

McKeel Academy Baseball And Softball

Lakeland,FL

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
A1-A2	70'	70'	5	TLC-LED-1200	5.85 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
B1	70'	70'	2	TLC-LED-1200	2.34 kW	A
		70'	3	TLC-LED-1500	4.23 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
		60'	2	TLC-LED-1500	2.82 kW	A
B2	70'	70'	2	TLC-LED-1200	2.34 kW	A
		70'	3	TLC-LED-1500	4.23 kW	A
		16'	1	TLC-BT-575	0.58 kW	A
C1	70'	70'	1	TLC-LED-1200	1.17 kW	A
		70'	2	TLC-LED-1500	2.82 kW	A
		70'	1	TLC-LED-900	0.88 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
C2	70'	70'	2	TLC-LED-1200	2.34 kW	A
		70'	2	TLC-LED-1500	2.82 kW	A
		16'	2	TLC-BT-575	1.15 kW	A
6			38		42.29 kW	

Circuit Summary			
Circuit	Description	Load	Fixture Qty
A	Baseball	42.29 kW	38

Fixture Type Summary							
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity
TLC-LED-1200	LED 5700K - 75 CRI	1170W	150,000	>120,000	>120,000	>120,000	17
TLC-LED-1500	LED 5700K - 75 CRI	1410W	181,000	>120,000	>120,000	>120,000	12
TLC-BT-575	LED 5700K - 75 CRI	575W	52,000	>120,000	>120,000	>120,000	8
TLC-LED-900	LED 5700K - 75 CRI	880W	104,000	>120,000	>120,000	>120,000	1

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-1200		6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-LED-1500		8.4	7.9	7.3	6.3	5.0	4.6	3.6
TLC-BT-575		3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-900		5.2	4.9	4.5	3.9	3.1	2.9	2.3

Light Level Summary

Calculation Grid Summary								
Grid Name	Calculation Metric	Illumination					Circuits	Fixture Qty
		Ave	Min	Max	Max/Min	Ave/Min		
Baseball (Infield)	Horizontal Illuminance	52.1	37	62	1.69	1.41	A	38
Baseball (Outfield)	Horizontal Illuminance	31.3	20	47	2.31	1.57	A	38

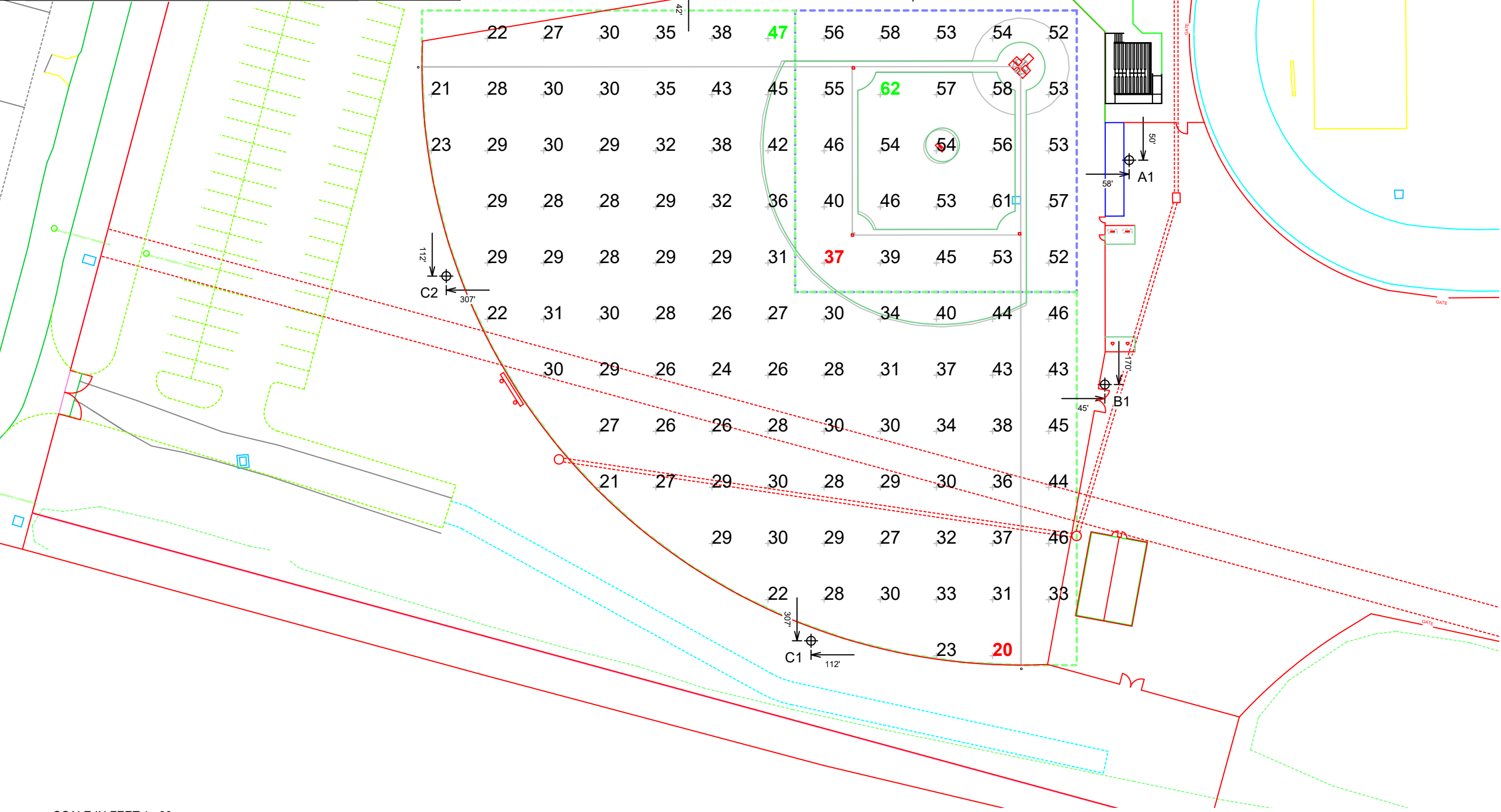
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EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	5	5	0
1	B1	70'	-	15.5'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1500	2	2	0
				70'	TLC-LED-1500	3	3	0
1	B2	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1500	3	3	0
1	C1	70'	-	70'	TLC-LED-1500	2	2	0
				70'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	2	0
1	C2	70'	-	70'	TLC-LED-1200	1	1	0
				70'	TLC-LED-1500	2	2	0
				15.5'	TLC-BT-575	2	2	0
6	TOTALS			70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	2	2	0



McKeel Academy Baseball And Softball
Lakeland,FL

GRID SUMMARY	
Name:	Baseball
Size:	320'/320'/320' - basepath 90'
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

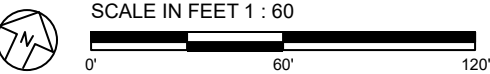
ILLUMINATION SUMMARY		
MAINTAINED HORIZONTAL FOOTCANDLES		
	Infield	Outfield
Guaranteed Average:	50	30
Scan Average:	52.05	31.33
Maximum:	62	47
Minimum:	37	20
Avg / Min:	1.42	1.53
Guaranteed Max / Min:	2	2.5
Max / Min:	1.69	2.31
UG (adjacent pts):	1.19	1.51
CU:	0.67	
CV:	0.12	0.20
No. of Points:	25	86
LUMINAIRE INFORMATION		
Applied Circuits:	A	
No. of Luminaires:	38	
Total Load:	42.29 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
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	5	5	0
1	B1	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1500	2	2	0
				70'	TLC-LED-1500	3	3	0
1	B2	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1500	3	3	0
1	C1	70'	-	70'	TLC-LED-1500	2	2	0
				70'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	1	1	0
1	C2	70'	-	70'	TLC-LED-1500	2	2	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	2	2	0
6	TOTALS					38	38	0

McKeel Academy Baseball And Softball
Lakeland,FL

GRID SUMMARY	
Name:	Bulpen 1st Base
Size:	320'/320'/320' - basepath 90'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	38.30
Maximum:	41
Minimum:	35
Avg / Min:	1.11
Max / Min:	1.18
UG (adjacent pts):	1.18
CU:	0.01
CV:	0.06
No. of Points:	7

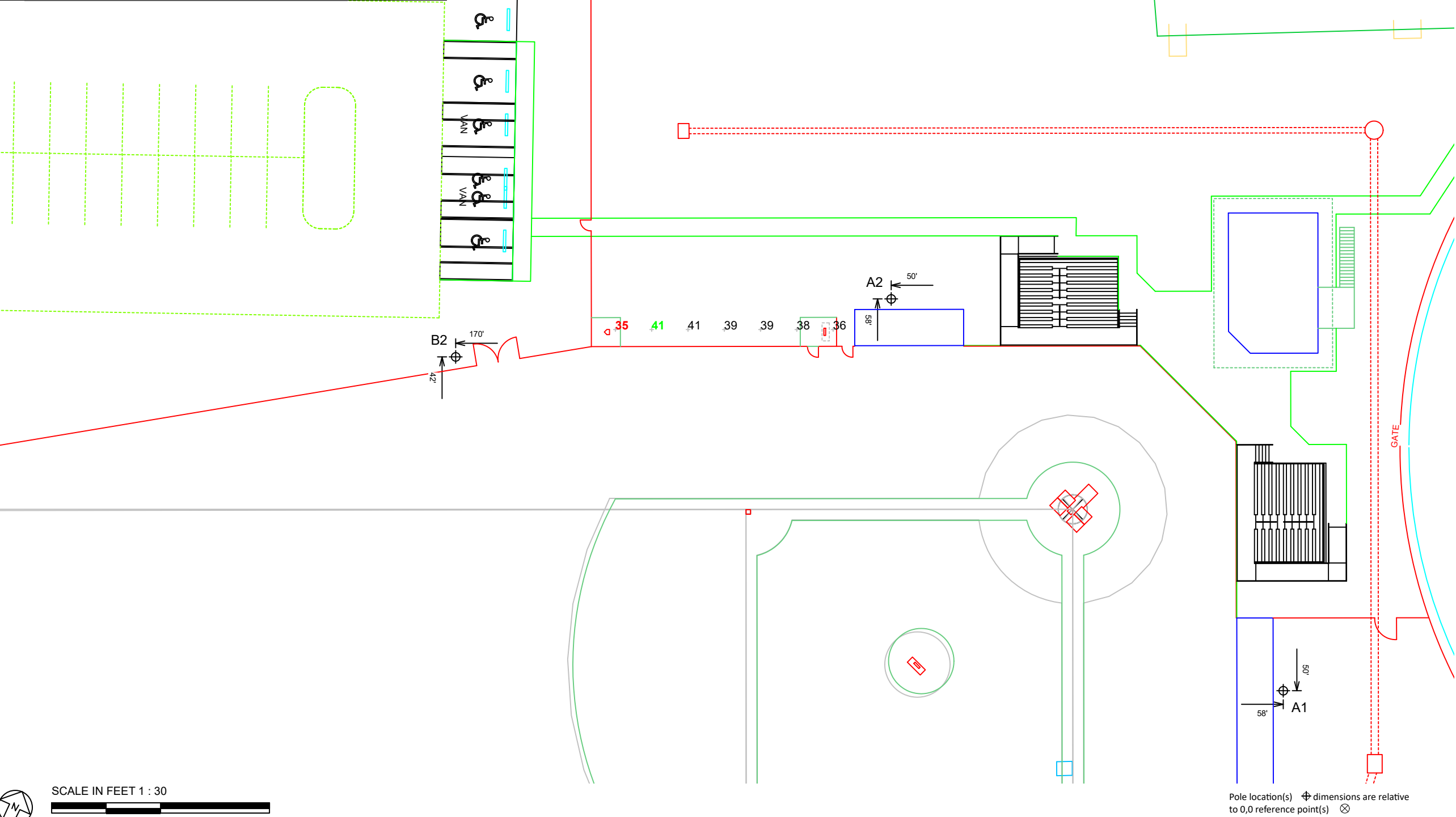
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	38
Total Load:	42.29 kW

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.

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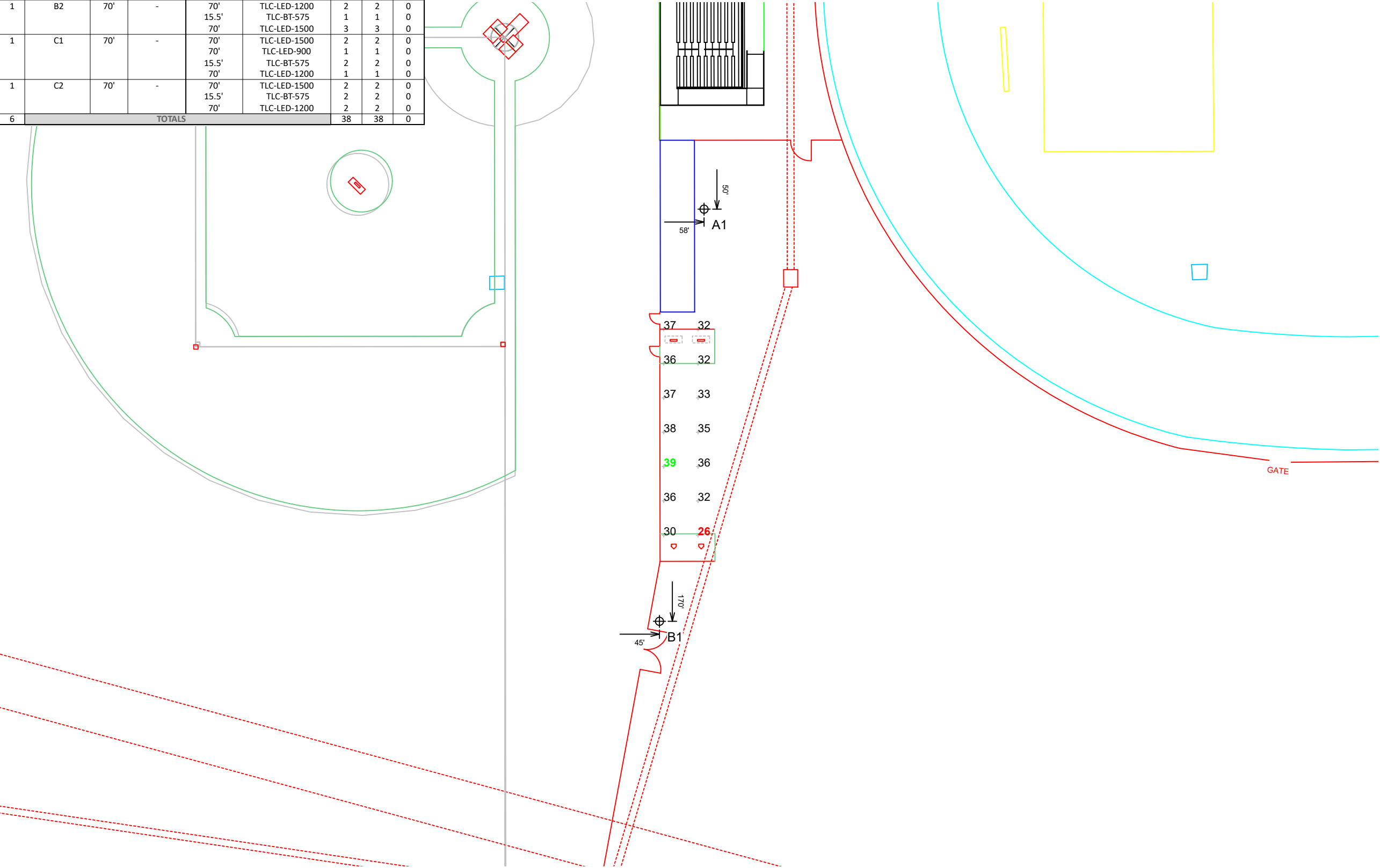


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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	5	5	0
1	B1	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1500	2	2	0
				70'	TLC-LED-1500	3	3	0
1	B2	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1500	3	3	0
1	C1	70'	-	70'	TLC-LED-1500	2	2	0
				70'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	1	1	0
1	C2	70'	-	70'	TLC-LED-1500	2	2	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	2	2	0
6	TOTALS					38	38	0



McKeel Academy Baseball And Softball
Lakeland,FL

GRID SUMMARY	
Name:	Bulpen 3rd Base
Size:	320'/320'/320' - basepath 90'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

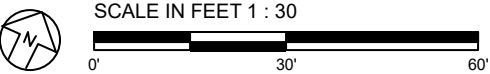
ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	34.17
Maximum:	39
Minimum:	26
Avg / Min:	1.29
Max / Min:	1.46
UG (adjacent pts):	1.21
CU:	0.01
CV:	0.10
No. of Points:	14
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	38
Total Load:	42.29 kW

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) ⊗

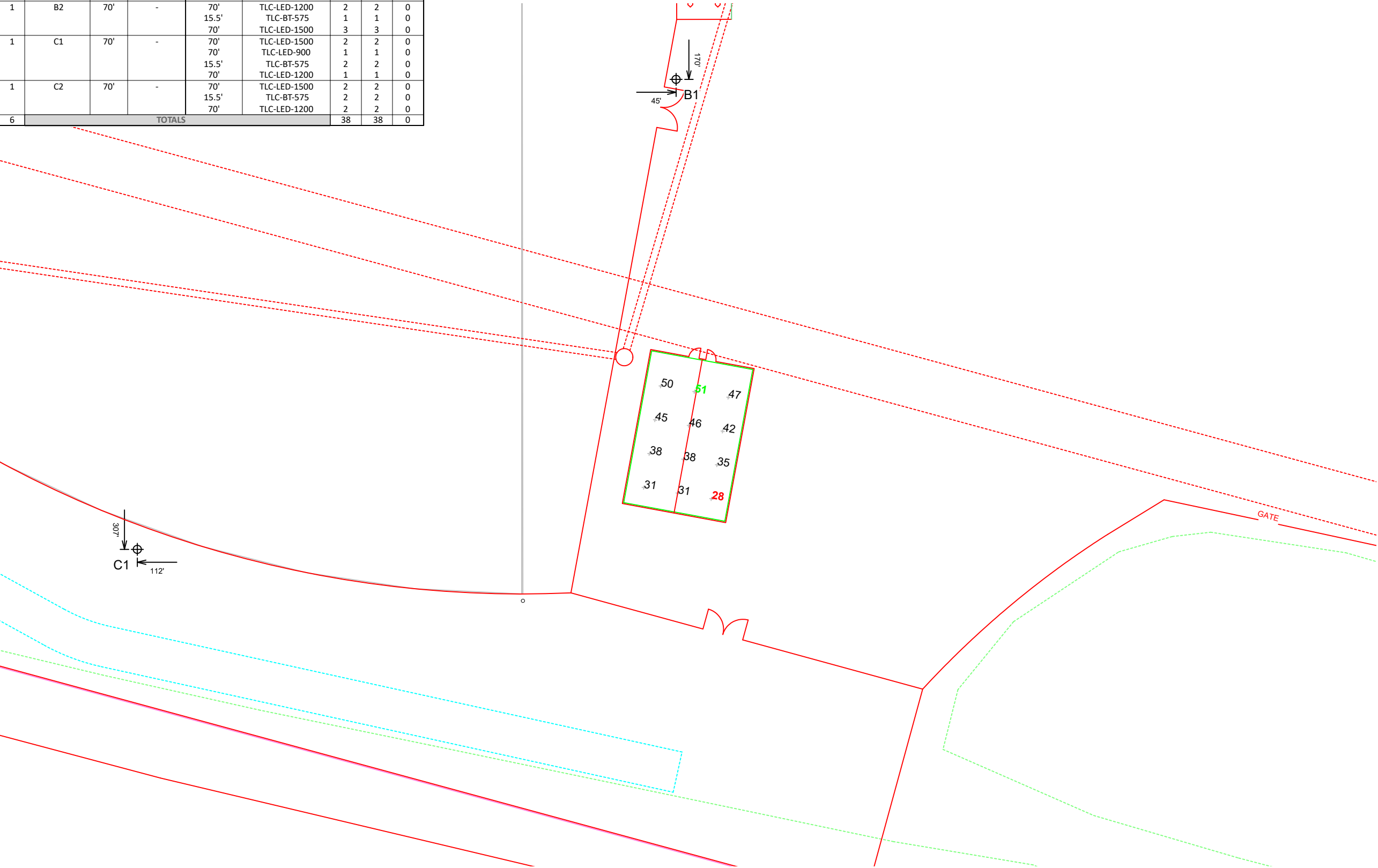


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ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN								
Pole				Luminaires				
QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
2	A1-A2	70'	-	15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1200	5	5	0
1	B1	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				60'	TLC-LED-1500	2	2	0
				70'	TLC-LED-1500	3	3	0
1	B2	70'	-	70'	TLC-LED-1200	2	2	0
				15.5'	TLC-BT-575	1	1	0
				70'	TLC-LED-1500	3	3	0
1	C1	70'	-	70'	TLC-LED-1500	2	2	0
				70'	TLC-LED-900	1	1	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	1	1	0
1	C2	70'	-	70'	TLC-LED-1500	2	2	0
				15.5'	TLC-BT-575	2	2	0
				70'	TLC-LED-1200	2	2	0
6	TOTALS					38	38	0



McKeel Academy Baseball And Softball
Lakeland,FL

GRID SUMMARY	
Name:	BB Batting Cage
Size:	320'/320'/320' - basepath 90'
Spacing:	10.0' x 10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
MAINTAINED HORIZONTAL FOOTCANDLES	
	Entire Grid
Scan Average:	40.11
Maximum:	51
Minimum:	28
Avg / Min:	1.45
Max / Min:	1.83
UG (adjacent pts):	1.27
CU:	0.01
CV:	0.20
No. of Points:	12
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	38
Total Load:	42.29 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.

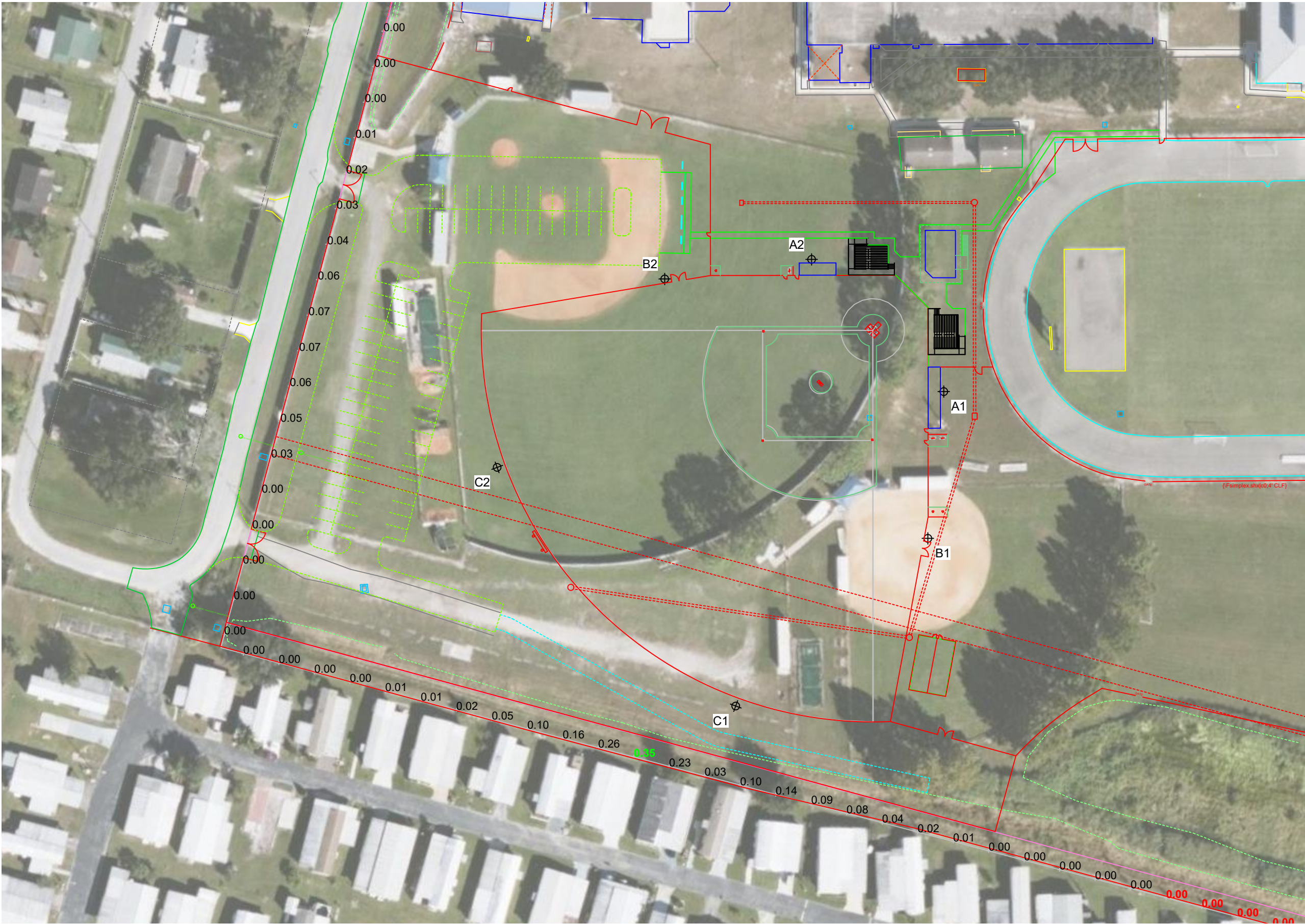
Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

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



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Lakeland, FL

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

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	Entire Grid 0.0309
Maximum:	0.35
Minimum:	0.00
No. of Points:	69
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	38
Total Load:	42.29 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.

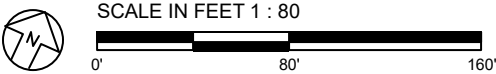
Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY



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

EQUIPMENT LAYOUT

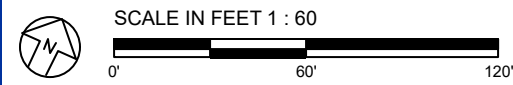
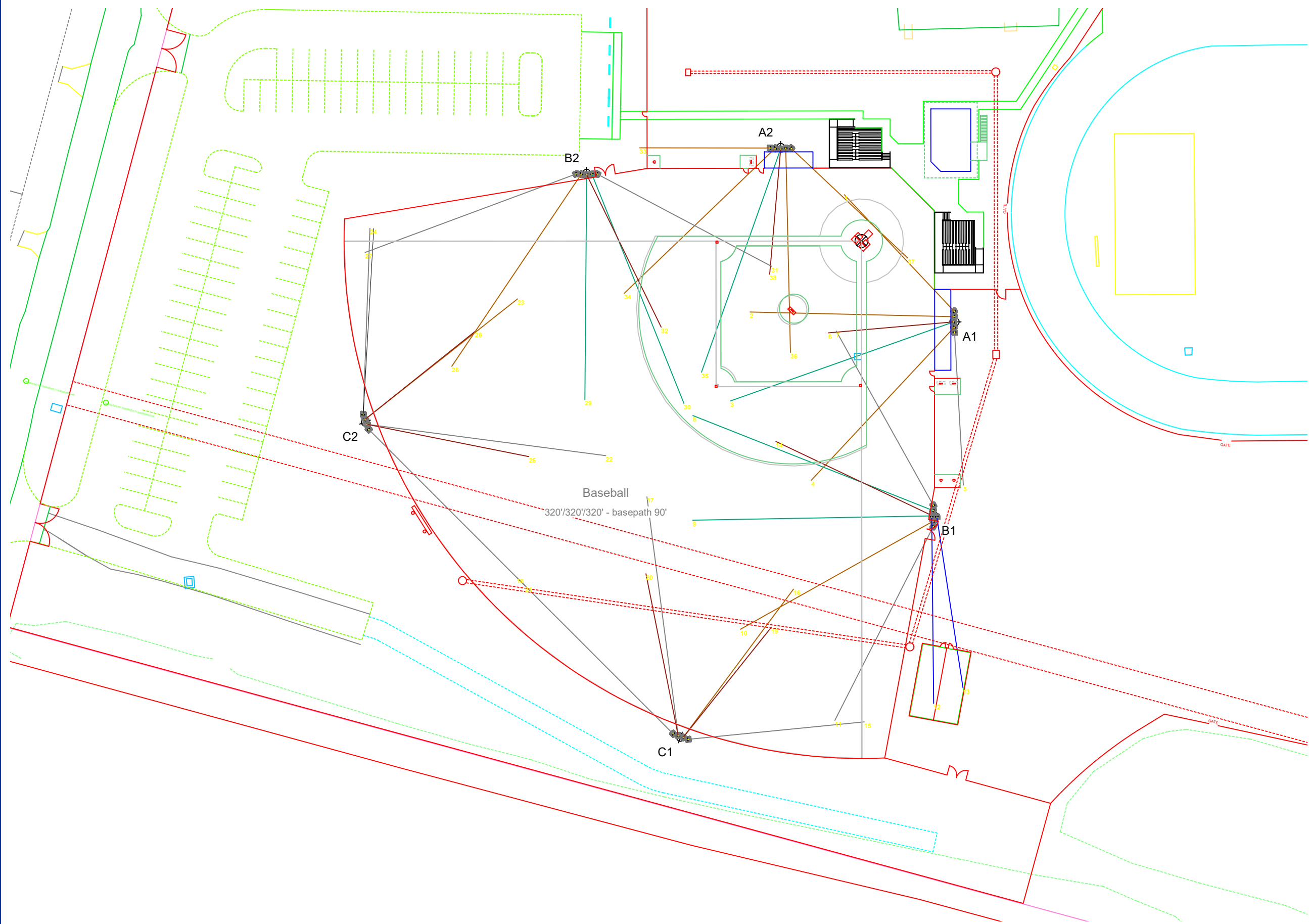
INCLUDES:
· Baseball

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	CLASS	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A1-A2	LSS70C	-	15.5'	TLC-BT-575	1
				70'	TLC-LED-1200	5
1	B1	LSS70D	-	70'	TLC-LED-1200	2
				15.5'	TLC-BT-575	1
				60'	TLC-LED-1500	2
				70'	TLC-LED-1500	3
1	B2	LSS70D	-	70'	TLC-LED-1200	2
				15.5'	TLC-BT-575	1
				70'	TLC-LED-1500	3
1	C1	LSS70C	-	70'	TLC-LED-1500	2
				70'	TLC-LED-900	1
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1200	1
1	C2	LSS70C	-	70'	TLC-LED-1500	2
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1200	2
6	TOTALS					38

SINGLE LUMINAIRE AMPERAGE DRAW CHART							
Driver (.90 min power factor)		Line Amperage Per Luminaire (max draw)					
Single Phase Voltage		208 (60)	220 (60)	240 (60)	277 (60)	347 (60)	480 (60)
TLC-LED-1500		8.4	7.9	7.3	6.3	5.0	4.6
TLC-LED-1200		6.9	6.5	6.0	5.2	4.2	3.8
TLC-BT-575		3.4	3.2	2.9	2.5	2.0	1.8
TLC-LED-900		5.2	4.9	4.5	3.9	3.1	2.9



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



EQUIPMENT LAYOUT

INCLUDES:

· Baseball

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

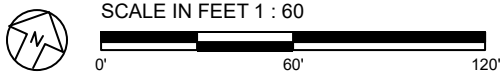
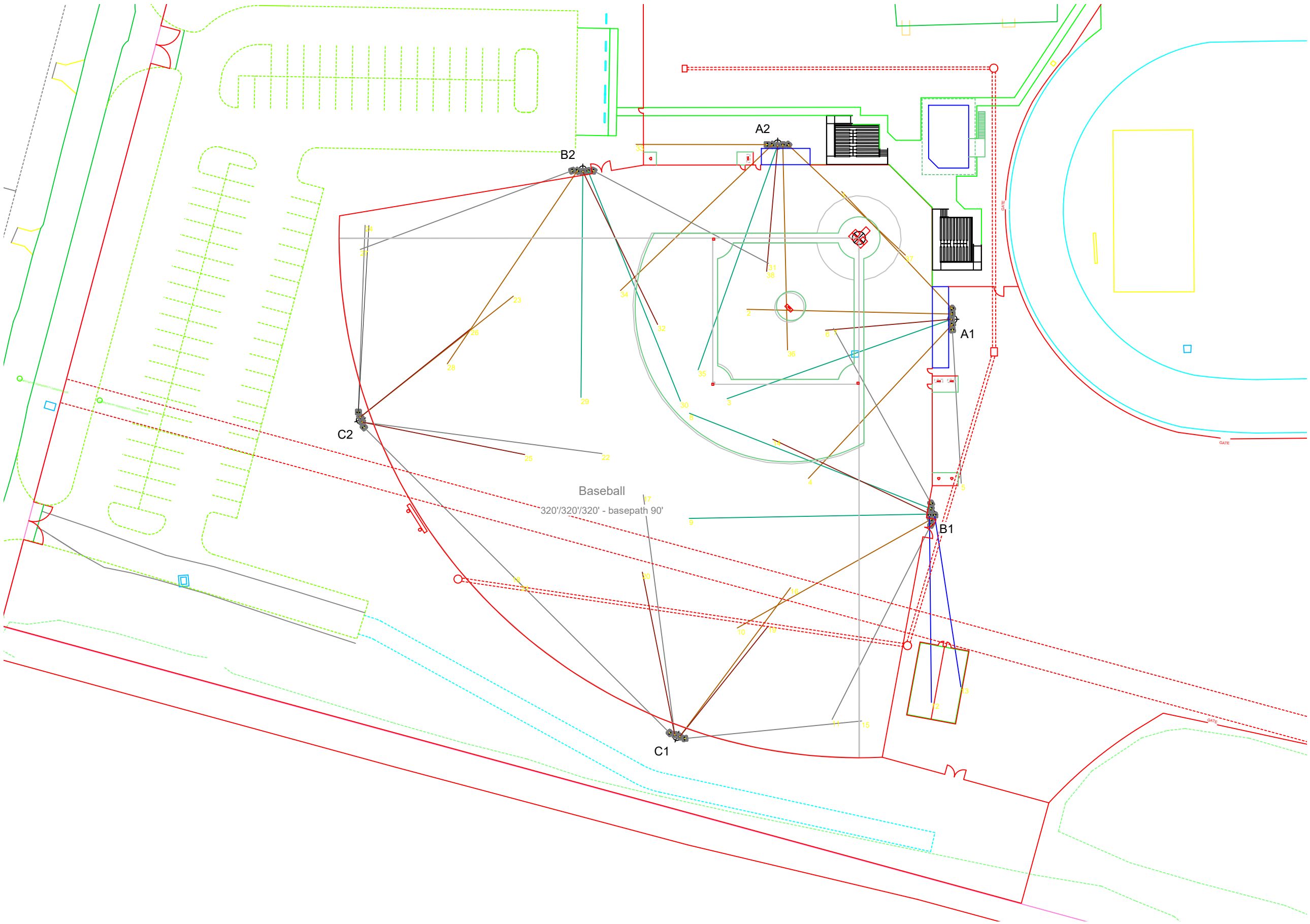
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

Pole				Luminaires		
QTY	LOCATION	CLASS	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE
2	A1-A2	LSS70C	-	15.5'	TLC-BT-575	1
				70'	TLC-LED-1200	5
1	B1	LSS70D	-	70'	TLC-LED-1200	2
				15.5'	TLC-BT-575	1
				60'	TLC-LED-1500	2
				70'	TLC-LED-1500	3
1	B2	LSS70D	-	70'	TLC-LED-1200	2
				15.5'	TLC-BT-575	1
				70'	TLC-LED-1500	3
1	C1	LSS70C	-	70'	TLC-LED-1500	2
				70'	TLC-LED-900	1
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1200	1
1	C2	LSS70C	-	70'	TLC-LED-1500	2
				15.5'	TLC-BT-575	2
				70'	TLC-LED-1200	2
6	TOTALS					38

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-1500	8.4	7.9	7.3	6.3	5.0	4.6	3.6
TLC-LED-1200	6.9	6.5	6.0	5.2	4.2	3.8	3.0
TLC-BT-575	3.4	3.2	2.9	2.5	2.0	1.8	1.5
TLC-LED-900	5.2	4.9	4.5	3.9	3.1	2.9	2.3



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



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