average:	Entire Grid 0.000		
Maximum:	0.00		
Minimum:	0.00		
No. of Points:	292		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	121,000 lumens		
No. of Luminaires:	56		
Total Load:	64.4 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-1150	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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: Markie Roake • File #194039A • 09-Aug-18



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.

ILLUMINATION SUMMARY

Seacoast United Maine Campus Falmouth, ME

EQUIPMENT LAYOUT

INCLUDES:

- Soccer 1
- Soccer 2

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.

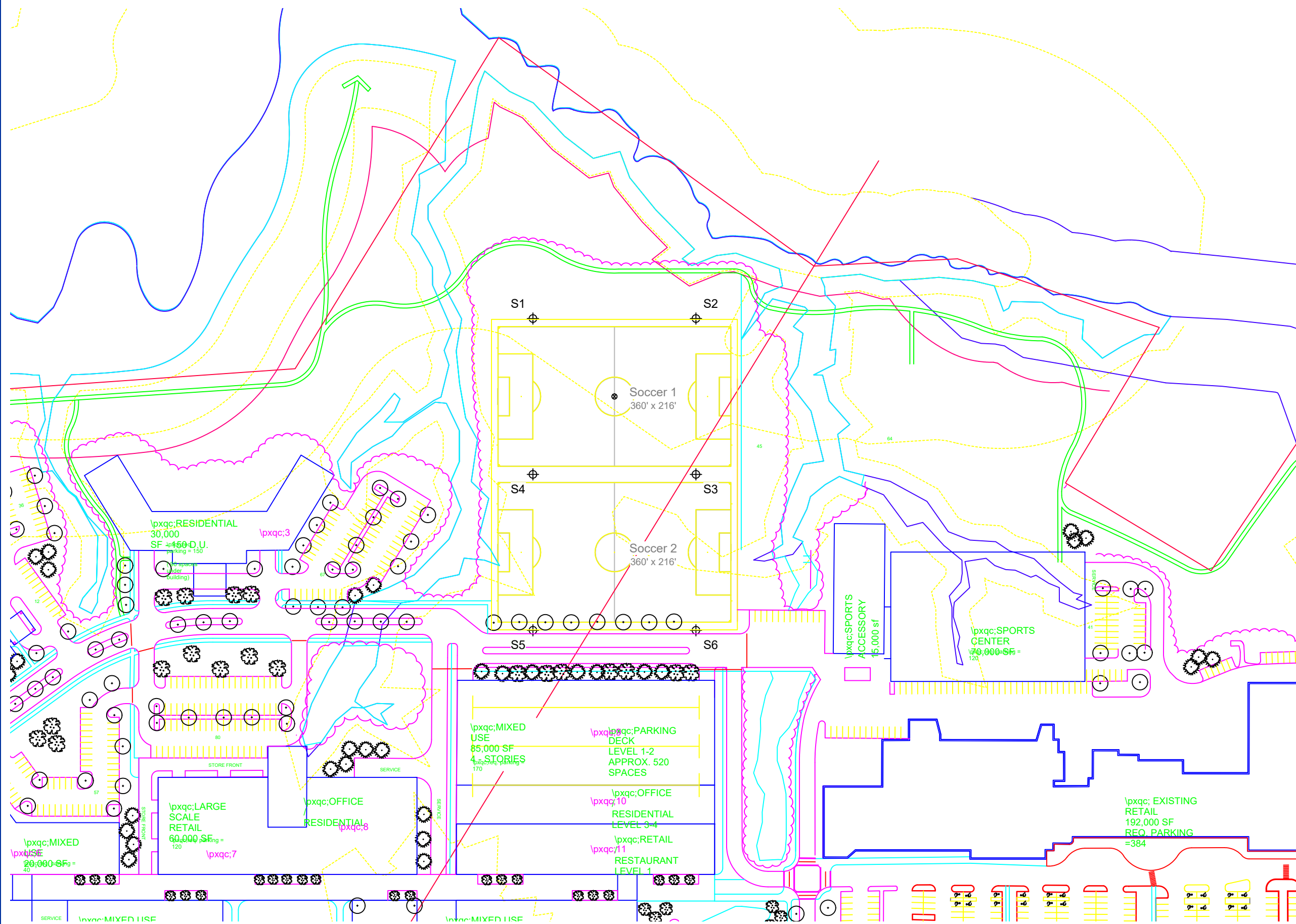
EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	Pole		Luminaires		QTY / POLE
		SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	
4	S1-S2 S5-S6	80'	-	80'	TLC-LED-1150	7
2	S3-S4	80'	-	80'	TLC-LED-1150	7/7*
6	TOTALS					56

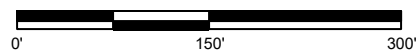
* This structure utilizes a back-to-back mounting configuration

SINGLE LUMINAIRE AMPERAGE DRAW CHART

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)
Single Phase Voltage	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
TLC-LED-1150	6.8	6.5	5.9	5.1	4.1	3.7	3.0



SCALE IN FEET 1 : 150



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



We Make It Happen.

Seacoast United Maine Campus
Falmouth, ME

GLARE IMPACT
Summary

Map indicates the maximum candela an observer would see when facing the brightest light source from any direction.

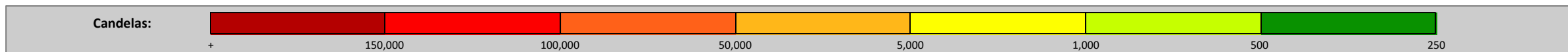
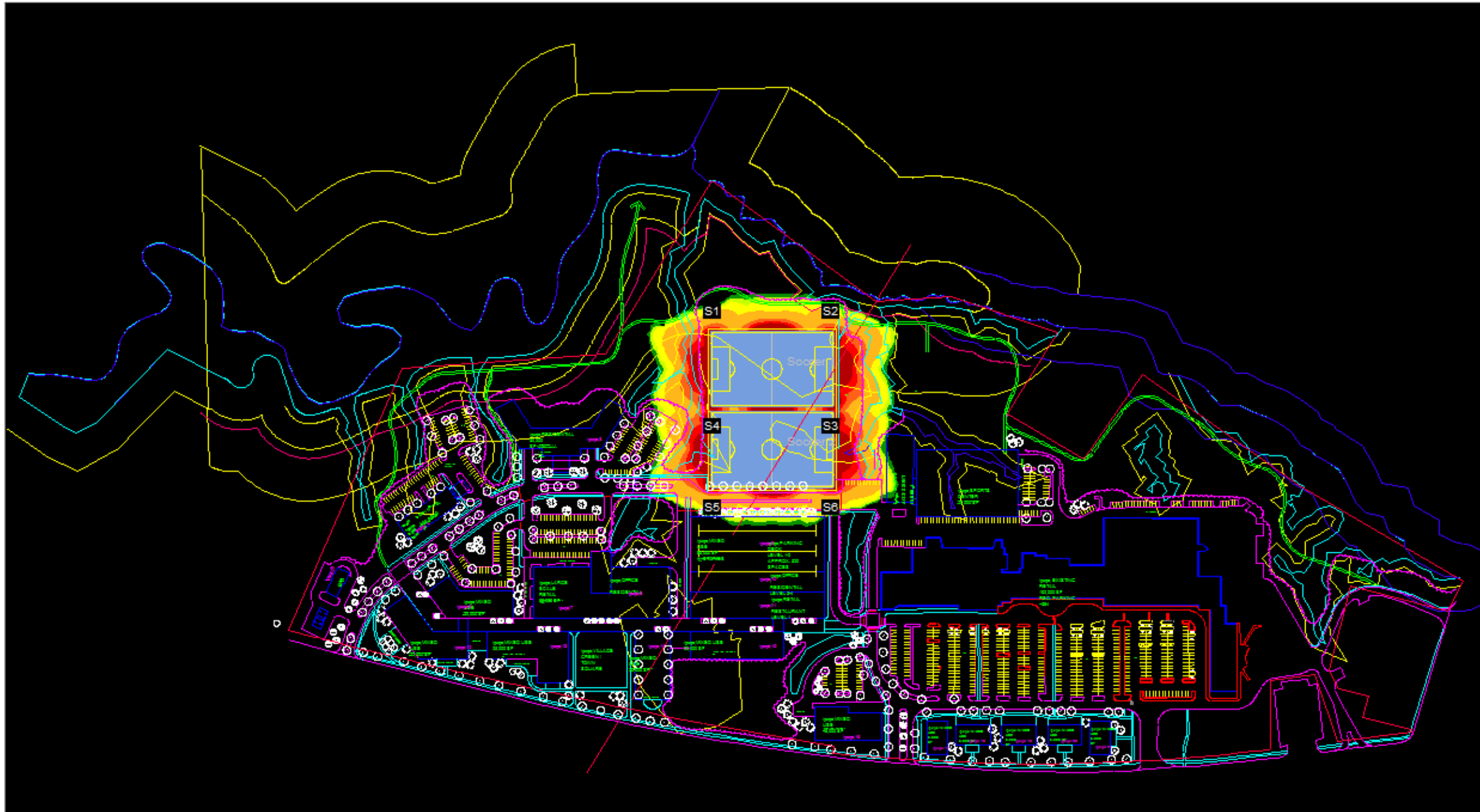
A well-designed lighting system controls light to provide maximum useful on-field illumination with minimal destructive off-site glare.

GLARE
Candela Levels

High Glare: 150,000 or more candela
Should only occur on or very near the lit area where the light source is in direct view. Care must be taken to minimize high glare zones.

Significant Glare: 25,000 to 75,000 candela
Equivalent to high beam headlights of a car.

Minimal to No Glare: 500 or less candela
Equivalent to 100W incandescent light bulb.



We Make It Happen.

Not to be reproduced in whole or part without the written consent of Musco Sports Lighting, LLC. ©1981, 2018 Musco Sports Lighting, LLC.