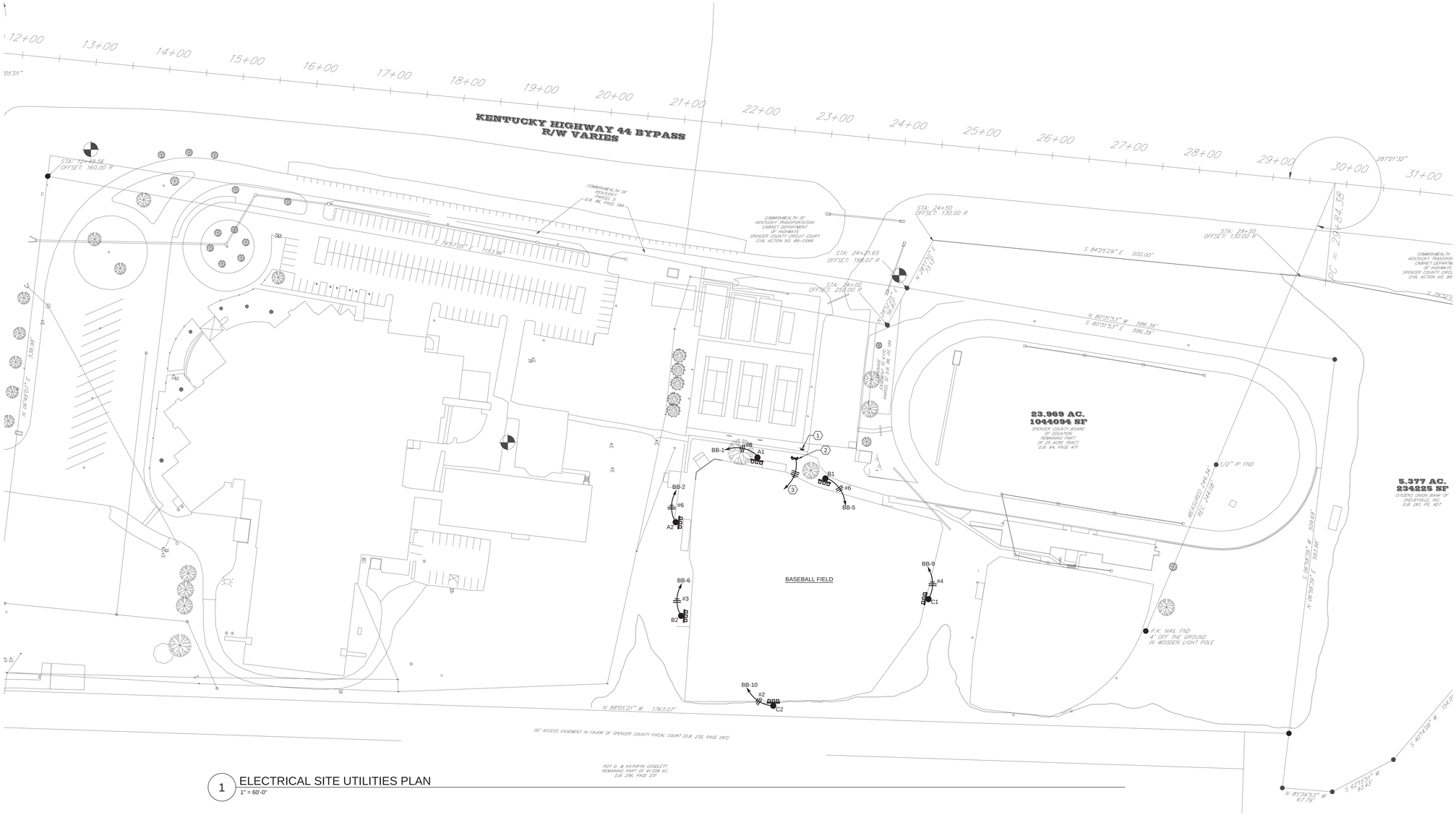

1 ELECTRICAL SITE UTILITIES PLAN

1" = 60'-0"

PRELIMINARY FOUNDATION AND POLE ASSEMBLY DRAWING

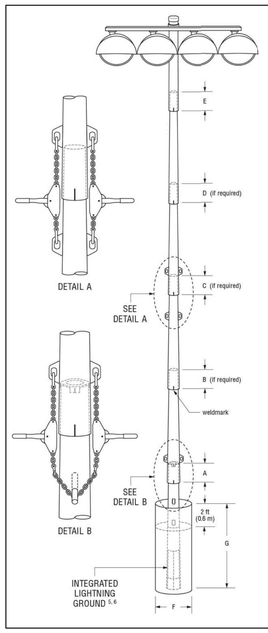

TABLE 1: POLE ASSEMBLY

POLE ID	MOUNTING HEIGHT ft (m)	# OF LUMINAIRES	ASSEMBLED POLE WEIGHT [1] lb (kg)
A1	70 (21.3)	6	2163 (981)
A2	70 (21.3)	6	2163 (981)
B1	80 (24.4)	8	3293 (1494)
B2	80 (24.4)	8	3293 (1494)
C1	70 (21.3)	7	2253 (1022)
C2	70 (21.3)	7	2253 (1022)

Pole Assembly Notes:
1. Steel pole should overlap concrete base and be seam tight with 1 1/2 ton come-alongs (contractor provided).
2. Align weldmarks on steel sections before assembling.
3. Assembled pole weight includes steel sections, crossarms, luminaires, and electrical components enclosures.
4. This document is not intended for use as an assembly instruction. See *Installation Instructions: Light-Structure Green Lighting System™* for complete assembly procedure.

TABLE 2: FOUNDATION DETAILS

POLE ID	CONCRETE BASE WEIGHT [2] lbf (kg)	BURIAL INFORMATION [3,4] F in (mm)	G ft (m)	CONCRETE BACKFILL [1,2] yd³ (m^3)	CUT BASE	LIGHTNING GROUND [5] TYPE	SUPPLEMENTAL INSTRUCTION
A1	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	
A2	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	
B1	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	
B2	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	
C1	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	
C2	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	

Foundation Notes:
1. Concrete backfill is calculated to 2 ft (0.6m) below grade (no overcage included). Top 2 ft (0.6m) to be class 5 soil compacted to 95% density of surrounding undisturbed soil unless otherwise specified in stamped structural design.
2. Concrete backfill required 3000 lb/in² (20 MPa) minimum unless otherwise specified in stamped structural design.
3. Foundation design per 2012 IBC ,115 mph ,exposure category C ,variation STD [Risk Category II).
4. Assumes IBC class 5 soils.
5. Standard bases include integrated lightning protection. If bases are cut, supplemental lightning protection is required. Contact Musco for materials and instruction.
6. Lightning protection is a manufacturer installed concrete encased electrode and connector. Ground connection is made when concrete base is installed and footing is poured. No additional steps required.

SHEET NOTES

1. EXISTING ATHLETIC FIELD DISTRIBUTION PANEL, 208V/3-PHASE, 800 AMP.
2. NEW BASEBALL FIELD LIGHTING PANEL 'BB' AND MUSCO CONTROLS CABINET, MOUNTED TO UNISTRUT FRAME.
3. NEW PANEL 'BB' TO BE FED FROM EXISTING ATHLETIC FIELDS DISTRIBUTION PANEL (SEE SHEET NOTE #1). FURNISH AN INSTALL A 200 AMP, 3-POLE BREAKER IN SPACES OF EXISTING DISTRIBUTION PANEL AND FEED PANEL 'BB' WITH 4#3/0, #6 GROUND, IN 2" CONDUIT.

POLE SCHEDULE

1. SPORTS LIGHTING POLES A1 AND A2: POLE HEIGHT - 70 FEET.
   (5) 1150 WATT LUMINAIRES PER POLE.
   (1) 575 WATT LUMINAIRE PER POLE.
2. SPORTS LIGHTING POLES B1 AND B2: POLE HEIGHT - 80 FEET.
   (7) 1150 WATT LUMINAIRES PER POLE.
   (1) 575 WATT LUMINAIRE PER POLE.
3. SPORTS LIGHTING POLES C1 AND C2: POLE HEIGHT - 70 FEET.
   (5) 1150 WATT LUMINAIRES PER POLE.
   (2) 575 WATT LUMINAIRE PER POLE.

PANEL 'BB'

VOLTAGE	3 PHASE	POLES	MAIN AMPS			MAIN TYPE	A. I RATING	MOUNTING
120/208	4 WIRE	24	225			MB	22,000	SURFACE

POLE NO.	BREAKER TRIP	BREAKER P	LOAD SERVED	PHASE LOADS KVA	A	B	C	KVA	LOAD SERVED	BREAKER TRIP	BREAKER P	POLE NO.
1	45	2	LTG POLE A1	3.9	7.8			3.9	LTG POLE A2	45	2	2
3	-	-	-	3.9		7.8		3.9	-	-	-	4
5	65	2	LTG POLE B1	5.3			10.6	5.3	LTG POLE B2	65	2	6
7	-	-	-	5.3	10.6			5.3	-	-	-	8
9	50	2	LTG POLE C1	4.2		8.4		4.2	LTG POLE C2	50	2	10
11	-	-	-	4.2			8.4	4.2	-	-	-	12
13			SPACE	0.0	0.0			0.0	SPACE			14
15			SPACE	0.0		0.0		0.0	SPACE			16
17			SPACE	0.0			0.0	0.0	SPACE			18
19			SPACE	0.0	0.0			0.0	SPACE			20
21			SPACE	0.0		0.0		0.0	SPACE			22
23			SPACE	0.0			0.0	0.0	SPACE			24
			PHASE TOTALS:		18.4	16.2	19.0		TOTAL: 53.6 KVA			

* INDICATES GFI PROTECTED BREAKER

SHERMAN CARTER BARNHART ARCHITECTS

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STATE OF KENTUCKY — WILLIAM CHRISTOPHER CARTER — 01222018

SPENCER CO. HIGH SCHOOL ACADEMIC AND ATHLETIC BUILDING

SPENCER COUNTY, KENTUCKY

BASEBALL FIELD LIGHTING PLAN

JOB NO.	16117
DATE	JAN 22, 2018
DRAWN	JF
CHECKED	WC

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REVISIONS

No.	Description	Date

SHEET

SU2.1