

APPENDIX B

Photometric Study

Los Altos HS Football

Los Altos, CA

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
F1	90'	90'	5	TLC-LED-1500	7.15 kW	A
		90'	4	TLC-LED-900	3.56 kW	A
		80'	1	TLC-LED-400	0.40 kW	B
		16'	2	TLC-BT-575	1.15 kW	A
F2	90'	90'	5	TLC-LED-1500	7.15 kW	A
		90'	4	TLC-LED-900	3.56 kW	A
		80'	1	TLC-LED-400	0.40 kW	B
		16'	2	TLC-BT-575	1.15 kW	A
		80'	1	TLC-LED-900	0.89 kW	B
		90'	6	TLC-LED-1500	8.58 kW	A
		90'	1	TLC-LED-900	0.89 kW	A
		80'	1	TLC-LED-400	0.40 kW	B
		16'	2	TLC-BT-575	1.15 kW	A
		80'	1	TLC-LED-900	0.89 kW	B
		90'	6	TLC-LED-1500	8.58 kW	A
		90'	1	TLC-LED-900	0.89 kW	A
F4	90'	80'	1	TLC-LED-400	0.40 kW	B
		16'	2	TLC-BT-575	1.15 kW	A
			46		48.34 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Football	44.96 kW	40
B	Egress	3.38 kW	6

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-900	LED 5700K - 75 CRI	890W	89,600	>81,000	>81,000	>81,000	12
TLC-LED-1500	LED 5700K - 75 CRI	1430W	160,000	>81,000	>81,000	>81,000	22
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>81,000	>81,000	>81,000	8
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>81,000	>81,000	>81,000	4

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Away Bleachers Egress	Horizontal Illuminance	7.07	2	13	5.88	3.54	B	6
Egress	Horizontal	3.80	1	11	12.32	3.80	B	6
Football	Horizontal Illuminance	41.3	29	48	1.66	1.42	A	40
Home Bleacher Egress	Horizontal Illuminance	7.84	4	13	3.20	1.96	B	6
Path of Egress	Horizontal	3.99	0	10.5	25848.51		B	6
Property Spill	Horizontal	0	0	0.03	0.00		A	40
Property Spill	Max Candela (by Fixture)	302	0	1259	0.00		A	40
Property Spill	Max Vertical Illuminance Metric	0.01	0	0.06	0.00		A	40
Soccer	Horizontal Illuminance	40.1	26	48	1.84	1.54	A	40
Track	Horizontal Illuminance	13.4	2	28	12.69	6.68	A	40

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	F1	90'	-	90'	TLC-LED-1500	5	5	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-900	4	4	0
1	F2	90'	-	90'	TLC-LED-900	4	4	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	1	0	1
1	F3	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
1	F4	90'	-	90'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-1500	6	6	0
4	TOTALS					46	40	6

Los Altos HS Football
Los Altos, CA

GRID SUMMARY	
Name:	Football
Size:	360' x 160'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	40
Scan Average:	41.32
Maximum:	48
Minimum:	29
Avg / Min:	1.42
Guaranteed Max / Min:	2.5
Max / Min:	1.66
UG (adjacent pts):	1.31
CU:	0.55
No. of Points:	72

LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 160,000 / 52,000 lumens		
No. of Luminaires:	40		
Total Load:	44.96 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>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.

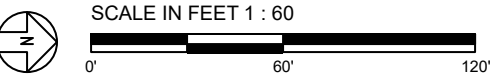
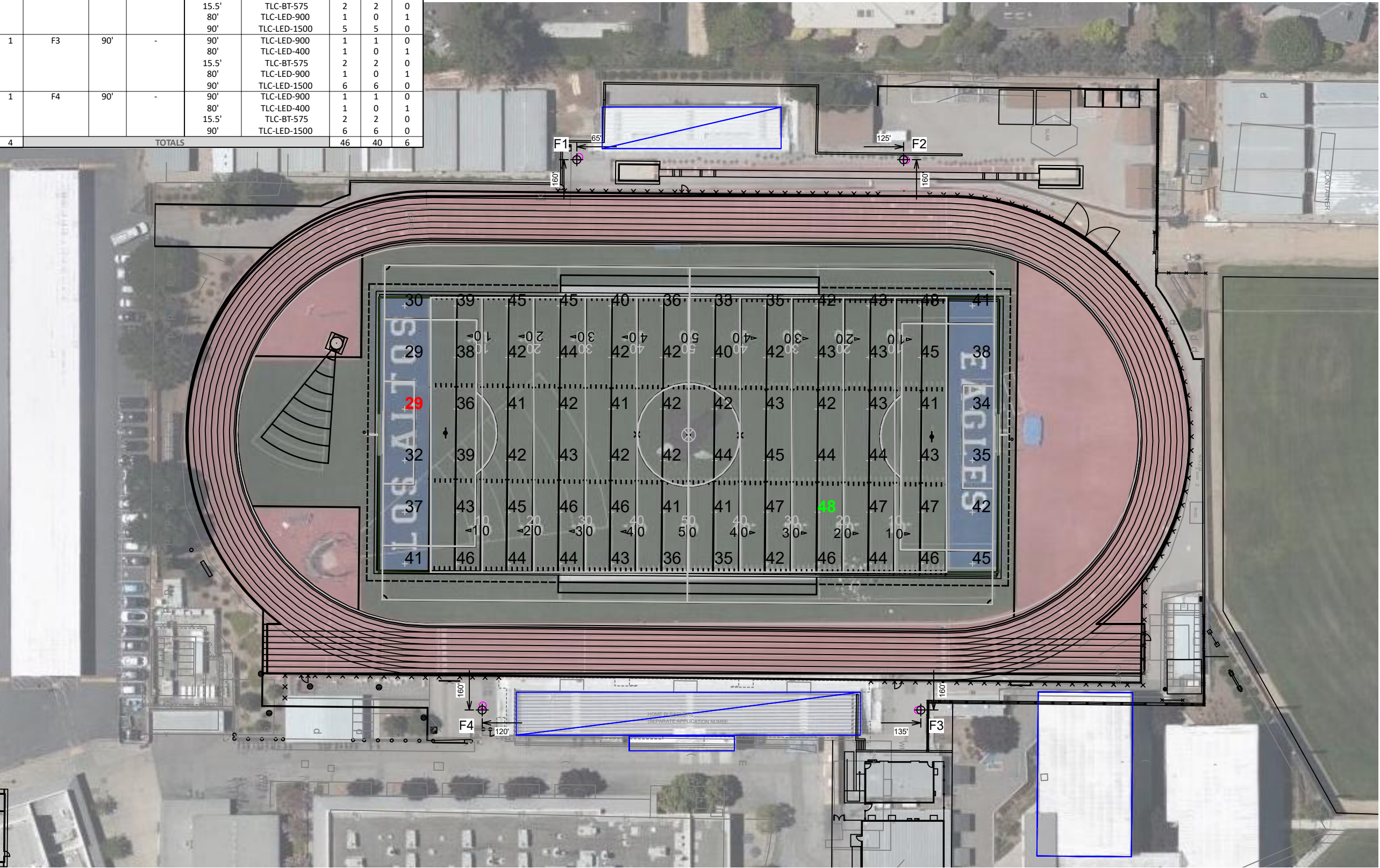
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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



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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	F1	90'	-	90'	TLC-LED-1500	5	5	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-900	4	4	0
1	F2	90'	-	90'	TLC-LED-900	4	4	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	1	0	1
1	F3	90'	-	90'	TLC-LED-1500	5	5	0
				80'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
1	F4	90'	-	80'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-900	6	6	0
4	TOTALS					46	40	6

Los Altos HS Football
Los Altos, CA

GRID SUMMARY

Name:	Soccer
Size:	355' x 195'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	40.12
Maximum:	48
Minimum:	26
Avg / Min:	1.53
Max / Min:	1.84
UG (adjacent pts):	1.42
CU:	0.63
No. of Points:	84

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	89,600 / 160,000 / 52,000 lumens
No. of Luminaires:	40
Total Load:	44.96 kW

Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>81,000	>81,000	>81,000

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

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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.

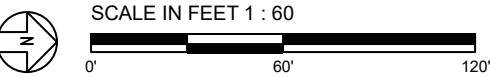
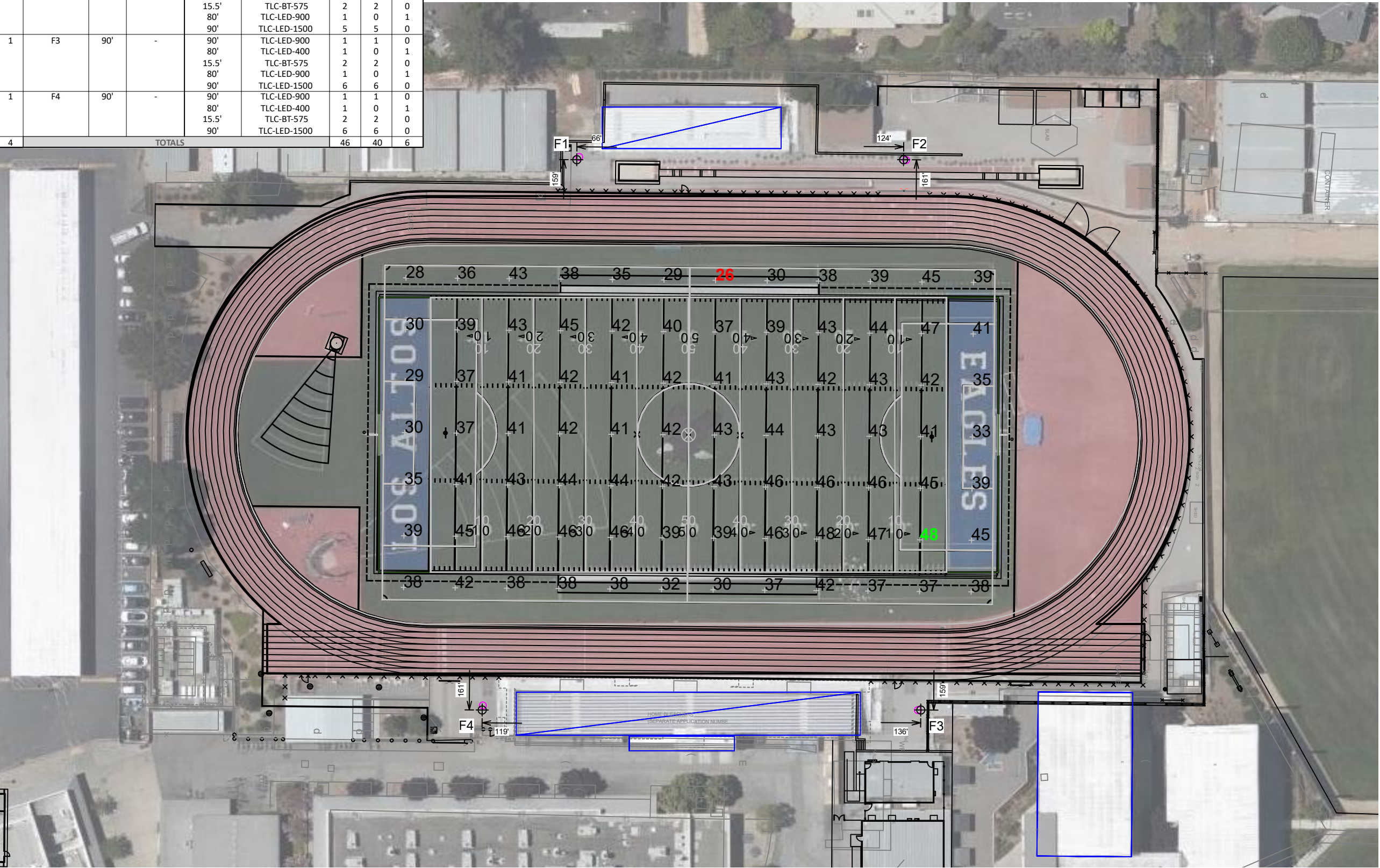
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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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	F1	90'	-	90'	TLC-LED-1500	5	5	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-900	4	4	0
1	F2	90'	-	90'	TLC-LED-900	4	4	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				80'	TLC-LED-900	1	0	1
1	F3	90'	-	90'	TLC-LED-1500	5	5	0
				90'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
1	F4	90'	-	90'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	0	1
				15.5'	TLC-BT-575	2	2	0
				90'	TLC-LED-1500	6	6	0
4	TOTALS					46	40	6

Los Altos HS Football
Los Altos, CA

GRID SUMMARY

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

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

Scan Average: 13.36
Maximum: 28
Minimum: 2
Avg / Min: 6.03
Max / Min: 12.69
UG (adjacent pts): 0.00
CU: 0.12
No. of Points: 47

LUMINAIRE INFORMATION

Color / CRI: 5700K - 75 CRI
Luminaire Output: 89,600 / 160,000 / 52,000 lumens
No. of Luminaires: 40
Total Load: 44.96 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>81,000	>81,000	>81,000

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

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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.

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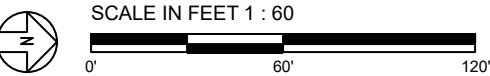
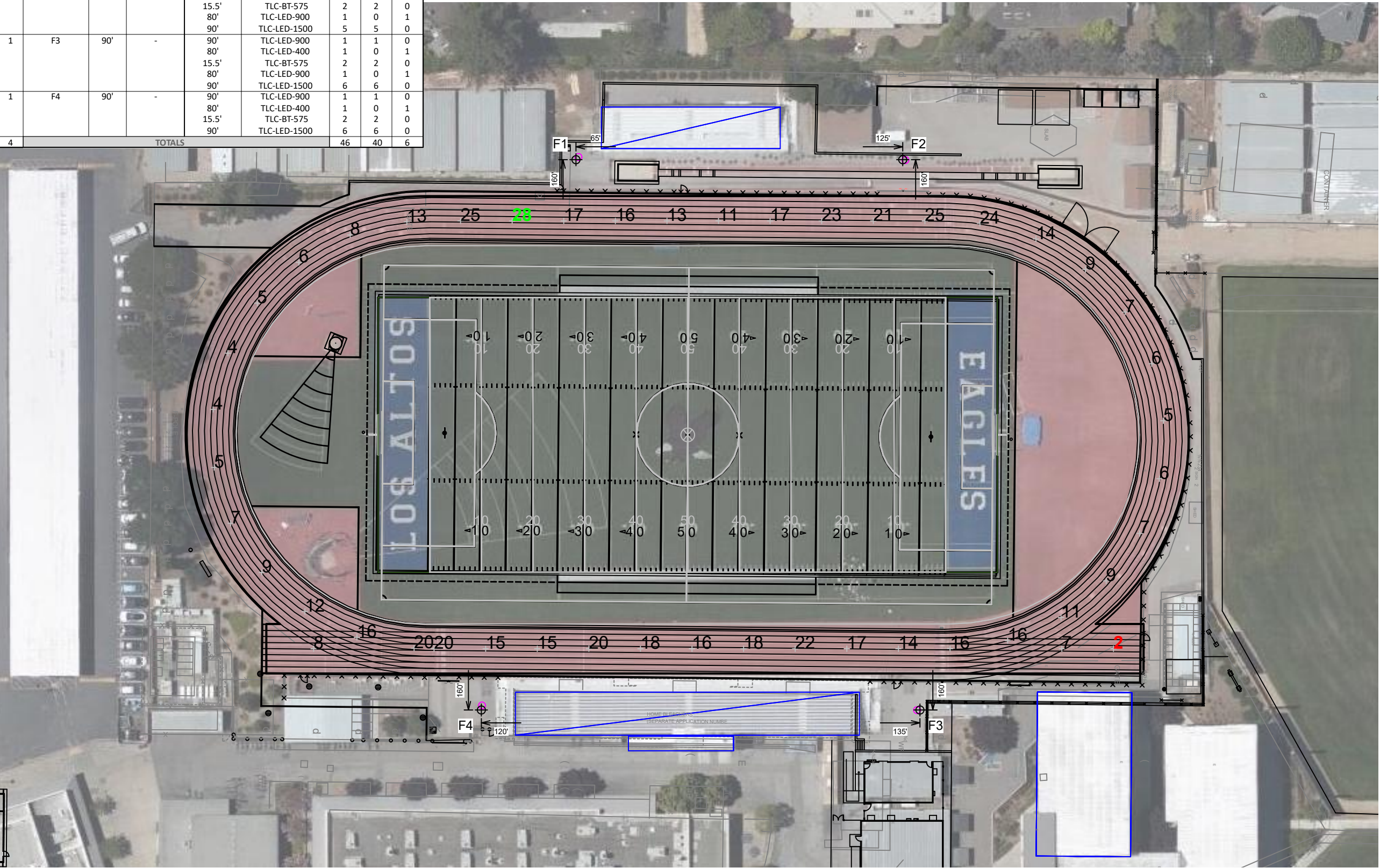
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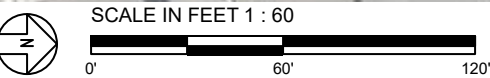
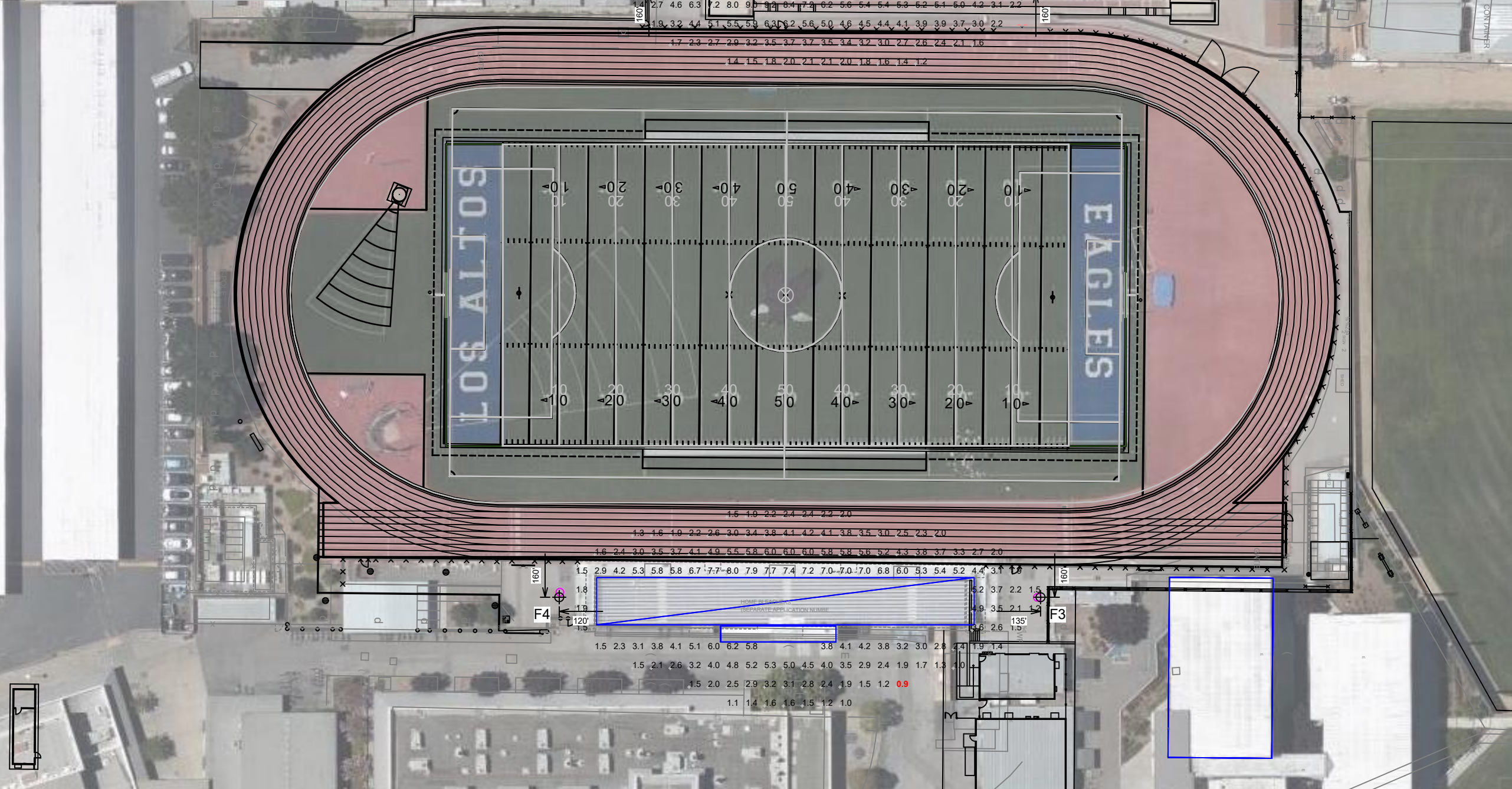
ILLUMINATION SUMMARY



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	F1	90'	-	90'	TLC-LED-1500	5	0	5
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	4	0	4
1	F2	90'	-	90'	TLC-LED-900	4	0	4
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-900	1	1	0
1	F3	90'	-	90'	TLC-LED-1500	5	0	5
				90'	TLC-LED-900	1	0	1
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
1	F4	90'	-	80'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	6	0	6
				90'	TLC-LED-1500	1	0	1
4	TOTALS					46	6	40



Los Altos HS Football
Los Altos, CA

GRID SUMMARY	
Name:	Egress
Size:	360' x 160'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
MAINTAINED HORIZONTAL FOOTCANDLES			
	Entire Grid		
Scan Average:	3.80		
Maximum:	11		
Minimum:	1		
Avg / Min:	4.44		
Max / Min:	12.32		
UG (adjacent pts):	2.48		
CU:	0.28		
No. of Points:	283		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 46,500 lumens		
No. of Luminaires:	6		
Total Load:	3.38 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000
Reported per TM-21-11. See luminaire datasheet for details.			

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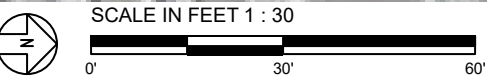
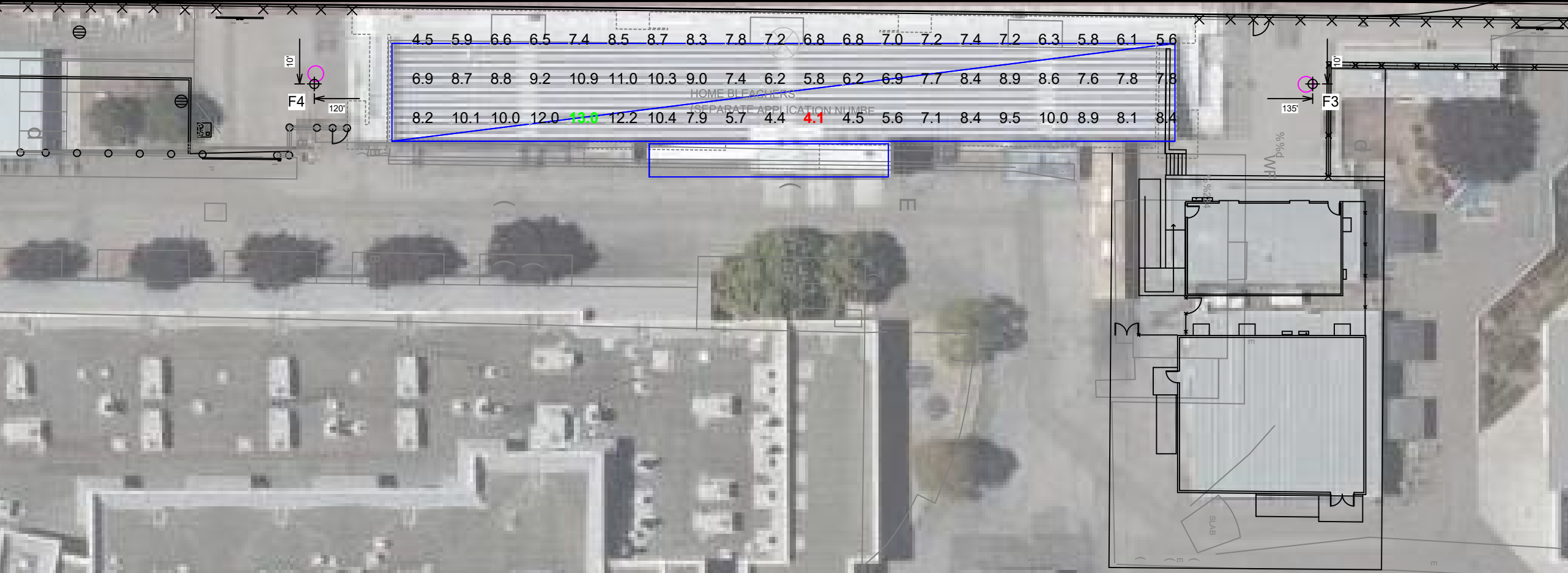
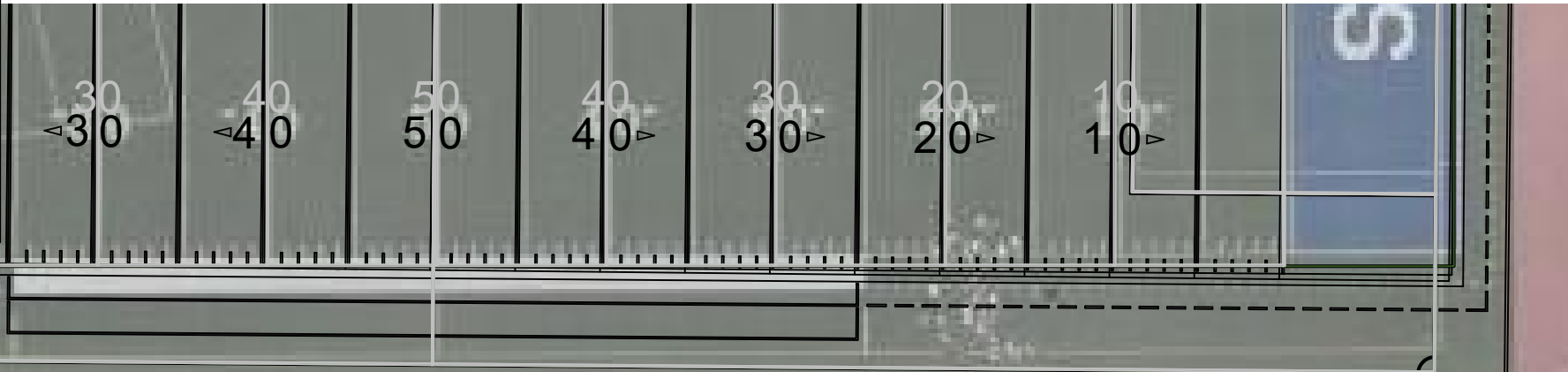
Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

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

Installation Requirements: Results assume ± 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
1	F1	90'	-	90'	TLC-LED-1500	5	0	5
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	4	0	4
1	F2	90'	-	90'	TLC-LED-900	4	0	4
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-900	1	1	0
1	F3	90'	-	90'	TLC-LED-1500	5	0	5
				90'	TLC-LED-900	1	0	1
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
1	F4	90'	-	90'	TLC-LED-900	1	0	1
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-1500	6	0	6
4	TOTALS					46	6	40



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

Los Altos HS Football

Los Altos, CA

GRID SUMMARY	
Name:	Home Bleacher Egress
Spacing:	10.0' x 10.0'
Height:	18.2' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid	
Scan Average:	7.84
Maximum:	13
Minimum:	4
Avg / Min:	1.92
Max / Min:	3.20
UG (adjacent pts):	0.00
CU:	0.12
No. of Points:	60

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	89,600 / 46,500 lumens
No. of Luminaires:	6
Total Load:	3.38 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000

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

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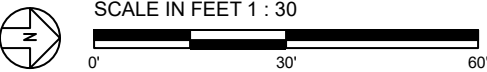
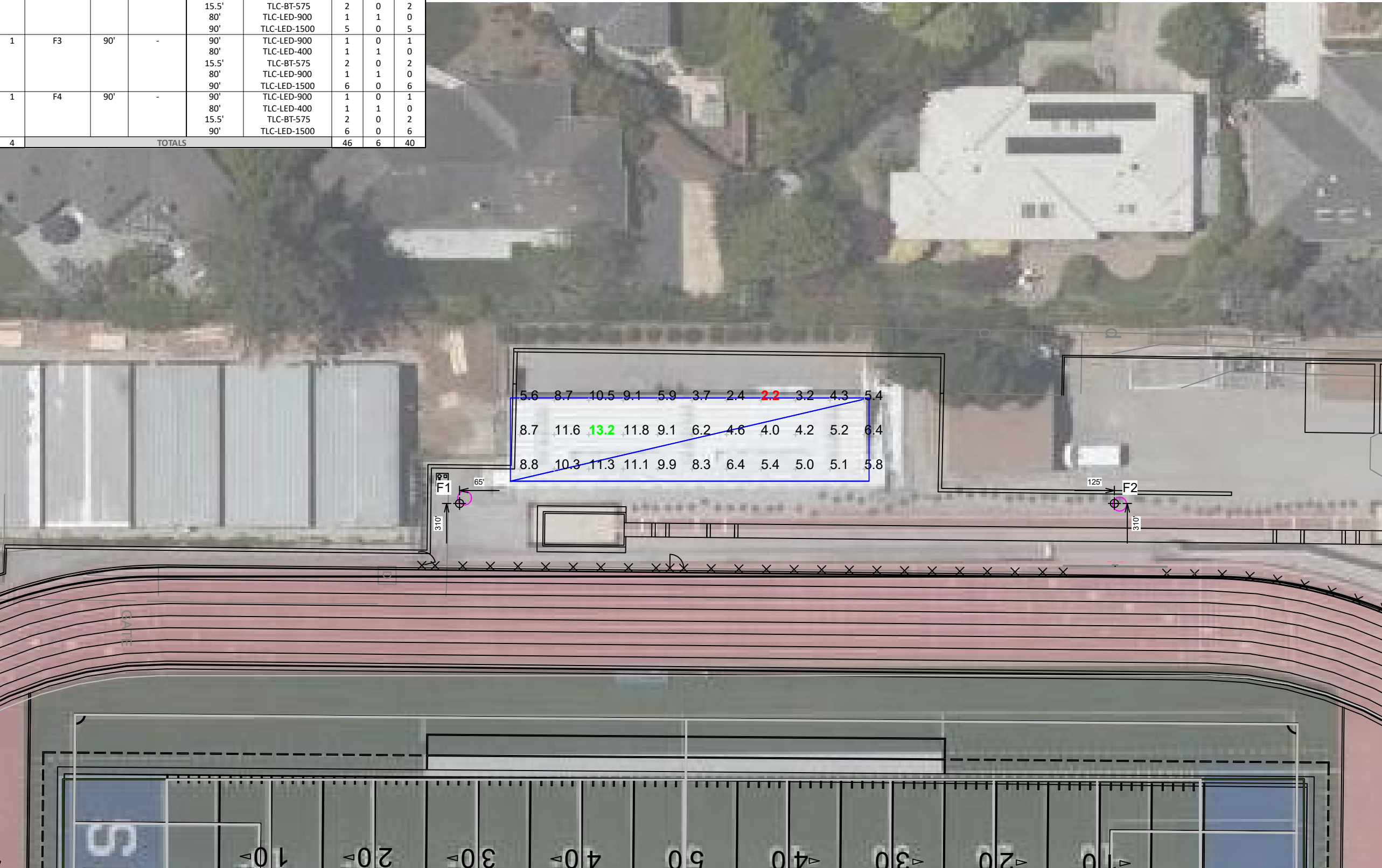
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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	F1	90'	-	90'	TLC-LED-1500	5	0	5
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	4	0	4
1	F2	90'	-	90'	TLC-LED-900	4	0	4
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-900	1	1	0
1	F3	90'	-	90'	TLC-LED-1500	5	0	5
				90'	TLC-LED-900	1	0	1
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
1	F4	90'	-	80'	TLC-LED-900	1	1	0
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	6	0	6
4	TOTALS					46	6	40



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

Los Altos HS Football

Los Altos, CA

GRID SUMMARY	
Name:	Away Bleachers Egress
Spacing:	10.0' x 10.0'
Height:	8.2' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid	
Scan Average:	7.07
Maximum:	13
Minimum:	2
Avg / Min:	3.16
Max / Min:	5.88
UG (adjacent pts):	0.00
CU:	0.06
No. of Points:	33

LUMINAIRE INFORMATION

Color / CRI:	5700K - 75 CRI
Luminaire Output:	89,600 / 46,500 lumens
No. of Luminaires:	6
Total Load:	3.38 kW

Lumen Maintenance

Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-400	>81,000	>81,000	>81,000

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

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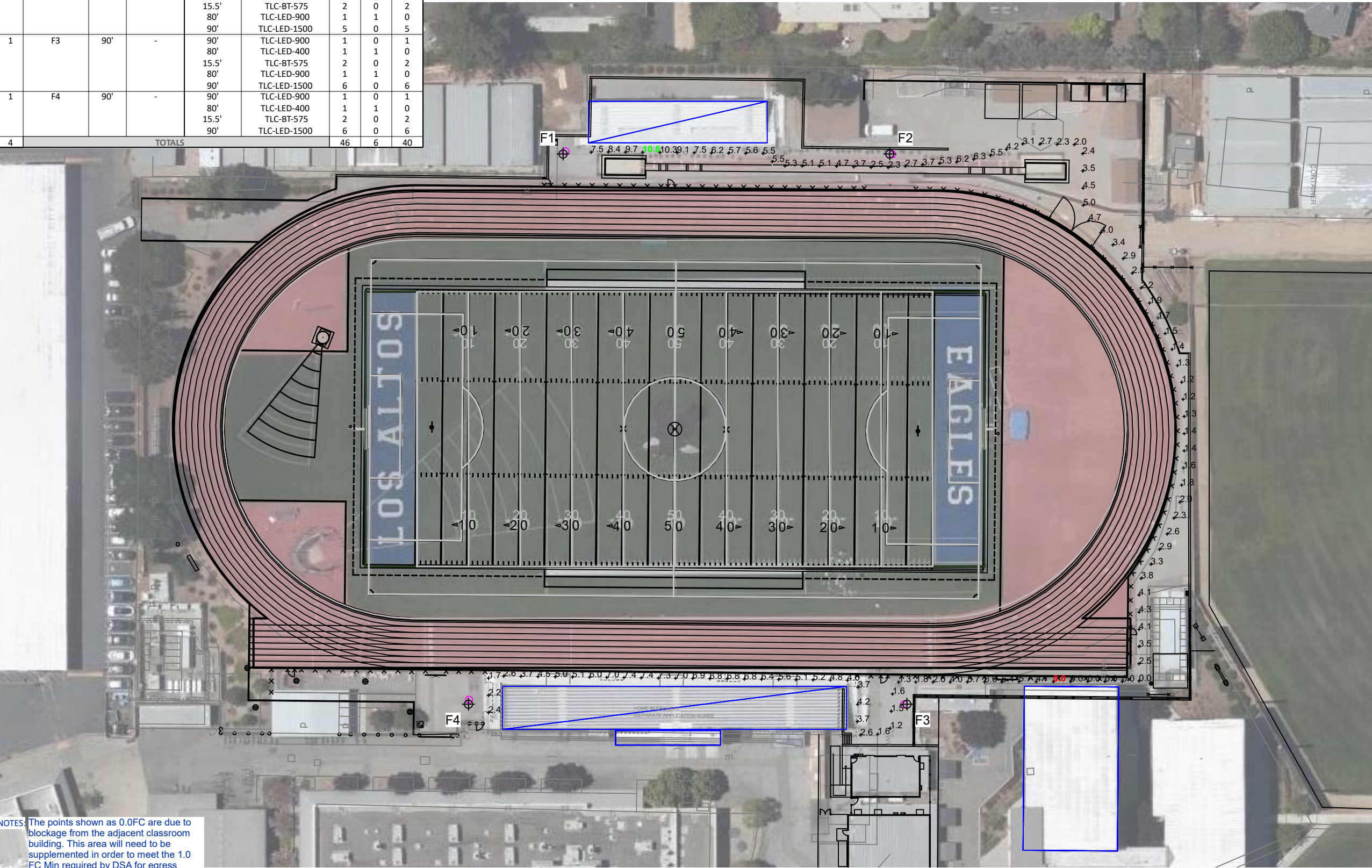
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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
1	F1	90'	-	90'	TLC-LED-1500	5	0	5
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	4	0	4
1	F2	90'	-	90'	TLC-LED-900	4	0	4
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
				80'	TLC-LED-900	1	1	0
1	F3	90'	-	90'	TLC-LED-1500	5	0	5
				90'	TLC-LED-900	1	0	1
				80'	TLC-LED-400	1	1	0
				15.5'	TLC-BT-575	2	0	2
1	F4	90'	-	80'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	0	2
				90'	TLC-LED-900	6	0	6
				90'	TLC-LED-1500	1	0	1
4	TOTALS					46	6	40



Los Altos HS Football
Los Altos, CA

GRID SUMMARY	
Name:	Path of Egress
Spacing:	10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY			
HORIZONTAL FOOTCANDLES			
	Entire Grid		
Scan Average:	3.9903		
Maximum:	10.49		
Minimum:	0.00		
No. of Points:	110		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 46,500 lumens		
No. of Luminaires:	6		
Total Load:	3.38 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-400	>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.

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.

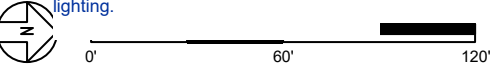
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



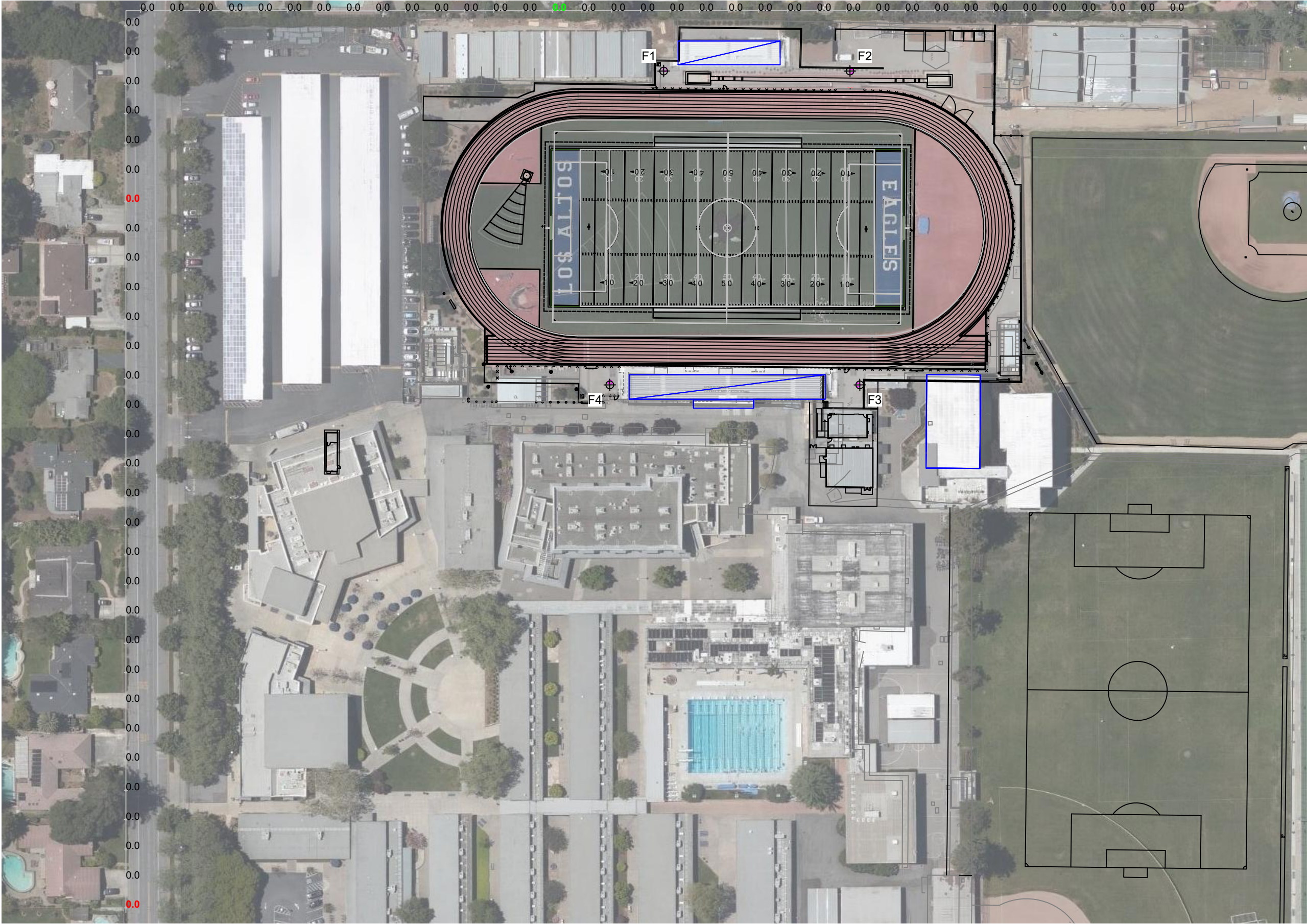
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ILLUMINATION SUMMARY

NOTES: The points shown as 0.0FC are due to blockage from the adjacent classroom building. This area will need to be supplemented in order to meet the 1.0 FC Min required by DSA for egress lighting.



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



Los Altos HS Football

Los Altos, CA

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

ILLUMINATION SUMMARY			
HORIZONTAL FOOTCANDLES			
Scan Average:	Entire Grid		
	0.0044		
	Maximum: 0.03		
	Minimum: 0.00		
No. of Points:	67		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 160,000 / 52,000 lumens		
No. of Luminaires:	40		
Total Load:	44.96 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>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.

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.

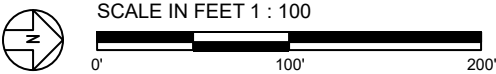
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



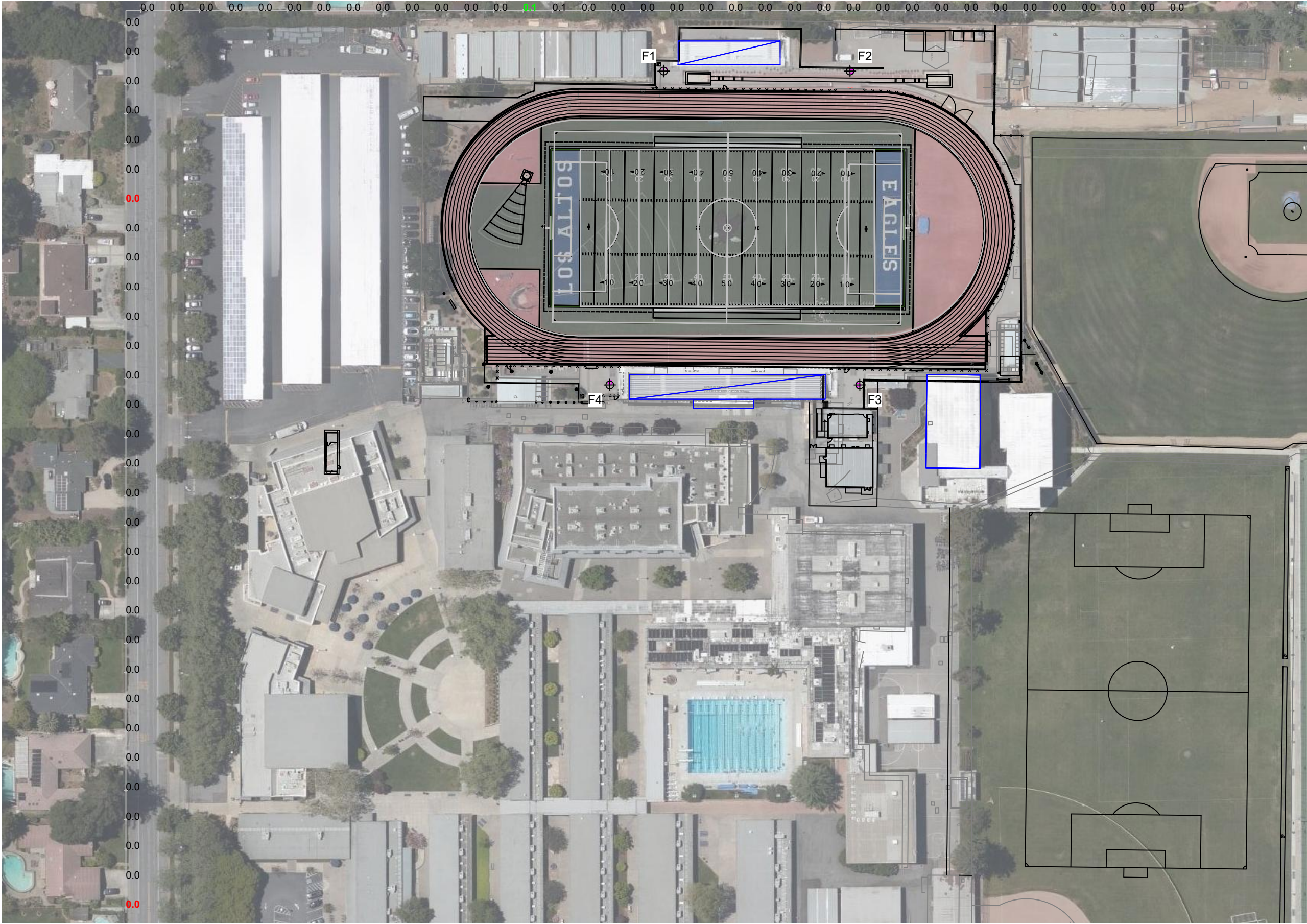
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ILLUMINATION SUMMARY



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



Los Altos HS Football

Los Altos, CA

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

ILLUMINATION SUMMARY			
MAX VERTICAL FOOTCANDLES			
Scan Average:	Entire Grid		
	0.0095		
	Maximum: 0.06		
	Minimum: 0.00		
No. of Points:	67		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 160,000 / 52,000 lumens		
No. of Luminaires:	40		
Total Load:	44.96 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>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.

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.

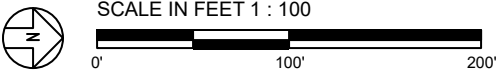
Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



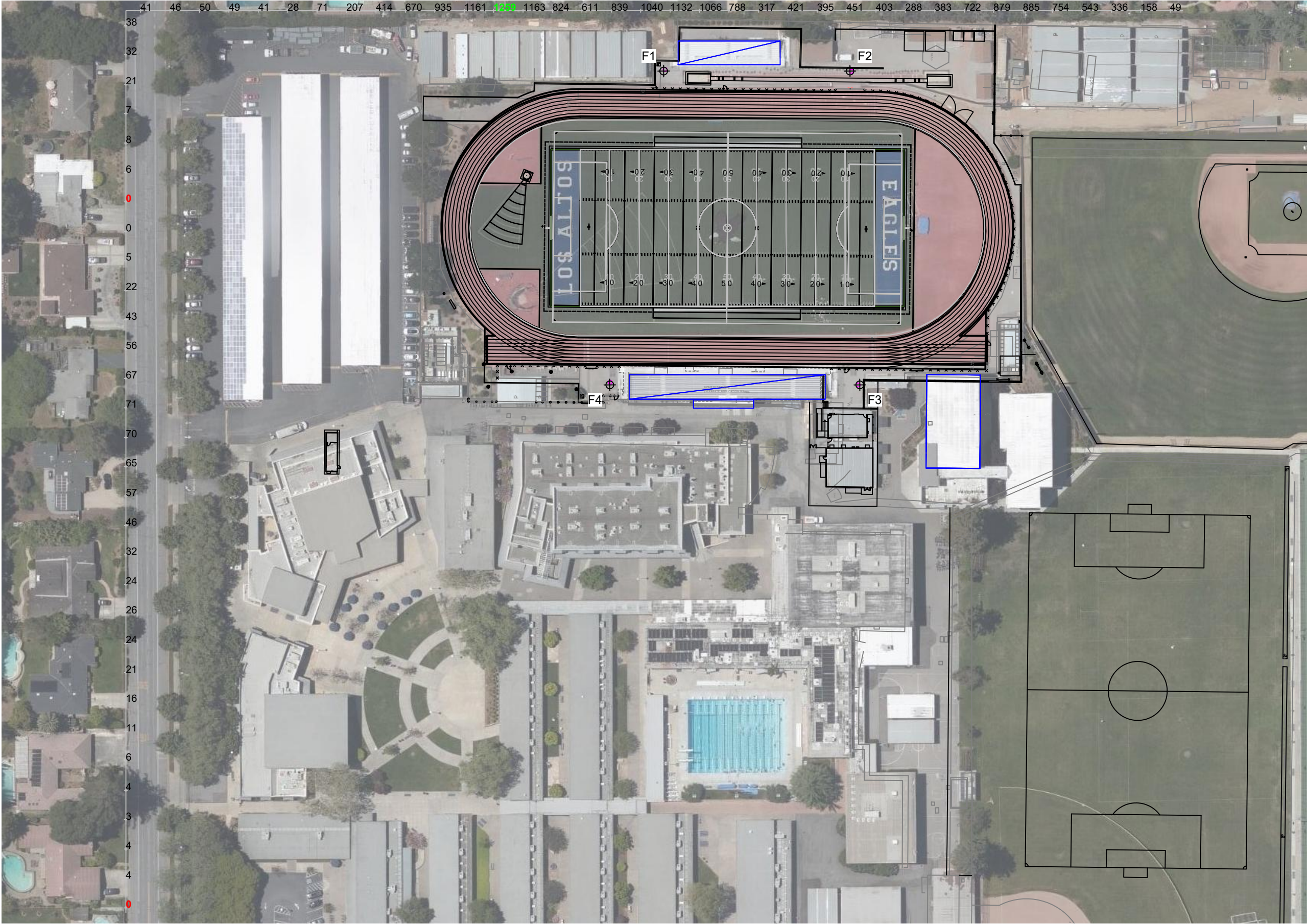
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ILLUMINATION SUMMARY



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



Los Altos HS Football

Los Altos, CA

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

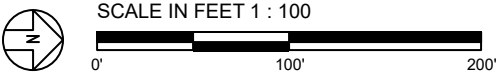
ILLUMINATION SUMMARY			
CANDELA (PER FIXTURE)			
Scan Average:	Entire Grid		
	301.5890		
	Maximum: 1258.74		
	Minimum: 0.00		
No. of Points:	67		
LUMINAIRE INFORMATION			
Color / CRI:	5700K - 75 CRI		
Luminaire Output:	89,600 / 160,000 / 52,000 lumens		
No. of Luminaires:	40		
Total Load:	44.96 kW		
Lumen Maintenance			
Luminaire Type	L90 hrs	L80 hrs	L70 hrs
TLC-LED-900	>81,000	>81,000	>81,000
TLC-LED-1500	>81,000	>81,000	>81,000
TLC-BT-575	>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.

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

Los Altos HS Football
Los Altos, CA

EQUIPMENT LAYOUT

INCLUDES:

- Bleachers
- Football
- Soccer
- 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 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
1	F1	90'	-	90'	TLC-LED-1500	5
				80'	TLC-LED-400	1
				15.5'	TLC-BT-575	2
				90'	TLC-LED-900	4
1	F2	90'	-	90'	TLC-LED-900	4
				80'	TLC-LED-400	1
				15.5'	TLC-BT-575	2
				80'	TLC-LED-900	1
1	F3	90'	-	90'	TLC-LED-1500	5
				80'	TLC-LED-900	1
				15.5'	TLC-BT-575	2
				80'	TLC-LED-900	1
1	F4	90'	-	90'	TLC-LED-1500	6
				90'	TLC-LED-900	1
				80'	TLC-LED-400	1
				15.5'	TLC-BT-575	2
1	F4	90'	-	90'	TLC-LED-1500	6
				90'	TLC-LED-900	1
				80'	TLC-LED-400	1
				15.5'	TLC-BT-575	2
4	TOTALS					46

SINGLE LUMINAIRE AMPERAGE DRAW CHART

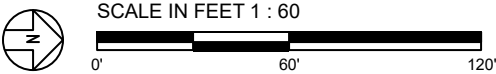
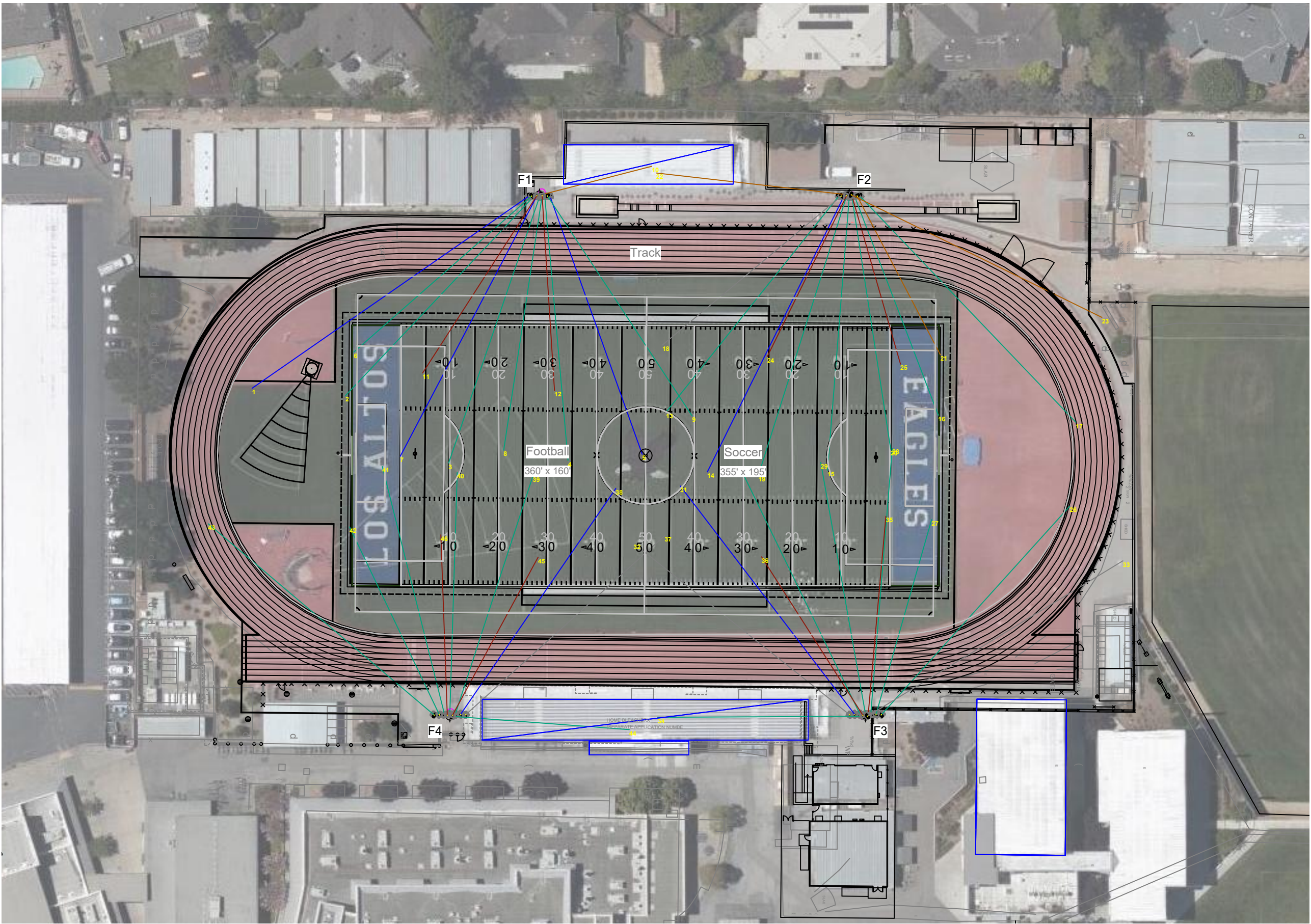
Ballast Specifications (.90 min power factor)	Line Amperage Per Luminaire (max draw)						
	208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	380 (60)	480 (60)
Single Phase Voltage	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-900	5.3	5.0	4.6	4.0	3.2	2.9	2.3
TLC-LED-1500	8.5	8.1	7.4	6.4	5.1	4.7	3.7
TLC-BT-575	3.4	3.2	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



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EQUIPMENT LAYOUT



ENGINEERED DESIGN By: Daniel Lohman • File #193131D • 02-Jan-20

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