Brewster Yards

Brewster, NY

GRID SUMMARY

Name:	Blanket Grid
Spacing:	30.0' x 30.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Entire Grid

Scan Average:	**7.38**
Maximum:	120
Minimum:	0
Avg / Min:	-
Max / Min:	-
UG (adjacent pts):	71.52
CU:	0.92
No. of Points:	8184

LUMINAIRE INFORMATION

Applied Circuits:	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O
No. of Luminaires:	**543**
Avg Load:	532.93 kW
Max Load:	532.12 kW

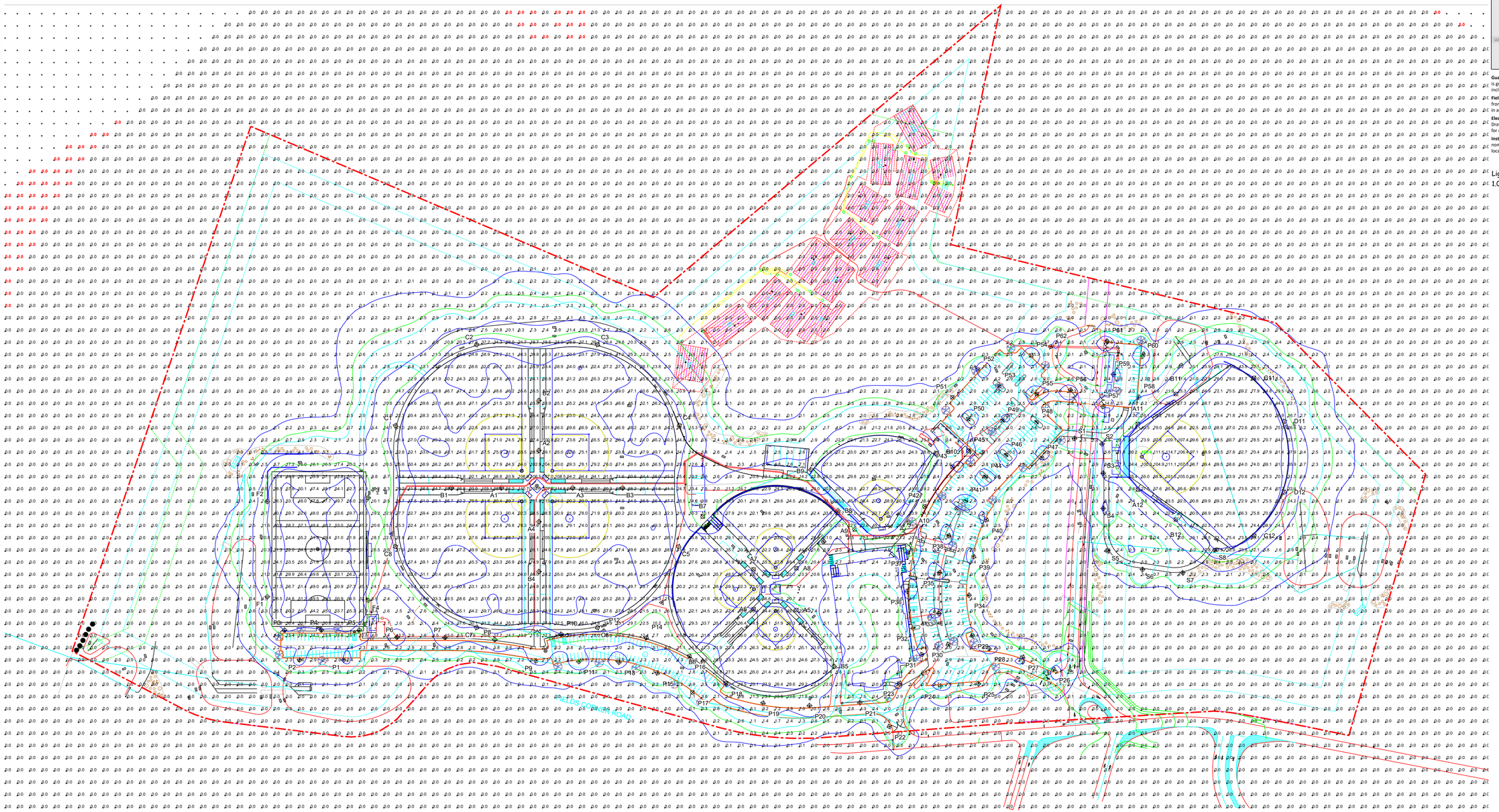
Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

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.

Light level contours are shown at 0.1, 0.5, 1.0, 5.0, 15.0, 25.0 and 50.0 footcandles (FC)



NOTES: Contours shown at 0.1, 0.5, 1.0, 5.0, 15.0, 25.0, and 50.0 footcandles.

SCALE IN FEET 1 : 120

0' 120' 240'

ENGINEERED DESIGN By: K.Martin · File #207986D-R1 · 15-Mar-23

Overall Site Lighting – "Blanket Grid"

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

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ILLUMINATION SUMMARY

Brewster Yards

Brewster, NY

GRID SUMMARY

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

ILLUMINATION SUMMARY

HORIZONTAL FOOTCANDLES

	Entire Grid
Scan Average:	0.0455
Maximum:	3.09
Minimum:	0.00
No. of Points:	315

LUMINAIRE INFORMATION

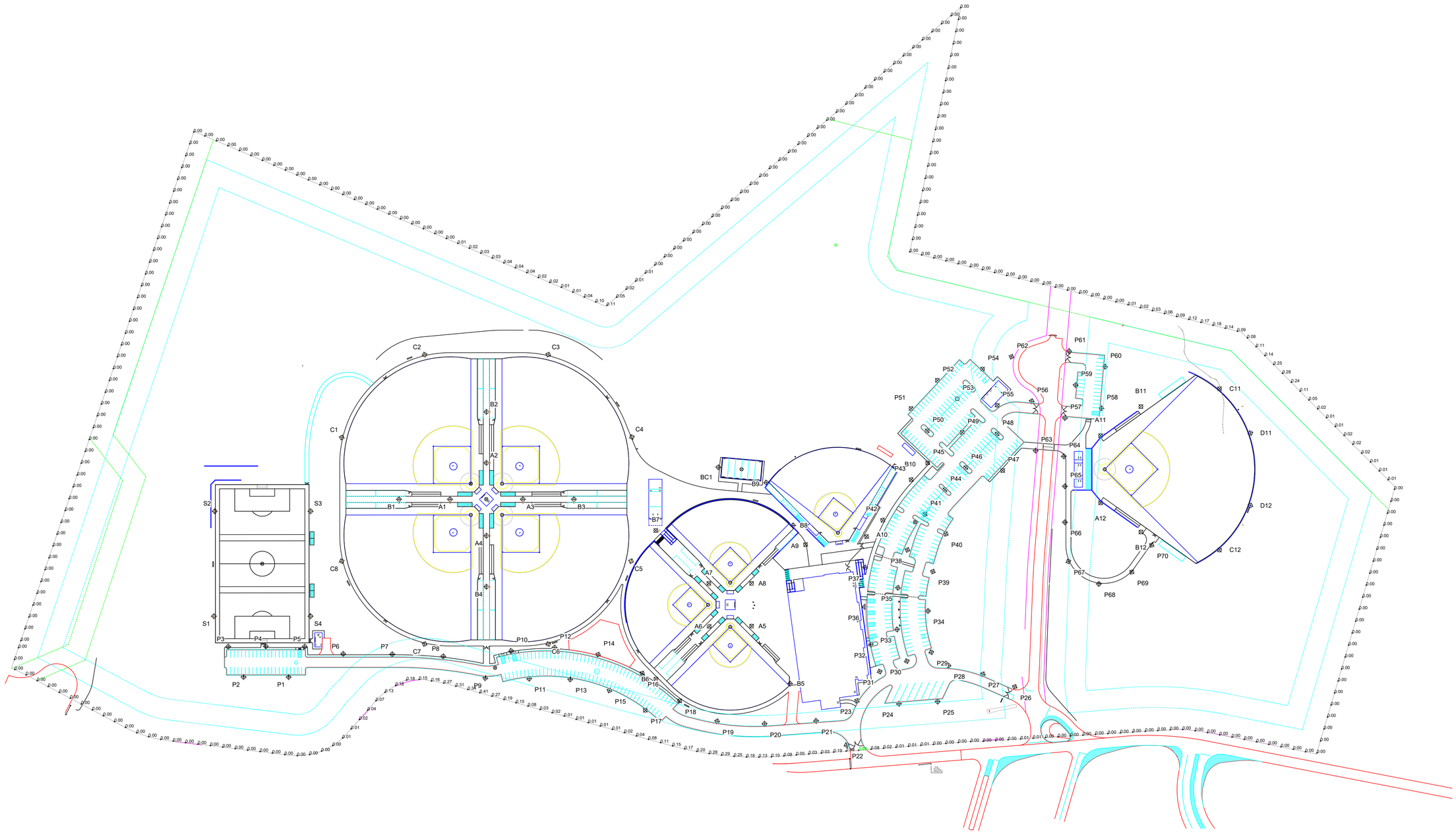
Applied Circuits:	A, B, C, D, E, F, G, H, I, J, K, L, M, N, O, P
No. of Luminaires:	**546**
Avg Load:	537.15 kW
Max Load:	536.34 kW

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



Overall Site Lighting – "Property Line Spill"

SCALE IN FEET 1 : 120

0' 120' 240'

ENGINEERED DESIGN By: K.Martin · File #207986C · 09-Jan-23

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

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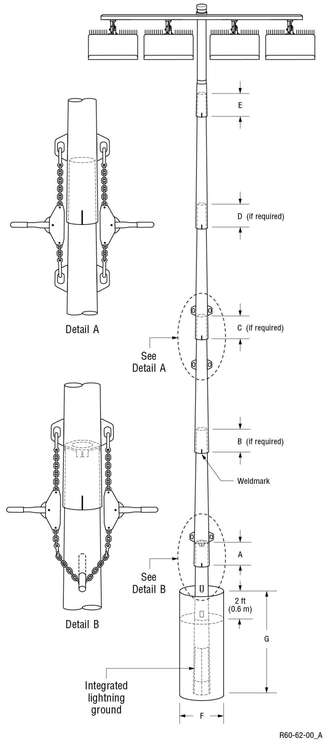
PRELIMINARY FOUNDATION AND POLE ASSEMBLY DRAWING



R60-62-00_A

TABLE 1: POLE ASSEMBLY

POLE ID	POLE HEIGHT ft (m)	# OF LUMINAIRES	ASSEMBLED POLE WEIGHT [3] lb (kg)
A1	70 (21.3)	13	3609 (1637)
A2	70 (21.3)	12	3544 (1608)
A3	70 (21.3)	13	3609 (1637)
A4	70 (21.3)	12	3544 (1608)
A5	60 (18.3)	4	1042 (473)
A6	60 (18.3)	8	1741 (790)
A7	60 (18.3)	8	1741 (790)
A8	60 (18.3)	7	1589 (721)
A9	70 (21.3)	6	1603 (727)
A10	70 (21.3)	6	1603 (727)
A11	70 (21.3)	8	2469 (1120)
A12	70 (21.3)	8	2469 (1120)
B1	80 (24.4)	26	7330 (3325)
B2	80 (24.4)	26	7330 (3325)
B3	80 (24.4)	26	7330 (3325)
B4	80 (24.4)	26	7330 (3325)
B5	70 (21.3)	7	2287 (1037)
B6	80 (24.4)	13	3836 (1740)
B7	80 (24.4)	13	3836 (1740)
B8	70 (21.3)	5	1810 (821)
B9	70 (21.3)	8	2400 (1089)
B10	70 (21.3)	5	1650 (748)
B11	80 (24.4)	18	4980 (2259)
B12	80 (24.4)	18	4980 (2259)
BC1	40 (12.2)	2	561 (254)
C1	70 (21.3)	14	3697 (1677)
C2	70 (21.3)	12	3567 (1618)
C3	70 (21.3)	12	3567 (1618)

Pole Assembly Notes:
1. Steel pole should overlap concrete base and be seated 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. Section overlap must be pulled together until tight. Overlap measurement should be +/- 6 in (150 mm).
5. This document is not intended for use as an assembly instruction. See *Installation Instructions: Light-Structure System™ Lighting System* for complete assembly procedure.

TABLE 2: FOUNDATION DETAILS

POLE ID	CONCRETE BASE WEIGHT lb(kg)	BURIAL INFORMATION [3,4] F in (mm)	BURIAL INFORMATION [3,4] G ft (m)	CONCRETE BACKFILL [1,2] yd³ (m³)	CUT BASE	LIGHTNING GROUND [5] TYPE	LIGHTNING GROUND [5] SUPPLEMENTAL INSTRUCTION
A1	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
A2	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
A3	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
A4	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
A5	1870 (848)	30 (762)	10 (3.0)	1.2 (0.9)	NO	INTEGRATED [6]	N/A
A6	2710 (1229)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
A7	2710 (1229)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
A8	2710 (1229)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
A9	2720 (1234)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
A10	2720 (1234)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
A11	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
A12	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
B1	11120 (5044)	42 (1067)	20 (6.1)	4.4 (3.3)	NO	INTEGRATED [6]	N/A
B2	11120 (5044)	42 (1067)	20 (6.1)	4.4 (3.3)	NO	INTEGRATED [6]	N/A
B3	11120 (5044)	42 (1067)	20 (6.1)	4.4 (3.3)	NO	INTEGRATED [6]	N/A
B4	11120 (5044)	42 (1067)	20 (6.1)	4.4 (3.3)	NO	INTEGRATED [6]	N/A
B5	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
B6	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
B7	5300 (2404)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
B8	2770 (1256)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
B9	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
B10	2720 (1234)	30 (762)	12 (3.7)	1.5 (1.1)	NO	INTEGRATED [6]	N/A
B11	7800 (3538)	36 (914)	18 (5.5)	2.8 (2.2)	NO	INTEGRATED [6]	N/A
B12	7800 (3538)	36 (914)	18 (5.5)	2.8 (2.2)	NO	INTEGRATED [6]	N/A
BC1	1090 (494)	30 (762)	8 (2.4)	1.0 (0.7)	NO	INTEGRATED [6]	N/A
C1	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C2	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C3	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A

Foundation Notes:
1. Concrete backfill is calculated to 2 ft (0.6m) below grade (no overage 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.
3. Foundation design per 2018 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.

Brewster Yards - Brewster, NY, USA

Date:	01/17/2023	Scale:	N/A
Rep:	David Kulis JR	Page:	1 of 2
Project:	207986		Preliminary

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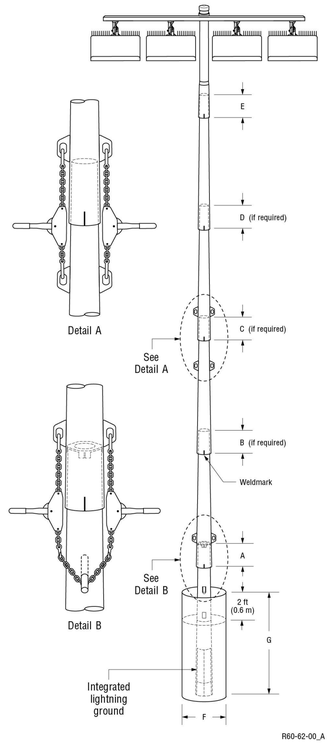
PRELIMINARY FOUNDATION AND POLE ASSEMBLY DRAWING



R60-62-00_A

TABLE 1: POLE ASSEMBLY

POLE ID	POLE HEIGHT ft (m)	# OF LUMINAIRES	ASSEMBLED POLE WEIGHT [3] lb (kg)
C4	70 (21.3)	12	3567 (1618)
C5	70 (21.3)	12	3567 (1618)
C6	70 (21.3)	12	3567 (1618)
C7	70 (21.3)	12	3567 (1618)
C8	70 (21.3)	12	3567 (1618)
C11	70 (21.3)	9	2559 (1161)
C12	70 (21.3)	9	2559 (1161)
D11	70 (21.3)	10	2670 (1211)
D12	70 (21.3)	10	2670 (1211)
S1	70 (21.3)	8	2511 (1139)
S2	70 (21.3)	8	2511 (1139)
S3	70 (21.3)	8	2511 (1139)
S4	70 (21.3)	8	2511 (1139)

Pole Assembly Notes:
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3. Assembled pole weight includes steel sections, crossarms, luminaires, and electrical components enclosures.
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C4	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C5	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C6	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C7	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C8	5250 (2381)	30 (762)	16 (4.9)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C11	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
C12	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
D11	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
D12	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
S1	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
S2	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
S3	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A
S4	3780 (1715)	30 (762)	14 (4.3)	1.6 (1.2)	NO	INTEGRATED [6]	N/A

Foundation Notes:
1. Concrete backfill is calculated to 2 ft (0.6m) below grade (no overage 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.
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Field Lighting Construction Details

Brewster Yards - Brewster, NY, USA

Date:	01/17/2023	Scale:	N/A
Rep:	David Kulis JR	Page:	2 of 2
Project:	207986		Preliminary

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