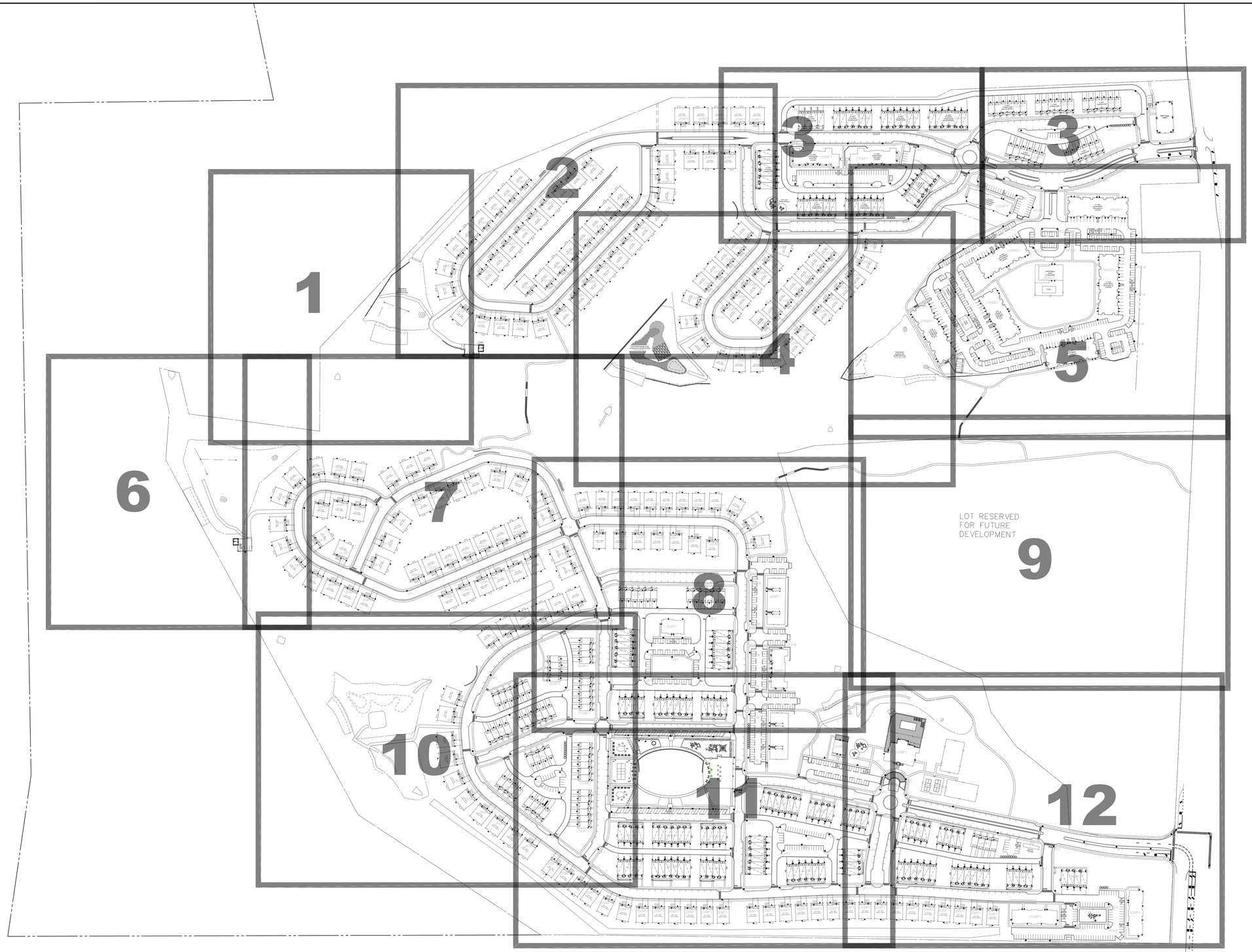
Pre-Marked Exhibit

A-19d Site Lighting Plan - Revised (17 Sheets)

A-19d



GRAPHIC SCALE

(IN FEET)
1 inch = 150 feet

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REV.	DESCRIPTION	DATE	DFT.BY	CKD.BY
1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

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EXPIRATION 12.31.21

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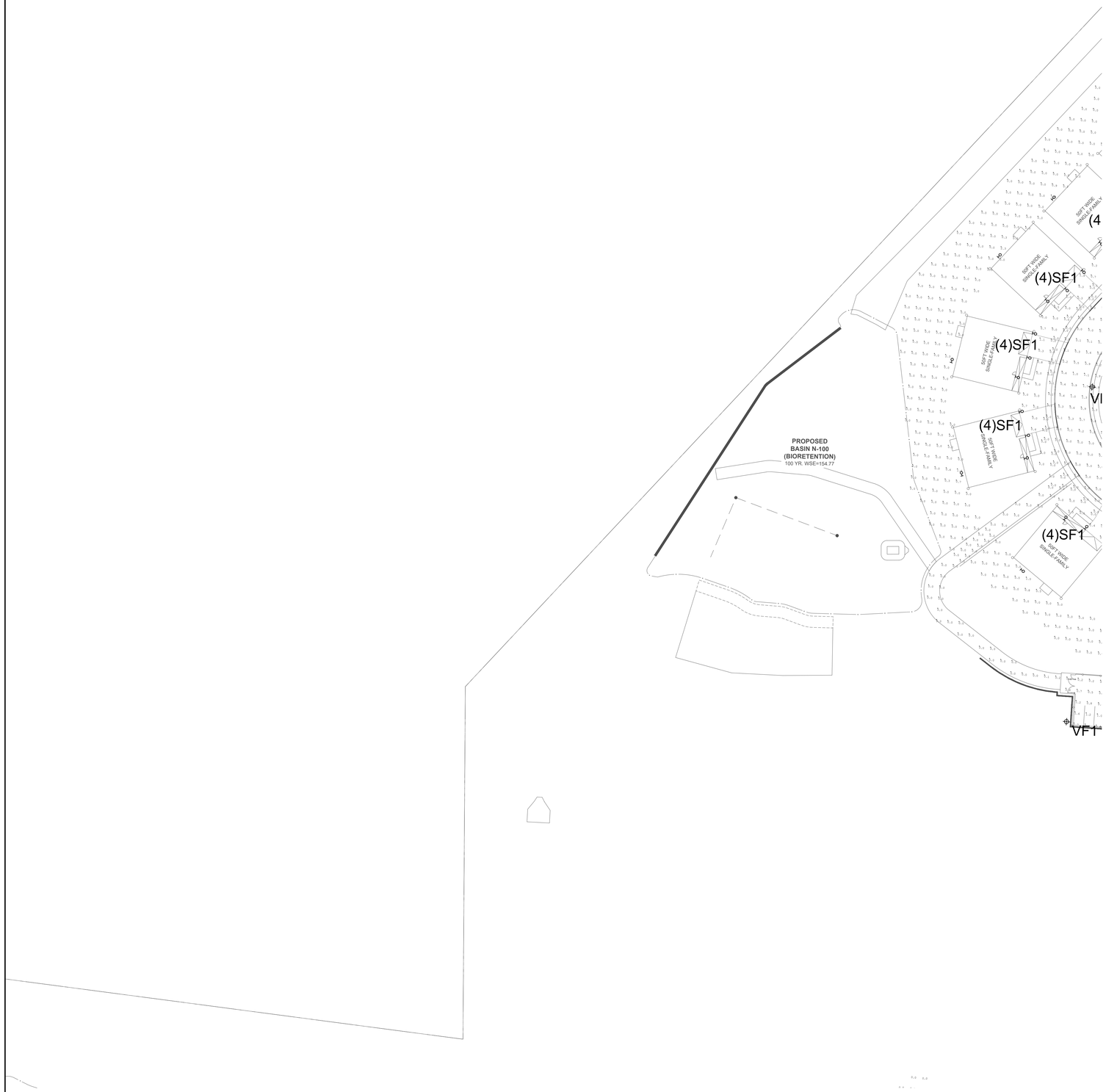
OVERALL SITE LIGHTING PLAN
OF
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 150'

MERCER CO., N.J.
DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG1.01



GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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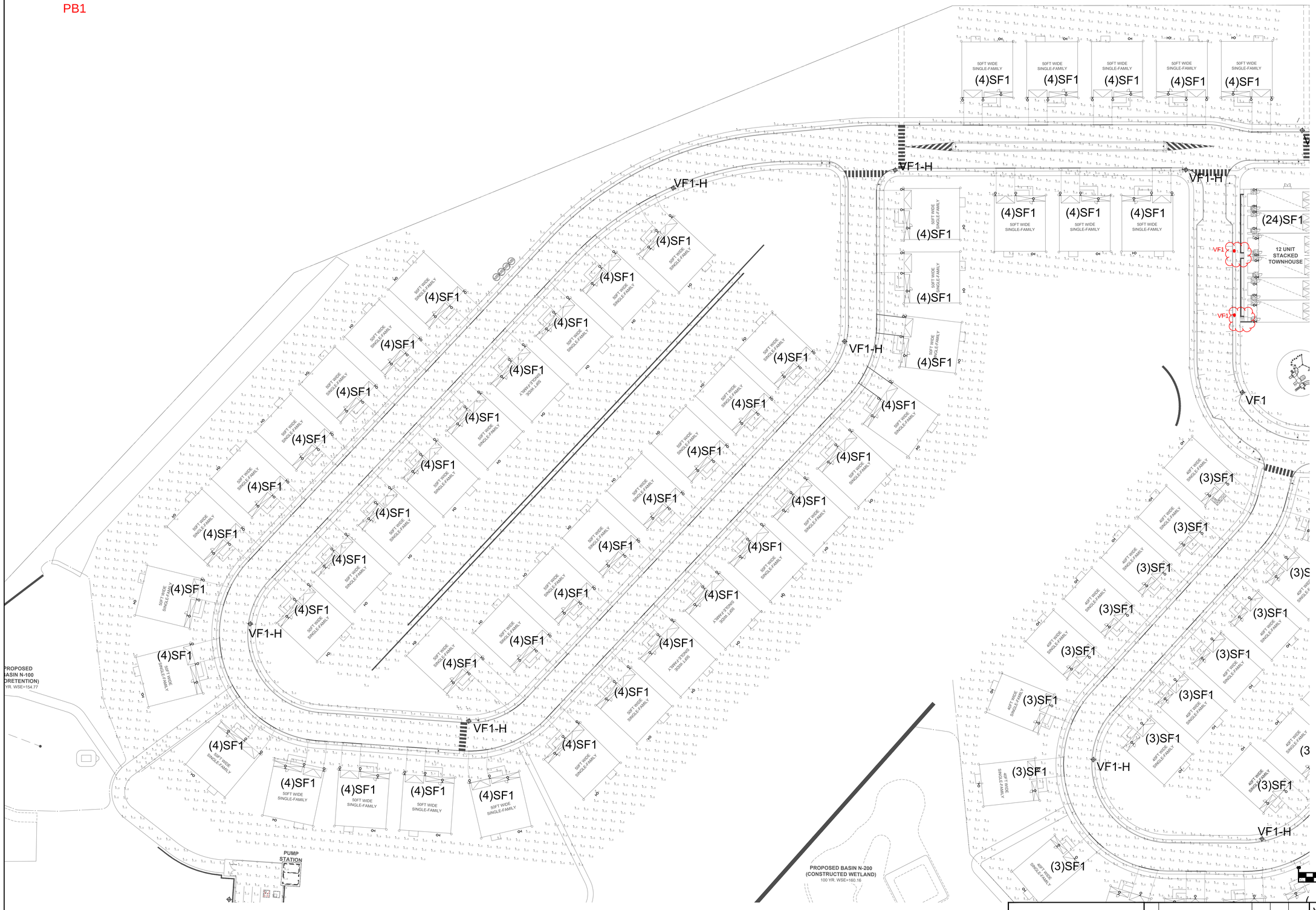
SITE LIGHTING PLAN 1
(MAINTAINED ILLUMINATION LEVELS)
OF
NORTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'

MERCER CO., N.J.
DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG2.01

PB1



GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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SITE LIGHTING PLAN 2
(MAINTAINED ILLUMINATION LEVELS)
OF
NORTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'

MERCER CO., N.J.
DECEMBER 16, 2020

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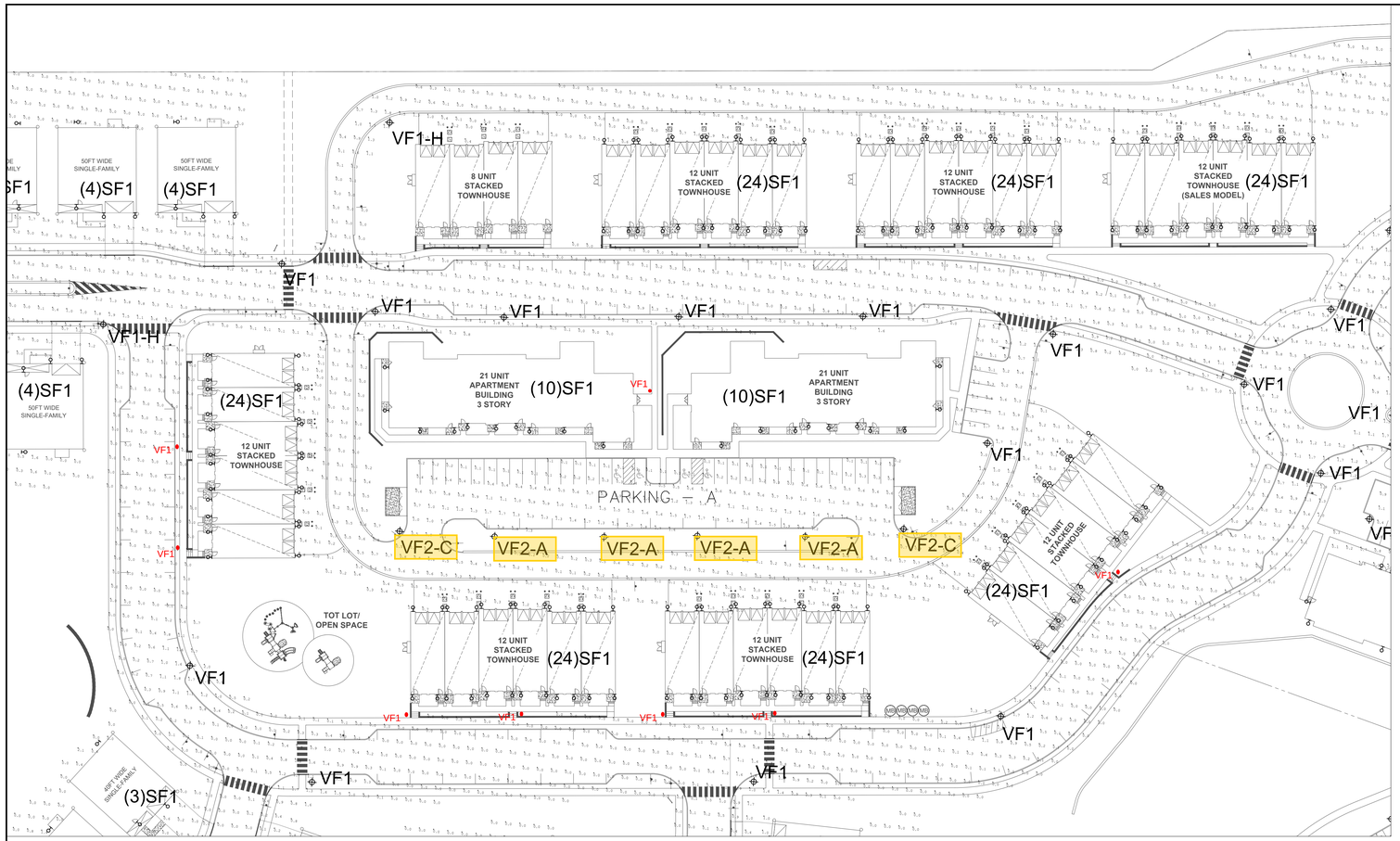
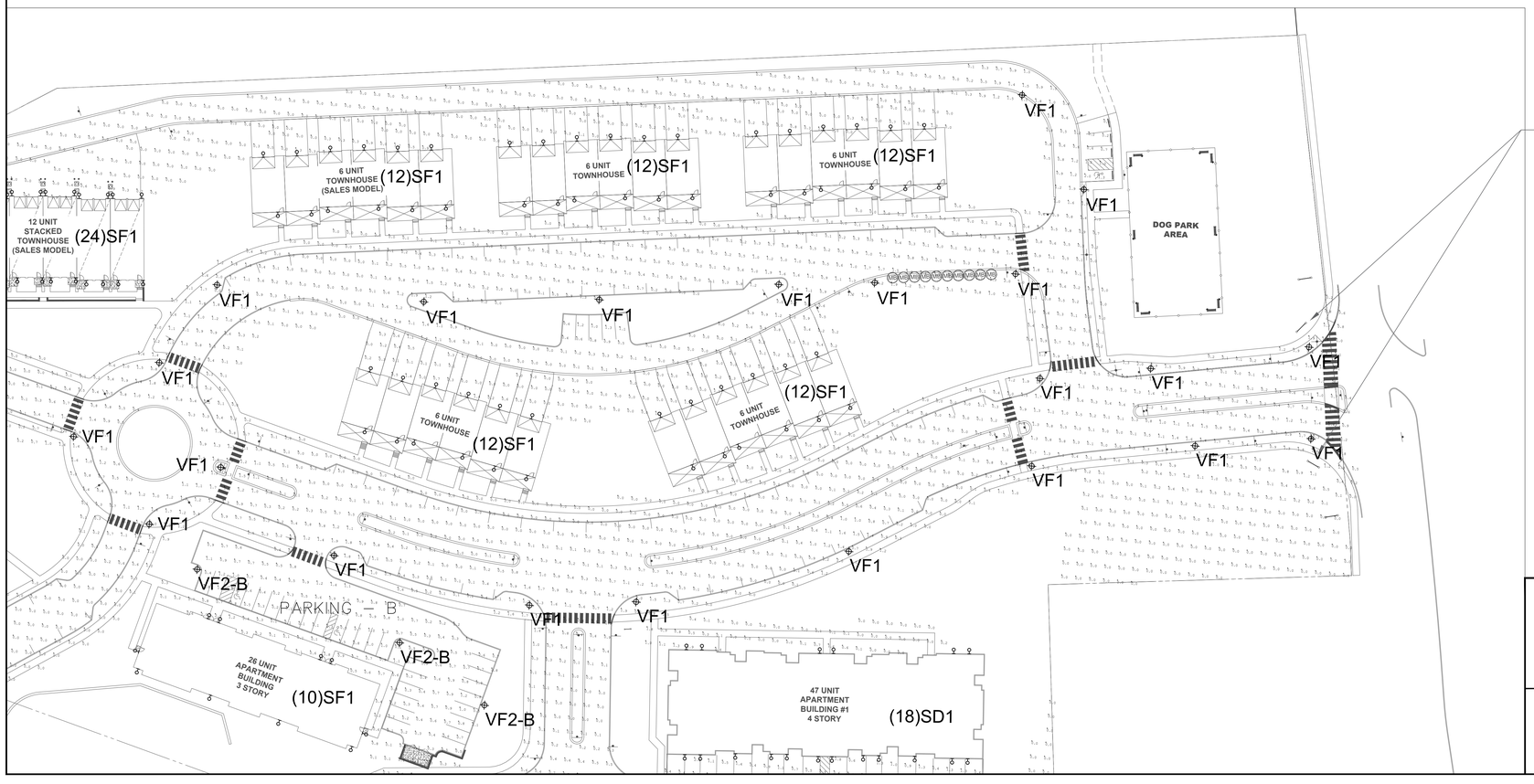
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG2.02

PB2





MONUMENT SIGN LIGHTING – TBD
LUMINAIRE SHALL BE SHIELDED TO MINIMIZE GLARE AND BE LAMPED AND AIMED SUCH THAT 100% OF THE DISTRIBUTION PATTERN FALLS ON THE FACE OF THE SIGN.

GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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SITE LIGHTING PLAN 3
(MAINTAINED ILLUMINATION LEVELS)
OF
NORTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'
MERCER CO., N.J.
DECEMBER 16, 2020

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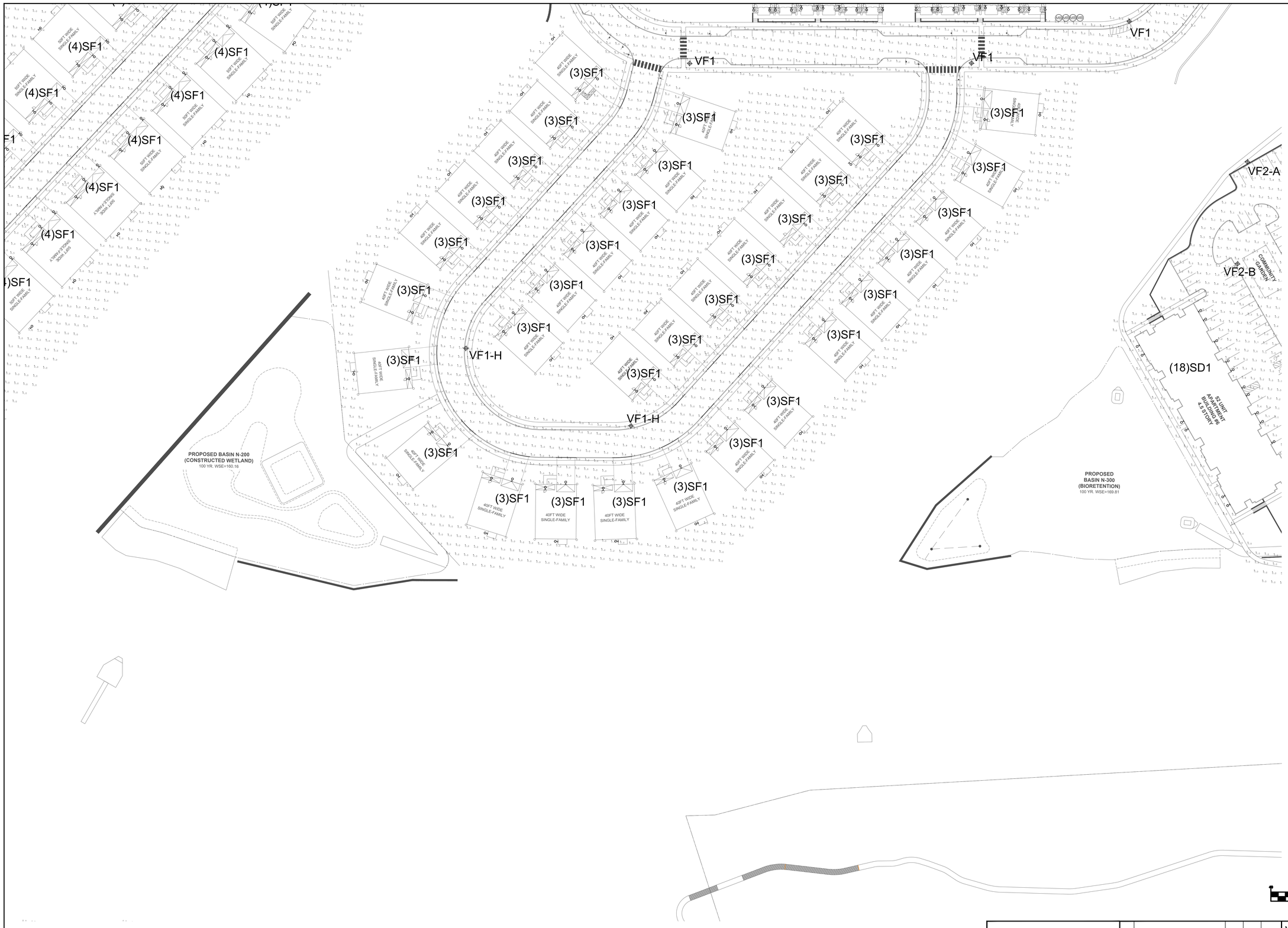
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG2.03



GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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SITE LAYOUT LIGHTING PLAN 4
(MAINTAINED ILLUMINATION LEVELS)
OF
NORTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
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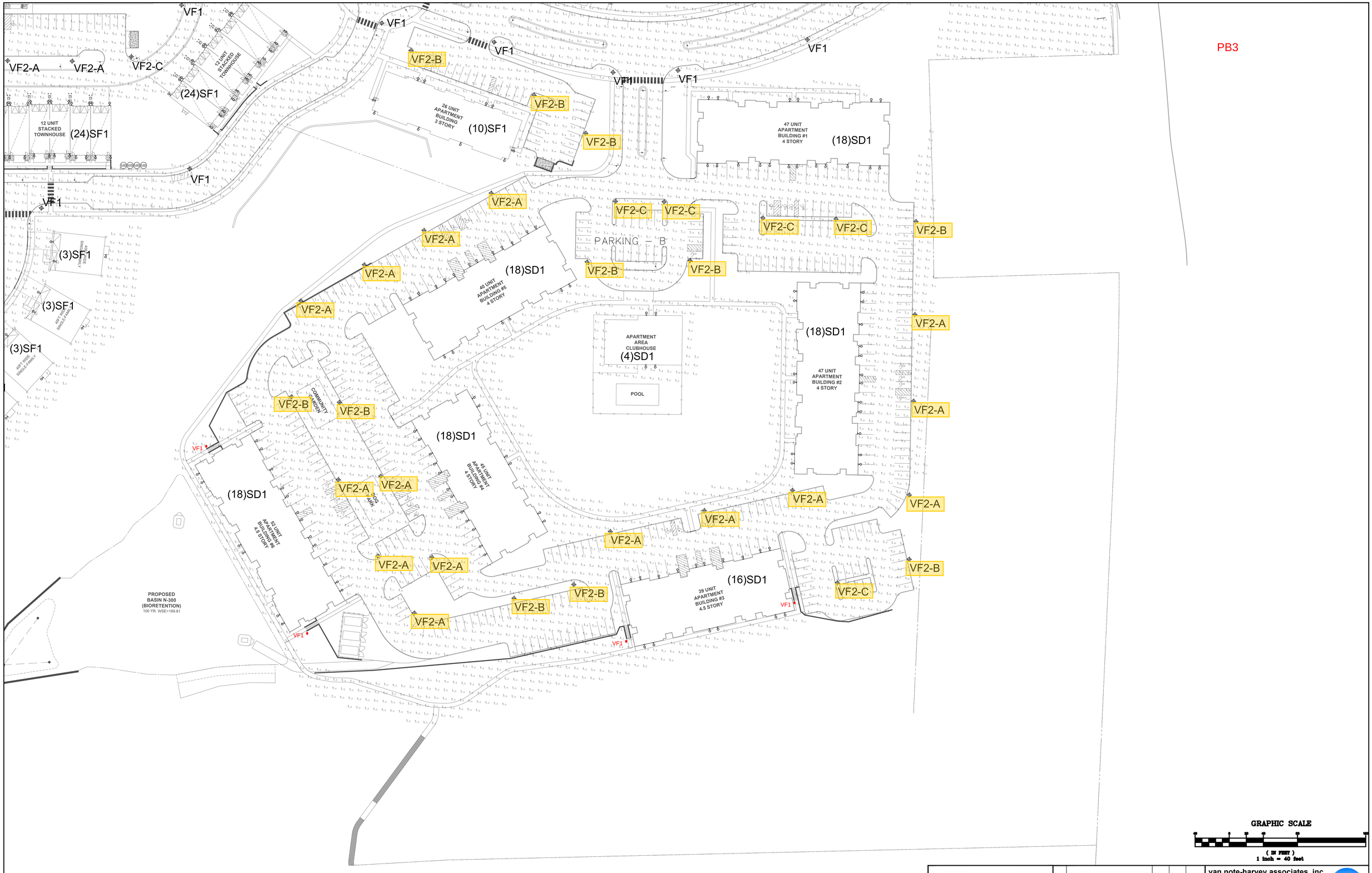

GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

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SITE LIGHTING PLAN 5
(MAINTAINED ILLUMINATION LEVELS)
OF
NORTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

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CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG2.05

GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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SITE LIGHTING PLAN 6
(MAINTAINED ILLUMINATION LEVELS)
of
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP MERCER CO., N.J.
SCALE 1"= 40' DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
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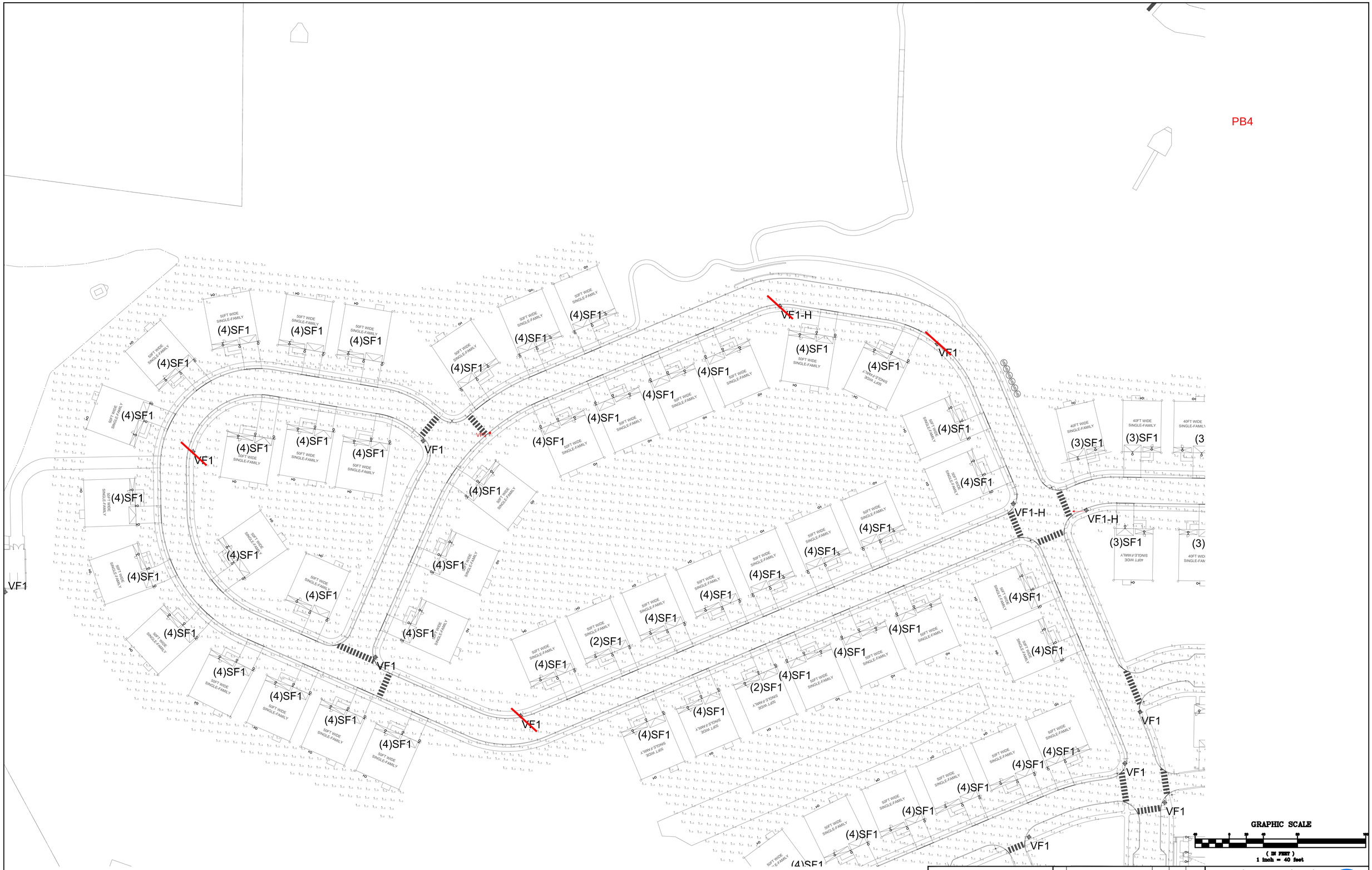

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REV.	DESCRIPTION	DATE	DFT.BY	CKD.BY
1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
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SITE LIGHTING PLAN 7
(MAINTAINED ILLUMINATION LEVELS)
OF
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

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DATE 12/16/20		45051-400-21	203-A-1	LG2.07
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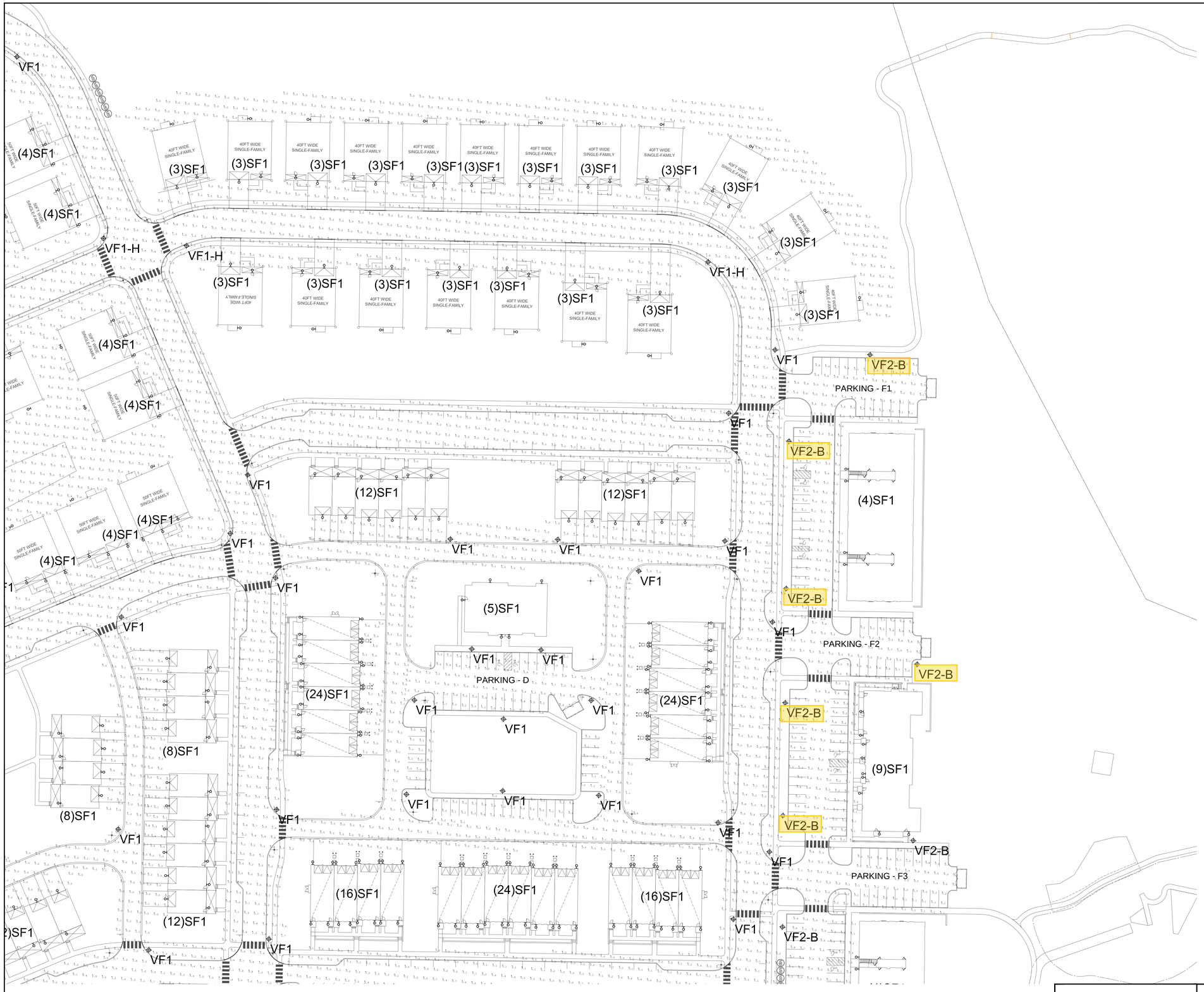

GRAPHIC SCALE

(IN FEET)
1 inch = 40 feet

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1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

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SITE LIGHTING PLAN 8
(MAINTAINED ILLUMINATION LEVELS)
OF
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

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CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG2.08

GRAPHIC SCALE

(IN FEET)
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SITE LIGHTING PLAN 9
(MAINTAINED ILLUMINATION LEVELS)
OF
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'

MERCER CO., N.J.
DECEMBER 16, 2020

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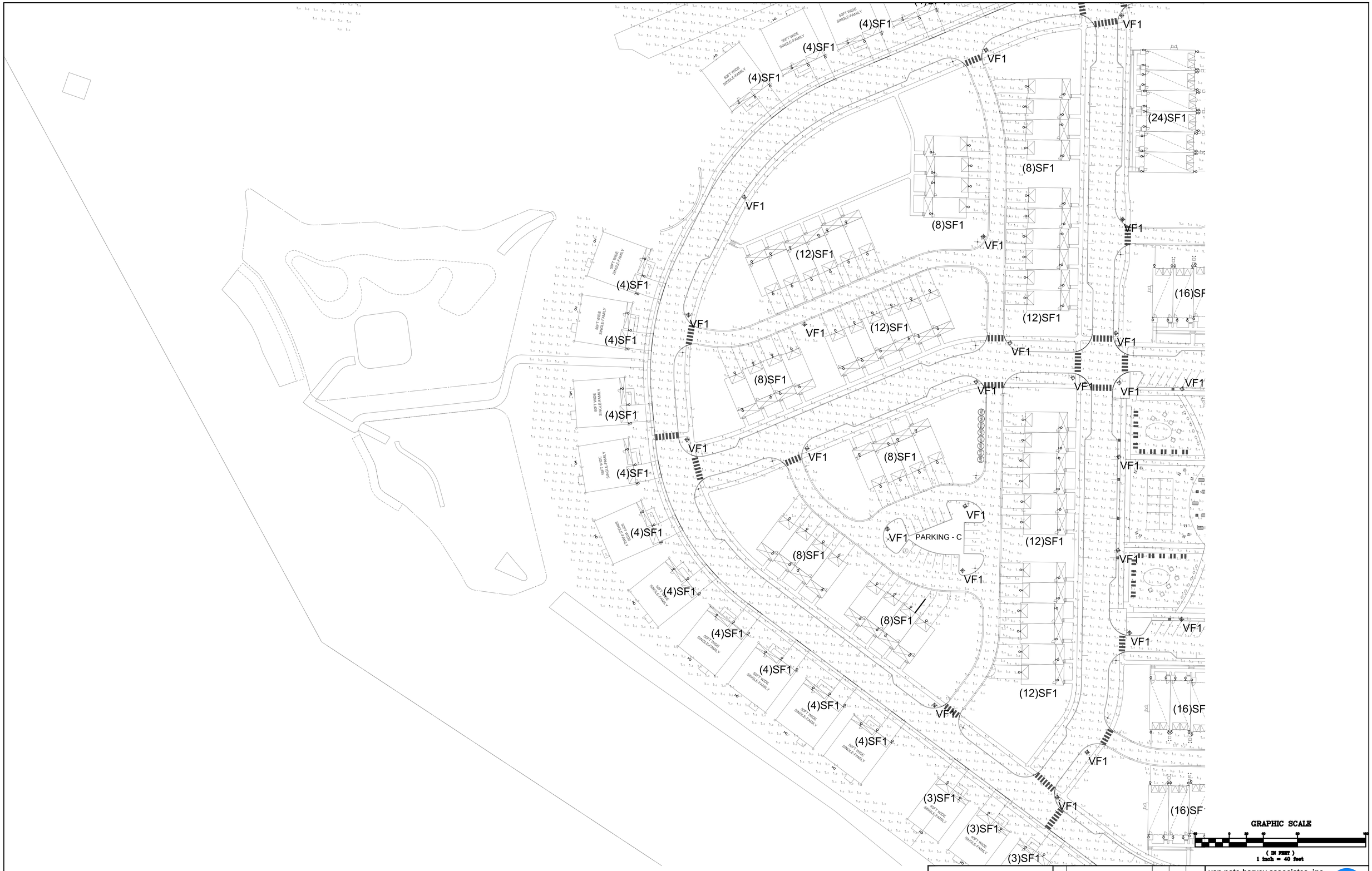

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SITE LIGHTING PLAN 10
(MAINTAINED ILLUMINATION LEVELS)
OF
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

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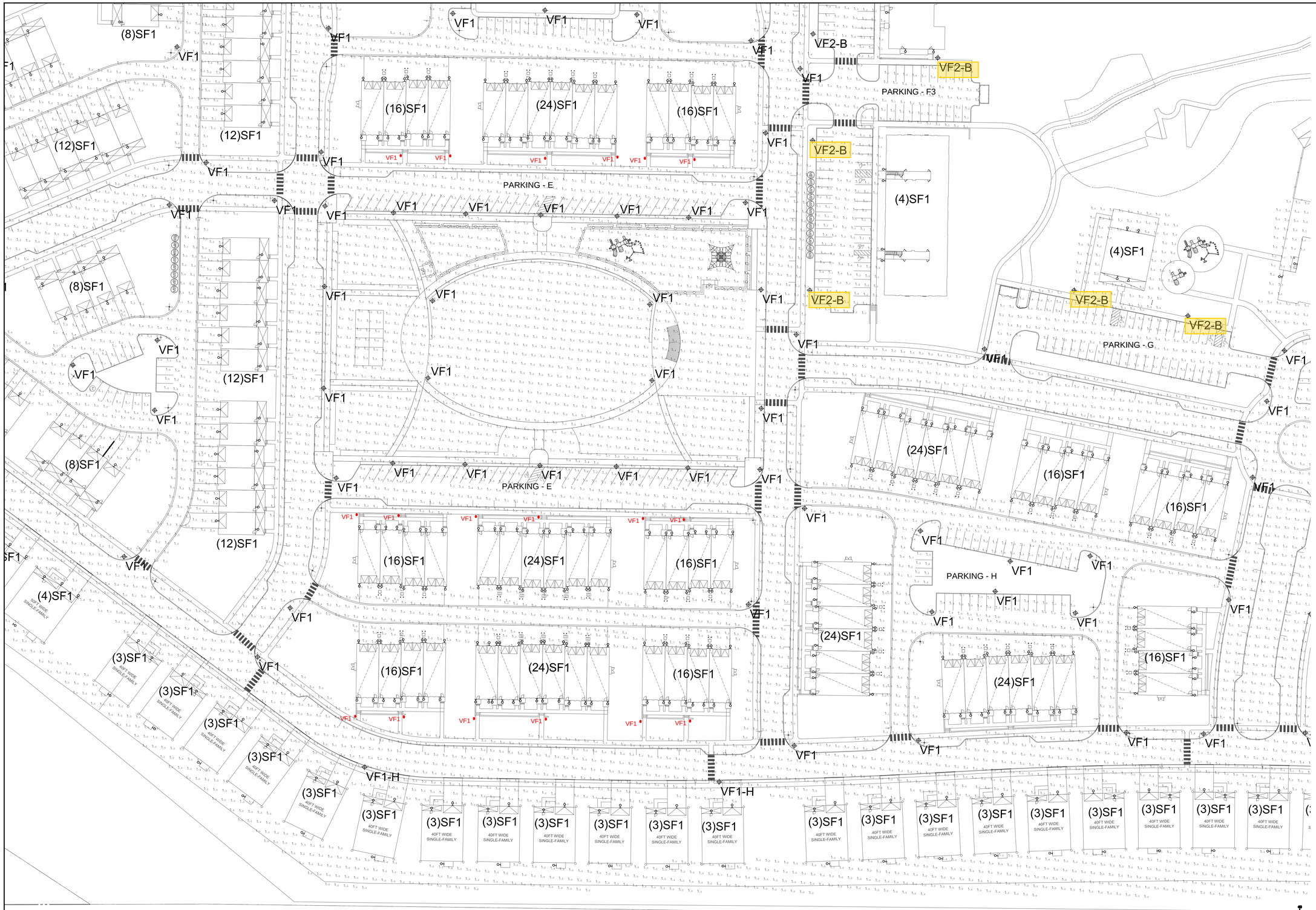

GRAPHIC SCALE

(IN FEET)
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SITE LIGHTING PLAN 11
(MAINTAINED ILLUMINATION LEVELS)
OF
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP — MERCER CO., N.J.
SCALE 1"= 40' — DECEMBER 16, 2020

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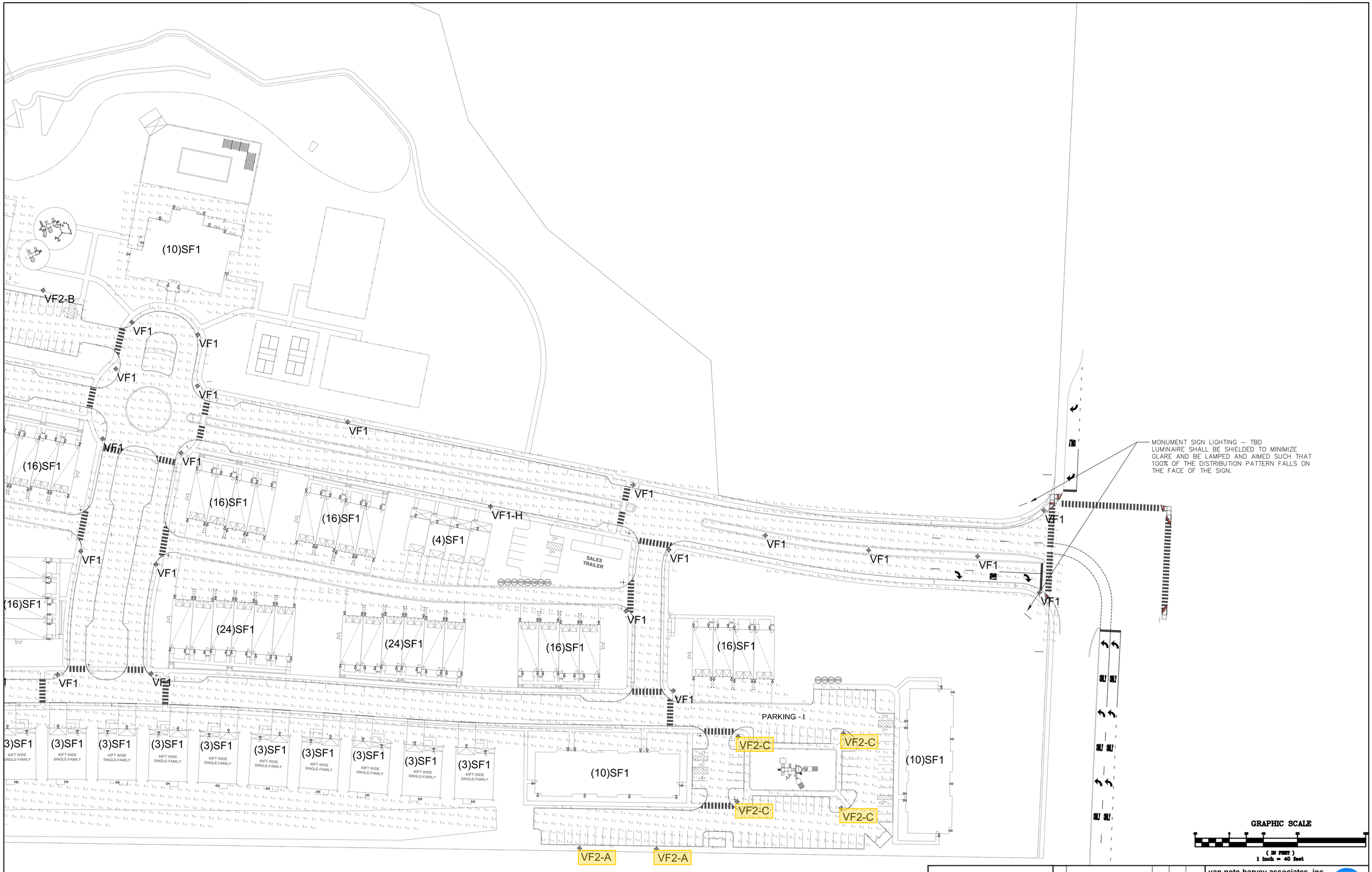

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SITE LIGHTING PLAN 12
(MAINTAINED ILLUMINATION LEVELS)
of
SOUTH SECTION
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP MERCER CO., N.J.
SCALE 1"= 40' DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No. 45051-400-21	FILE No. 203-A-1	SHEET No. LG2.12
CHECKED BY CS DATE 12/16/20	PAGE			

TYPE	MANUFACTURER	CATALOG NUMBER	MOUNTING	VOLTAGE	LAMP WATTS	LAMP TYPE	DESCRIPTION
SD1	BEGA (OR EQUAL)	33 224-K27-FINISH/19543	SURFACE 8' AFF	TBD	3.9W	LED 2700K 80+CRI	LED WALL MOUNTED AREA LIGHT, FULL CUT-OFF WITH WIDE-SPREAD DISTRIBUTION, DIFFUSED LENS FOR GLARE CONTROL, 391 DELIVERED LUMENS. LUMINAIRE CONTROLLED VIA REMOTE PHOTOCELL FOR DUSK-TO-DAWN OPERATION.
SF1	GENERATION LIGHTING (OR EQUAL)	8462DEN3-44	SURFACE 8'AFF	120	10W MAX	LED A19 2700K 80+CRI	LED WALL SCONCE, FULL CUT-OFF DISTRIBUTION, 800 INITIAL LAMP LUMENS. LUMINAIRE CONTROLLED BY HOMEOWNER
VF1	AMERICAN ELECTRIC (OR EQUAL)	ARDCL-P25-27K-R5-FINISH	13' POLE	TBD	52W	LED 2700K 80+ CRI	LED DECORATIVE STREET LUMINAIRE, 13'-0" POLE, FULL CUT-OFF WITH TYPE V DISTRIBUTION, INTEGRAL PHOTOCELL FOR DUSK-TO-DAWN OPERATION, 5174 DELIVERED LUMENS.
VF1-H	AMERICAN ELECTRIC (OR EQUAL)	ARDCL-P25-27K-R5-FINISH-HSS	13' POLE	TBD	52W	LED 2700K 80+ CRI	SAME AS VF1 EXCEPT WITH HOUSE SIDE SHIELD.
VF2-A	AMERICAN ELECTRIC (OR EQUAL)	AVPCL2-P30-27K-R3-FINISH	20' POLE	TBD	46W	LED 2700K 80+ CRI	LED PARKING LOT LUMINAIRE 20'-0" POLE, FULL CUT-OFF WITH TYPE II DISTRIBUTION, INTEGRAL PHOTOCELL FOR DUSK-TO-DAWN OPERATION, 4667 DELIVERED LUMENS.
VF2-B	AMERICAN ELECTRIC (OR EQUAL)	AVPCL2-P30-27K-R4-FINISH	20' POLE	TBD	46W	LED 2700K 80+ CRI	SAME AS VF2-A EXCEPT WITH TYPE IV DISTRIBUTION
VF2-C	AMERICAN ELECTRIC (OR EQUAL)	AVPCL2-P30-27K-R5-FINISH	20' POLE	TBD	46W	LED 2700K 80+ CRI	SAME AS VF2-A EXCEPT WITH TYPE V DISTRIBUTION

NOTES:
1. ALL LUMINAIRES SHALL MEET ALL HOPEWELL TOWNSHIP LIGHTING ORDINANCE REQUIREMENTS INCLUDING, BUT NOT LIMITED TO, BEING FULL CUT-OFF AND CONTAIN A 2700K COLOR TEMPERATURE. REFER TO ORDINANCE FOR ADDITIONAL INFORMATION.
2. BECAUSE THIS IS A RESIDENTIAL DEVELOPMENT WITH 24-HOUR ACCESS ALL STREET AND PARKING LOT LIGHTING SHALL REMAIN ON FROM DUSK-TO-DAWN

CALCULATION SUMMARY (INITIAL)

LABEL	LLF	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PARKING AREAS							
PARKING - A	1.0	FC	0.85	2.1	0.1	8.5	21.0
PARKING - B	1.0	FC	0.64	2.3	0.1	6.4	23.0
PARKING - C	1.0	FC	0.71	2.0	0.1	7.1	20
PARKING - D	1.0	FC	0.9	2.2	0.1	9.0	22.0
PARKING - E	1.0	FC	1.14	2.3	0.1	11.4	23.0
PARKING - F1	1.0	FC	0.57	2.0	0.1	5.7	20.0
PARKING - F2	1.0	FC	0.50	1.7	0.1	5.0	17.0
PARKING - F3	1.0	FC	0.45	1.6	0.1	4.5	16.0
PARKING - G	1.0	FC	0.5	2.3	0.1	5.0	23.0
PARKING - H	1.0	FC	0.92	2.2	0.1	9.2	22.0
PARKING - I	1.0	FC	0.52	2.0	0.1	5.2	20.0
ROADWAYS							
ROADWAY - NORTH	1.0	FC	0.31	2.3	0.0	N/A	N/A
ROADWAY - SOUTH	1.0	FC	0.33	2.3	0.0	N/A	N/A

CALCULATION SUMMARY (MAINTAINED)

LABEL	LLF	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN
PARKING AREAS							
PARKING - A	0.9	FC	0.76	1.9	0.1	7.6	19.0
PARKING - B	0.9	FC	0.58	2.0	0.1	5.8	20.0
PARKING - C	0.9	FC	0.64	1.8	0.1	6.4	18.0
PARKING - D	0.9	FC	0.81	2.0	0.1	8.1	20.0
PARKING - E	0.9	FC	1.02	2.0	0.1	10.2	20.0
PARKING - F1	0.9	FC	0.51	1.8	0.1	5.1	18.0
PARKING - F2	0.9	FC	0.45	1.5	0.1	4.5	15.0
PARKING - F3	0.9	FC	0.41	1.4	0.1	4.1	14.0
PARKING - G	0.9	FC	0.45	2.0	0.1	4.5	20.0
PARKING - H	0.9	FC	0.84	2.0	0.1	8.4	20.0
PARKING - I	0.9	FC	0.47	1.8	0.1	4.7	18.0
ROADWAYS							
ROADWAY - NORTH	0.9	FC	0.28	2.0	0.0	N/A	N/A
ROADWAY - SOUTH	0.9	FC	0.28	2.0	0.0	N/A	N/A

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **SD1**

LED wall luminaire - directed light

BEGA

Application
This luminaire features flush mounted glass which distributes the light onto the installation surface uniformly with a wide-spread light distribution. Luminaire can be mounted with the light output upwards or downwards.

Materials
Luminaire housing constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass with optical texture
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP65
Weight: 3.1 lbs

Electrical

Operating voltage	120-277VAC
Minimum start temperature	-30°C
LED module wattage	3.9W
System wattage	4.5W
Dimming	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	391 lumens (3000K)
Lifetime at Ta +15°C	>500,000 h (L70)
Lifetime at Ta +35°C	320,000 h (L70)

LED color temperature

☐ 4000K - Product number = **K4**
☐ 3500K - Product number = **K35**
☐ 3000K - Product number = **K3**
☑ 2700K - Product number = **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish:
All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.
Available colors: ☐ Black (BLK) ☐ White (WHT) ☐ RAL: ☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS:

Type:
BEGA Product:
Project:
Modified:

LED wall luminaire | directed light

	LED	A	B	C	Required wiring box
33 224	3.9W	5 ½	2 ½	7 ½	**19543**

BEGA 1000 BEGA Way, Carpinteria, CA 93013 | (805) 684-0533 info@bega-us.com
Due to the dynamic nature of lighting products and the associated technologies, Luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us .com
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Updated 09/05/18

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **SD1**

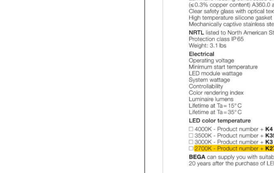
OUTDOOR PHOTOMETRIC REPORT
CATALOG: 33224K27

AcuityBrands.

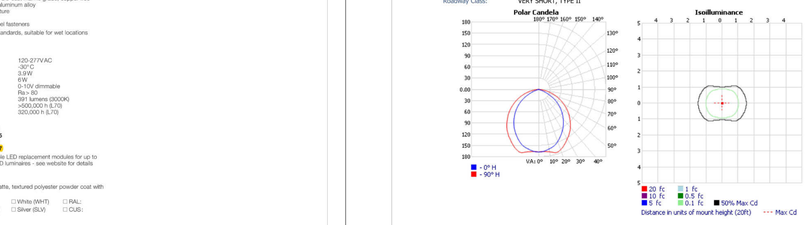
Manufacturer:	BEGA Converted by LUMCat V 22.04.2013 / 23.02.2018
Description:	33224K27
Lamp Catalog:	LED 3,9W 455 lm
Lamp:	LED 3,9W
Lamp Output:	Total luminaire Lumens: 454.7, absolute photometry *
Input Wattage:	6
Luminous Opening:	Circular (Dia: 4.68")
Max Cd:	175.3 at Horizontal: 90°, Vertical: 15°
Roadway Class:	VERY SHORT, TYPE II

No Photo Available

Polar Candela



Isoilluminance



*Test based on absolute photometry where lamp lumens=lumens total.
*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

Visual Photometric Tool 1.2.46 copyright 2021, Acuity Brands Lighting.
This Photometric report has been generated using methods recommended by the IESNA. Calculations are based on Photometric data provided by the manufacturer, and the accuracy of this Photometric report is dependent on the accuracy of this data provided. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual Photometric performance to differ from the performance calculated using the data provided by the manufacturer. This report is provided without warranty as to accuracy, completeness, reliability or otherwise. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this report.

VISUAL PHOTOMETRIC TOOL

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **SD1**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: 33224K27

AcuityBrands.

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	133.2	29.3%
0-40	217.2	47.8%
0-60	374.6	82.4%
60-90	80.1	17.6%
70-100	29.5	6.5%
90-120	0.000	0%
0-90	454.7	100%
90-180	0.000	0%
0-180	454.7	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	15.8	3.5%	90-100	0.000	0%
10-20	46.5	10.2%	100-110	0.000	0%
20-30	70.9	15.6%	110-120	0.000	0%
30-40	84.0	18.5%	120-130	0.000	0%
40-50	84.6	18.6%	130-140	0.000	0%
50-60	72.8	16.0%	140-150	0.000	0%
60-70	50.6	11.1%	150-160	0.000	0%
70-80	24.4	5.4%	160-170	0.000	0%
80-90	5.0	1.1%	170-180	0.000	0%

Roadway Summary

Distribution:	TYPE II, VERY SHORT
Max Cd, 90 Deg Vert:	0.000
Max Cd, 80 to <90 Deg:	17.5

	Lumens	% Lamp
Downward Street Side:	227.4	50%
Downward House Side:	227.4	50%
Downward Total:	454.7	100%
Upward Street Side:	0.000	0%
Upward House Side:	0.000	0%
Upward Total:	0.000	0%
Total Lumens:	454.7	100%

LCS Table

BUG Rating	**B0 - U0 - G0**	
Forward Light	Lumens	Lumens %
Low(0-30):	66.6	14.7%
Medium(30-60):	120.7	26.5%
High(60-80):	37.5	8.3%
Very High(80-90):	2.5	0.6%
Back Light		
Low(0-30):	66.6	14.7%
Medium(30-60):	120.7	26.5%
High(60-80):	37.5	8.3%
Very High(80-90):	2.5	0.6%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
Trapped Light:	0.000	0%

VISUAL PHOTOMETRIC TOOL

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **SF1**

GENERATION LIGHTING

8462DEN3-44: One Light Outdoor Wall Lantern

Collection: Chatham

Weathered Copper Finished Dark Sky One Light LED Outdoor Wall Lantern with Clear Seeded Glass and Interior Aluminum Panels

Featured in the decorative Chatham collection

1 A19 Medium 9.3 watt light bulb

Fixture is supplied with 1 light bulb

Clear seeded glass panels and white aluminum panels

ENERGY STAR® Qualified

UPC #: 785652052934

Finish: Weathered Copper (44)

Dimensions:

Width:	6 3/4"	**Extends:**	7 1/2"
Height:	14 1/2"	**Wire:**	6 1/2" (color:Black/White)
Weight:	3.2 lbs.	**Mounting Proc.:**	Cap Nuts
		Connection:	Mounted To Box
		Lumens:	800

Bulbs:
1 - LED Medium A19 9.3w Max. 120v - included

Features:
- ENERGY STAR® Qualified
- Dark sky friendly. Designed to emit no light above the 90° horizontal plane. Photometry unavailable.
- LED Bulbs are an efficient, versatile and durable light source that deliver exceptional performance.
- Meets Title 24 energy efficiency standards
- Title 24 compliant when used with included Joint Appendix (JA8) approved lamp.

Material List:
1 Body - Brass - Undefined

Safety Listing:
Safety Listed for Wet Locations
Safety Listed for Wet Locations

Instruction Sheets:
English (HC-231)
French (F-009)

Shade / Glass / Diffuser Details:

Part	Material	Finish	Quantity	Item Number	Length	Width	Height	Diameter	Fitter Diameter	Shade Top Length	Shade Top Width	Shade Top Diameter
Panel	Glass	Clear Seeded	4									
Panel	Aluminum	White	4									

Backplate / Canopy Details:

Type	Height / Length	Width	Depth	Diameter	Outlet Box Up	Outlet Box Down
Back Plate	6	4 3/4			6	8 1/2

Replacement Bulb Data:

Product #		Type	Base	Watts	Watts Consumed	Volts	Hours	Lumens	Temp (°K)	CRI
975025	Frosted	A19	Medium	9.3	9.3	120v	15000	800 230°	3000	90

Shipping Information:

Package Type	Product #	Quantity	UPC	Length	Width	Height	Cube	Weight	Frt. Class	UPS Ship
Individual	8462DEN3-44	1	785652052934	9.5	9.5	18	0.94	5.75	125	Yes
NJ Pallet		70		48	40	72	80	402.5		No

BEAM ILLUMINATING ARCHITECTURE

BEAM, ltd.
2220 Mount Carmel Avenue
Glenside, PA 19038
T. 215.508.0900
www.beamltd.com

REV.	DESCRIPTION	DATE	DFT.BY	CKD.BY
1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

CHRISTINA SPANGLER
LIGHTING CERTIFIED BY NCQLP
EXPIRATION 12.31.21

NCQLP LIGHTING CERTIFIED LC

van note-harvey associates, inc.
consulting engineers, planners & land surveyors
103 College Road East • Princeton, NJ 08540 • 609-987-2323
211 Bayberry Drive • Cape May Court House, NJ 08210 • 609-465-2600
www.vannoteharvey.com **Certificate of Authorization** No. 24GA28071200
van note-harvey associates - Since 1884 -

LIGHTING DETAILS
OF
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'

MERCER CO., N.J.
DECEMBER 16, 2020

DRAWN BY JR	FIELD BK	ORDER No.	FILE No.	SHEET No.
DATE 12/16/20		45051-400-21	203-A-1	LG3.01
CHECKED BY CS	PAGE			
DATE 12/16/20				

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

American Revolution Deluxe Full Cutoff LED

Series ARDCL

PRODUCT OVERVIEW

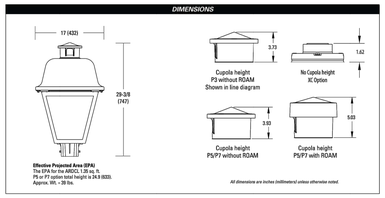
Features:

- Colonial LED lantern, replaces HID models up to 150W HPS for street and area lighting applications
- Eleven (11) LED performance packages deliver just the right amount of light for any given application up to 12,800 lumens
- Available in color temperature choices of 2700K, 3000K, 4000K, and 5000K
- Designed for up-light restrictive applications. ARDCL has zero up-light
- Four (4) distinct light distribution options provide design flexibility, available in Type II, Type III, Type IV, and Type V
- Die-cast aluminum housing, engineered for sturdy life-long performance
- Die-cast aluminum hood features a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access
- Standard paint finish is smooth / gloss
- Housing is tenon pole-mounted and designed for use with a 3" tall by 3-3/8" to 3" diameter tenon, and secured by three set screws.
- Rated L70, LED life greater than 100,000 hours at 25°C
- Complies with all applicable ANSI C136 standards
- CSA listed and suitable for up to 40°C ambient
- Surge protection device (standard) exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Enhanced (10kV/6kA). 20kV Option exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Extreme (20kV/10kA)
- Equipped with LED electronic 0-10V dimmable driver

Applications:

Streetscapes
Walkways
Pathways
Parks

DIMENSIONS



Effective Projected Area (EPA)
The EPA for the ARDCL 1.28 sq. ft.
P5 or P7 cupola total height is 24.9 (633).
Approx. 9ft. – 3lb lbs.

All dimensions are inches (millimeters) unless otherwise noted.

Note: Specifications subject to change without notice.
American Revolution Deluxe Full Cutoff LED Series - ARDCL

AEL American Electric Lighting

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

American Revolution Deluxe Full Cutoff LED

Series ARDCL

ORDERING INFORMATION

Example: ARDCL P30 AS 40K R3

Series

ARDCL	American Revolution Full Cutoff Deluxe LED

Performance Package

Package	Input Watts	Lumens (nominal)
P10	23	2,600
P15	34	3,400
P20	41	3,900
P25	52	4,600
P30	46	5,100
P35	65	6,700
P40	78	7,600
P45	98	8,800
P50	66	7,700
P55	94	10,100
P60	111	11,500

Voltage

AS	120-277v
AR	347V, 480V

Color Temperature (CCT)

27K	2700K
30K	3000K
40K	4000K
50K	5000K

Distribution

R2	Type II
R3	Type III
R4	Type IV
R5	Type V

Options

Paint[1]

(blank)	Black (standard), smooth / gloss
GY	Gray, smooth / gloss
DOB	Dark Bronze, smooth / gloss
WH	White, smooth / gloss
BZ	Bronze, smooth / gloss

Controls

(blank)	1 pin NEMA photocontrol (standard)
NR	No photocontrol receptacle
P7	7 pin NEMA photocontrol
PCLL[1,4]	Solid state long life photocontrol
PS4[1,4]	Solid state long life photocontrol, 347 Volt only
P48[1,4]	Solid state long life photocontrol, 480 Volt only
PCSS[1,4,5]	Solid state photocontrol, 120-277V (not CSA Listed)
AO	Field adjustable output module
DALI	DALI driver (special request)
PND	Part night dimming
SH	Shorting cap
SHX[4]	Shorting cap (not CSA listed)

Miscellaneous

SS	Stainless steel hardware
TL	Tool-less latch
NL1X1	1" x 1" NEMA label
NL2X2	2" x 2" NEMA label
XL	Not CSA Listed
LDGF	Ladder Rest
RCCS[4]	ROAM Cupola Cap
XC	No Cupola
CR	Epoxy Pre-Coat Finish
20KR	20kV/10kA surge protection device
FPDxx	factory programmed driver

House-Side Shields

HSS	House Side Shield

VF1-H ONLY

Prewired leads

L10	10ft prewired leads
L03	3ft prewired leads
L10	10ft prewired leads
L20	20ft prewired leads
L25	25ft prewired leads
L30	30ft prewired leads

Accessory
House Side Shield shipped separately and installed in the field

ARDCLFHSSLEM10	ARDCL HSS for P10 / P15 / P20 / P25
ARDCLFHSSLEM30	ARDCL HSS for P30 / P35 / P40 / P45
ARDCLFHSSLEM50	ARDCL HSS for P50 / P55 / P60

Note: Check the OPTIONS MATRIX on Page 3 for compatibility & restrictions

AEL American Electric Lighting
AEL Headquarters, 3635 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
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Warranty Five year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/terms-and-conditions
Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

LITHONIA LIGHTING

Catalog Number	
Notes	
Type	

FEATURES & SPECIFICATIONS

INTENDED USE — **These specifications are for USA standards only. Check with factory for Canadian specifications.** Round Straight Steel is a general purpose light pole for up to 30 foot mounting heights. This pole provides a robust yet cost effective option for mounting area lights and floodlights.

CONSTRUCTION — **Pole:** Shaft is fabricated from one piece of ASTM A-572 Grade 55 structural steel, 3" diameter with a nominal wall thickness of .100" and .250" are available with certain tube diameters.

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Tenon drilled and open top poles include a removable press-fit, black, low density polyethylene top cap.

Handhole: A reinforced handhole with grounding provision is provided at 12" from the base end of the pole assembly on side A. Every handhole includes a cover and cover attachment hardware. 2.5" x 5" rectangular handhole is provided on pole.

Base Cover: A two-piece ABS plastic full base cover is provided with each pole assembly. Additional base cover options are available upon factory request. Options include fabricated two-piece steel cover or heavy duty two-piece cast aluminum full base cover. All base covers are finished to match pole.

Anchor Base/ Bolts: Anchor base is fabricated from hot-rolled carbon steel plate that conforms with ASTM A36. Anchor bolts conform to ASTM F1554 Grade 55 and are provided with two free nuts and two flat washers. Bolts have an "L" bend on one end. All anchor bolts are hot-dipped galvanized a minimum of 12" terminal on the threaded end. Anchor bolts are made of steel rod having a minimum yield strength of 55,000 psi and a yield strength of 75,000 psi to 95,000 psi.

Hardware – All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel or stainless steel.

Finish – Extra durable standard powder-coat finishes include Dark Bronze, White, Black, Medium Bronze and Natural Aluminum colors. Classic finishes include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue colors. Architectural Colors and Special Finishes are available by quote and include, but are not limited to Hot-dipped Galvanized, Paint over Hot-dipped Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes. Factory applied primer paint finish is available for customer field paint applications.

WARRANTY — 5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/customer-support/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

Anchor Base Poles

RSS

ROUND STRAIGHT STEEL

OUTDOOR POLE-RSS

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

RSS Round Straight Steel Pole

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** RSS 20 4-5B DM19 DDB

RSS Series	Nominal Rotare-mounting height	Nominal shaft base size/wall thickness[1]	Mounting[2]	Options	Finish[8]
RSS	8'-30' (for 1/2 ft. increments, add -R to the pole height, e.g. 14.5 equals 20'-R for 14.5') (See technical information table for complete ordering information.)	**3B** 3" (.120") **4B** 4" (.120") **4-5B** 4-1/2" (.120") **5B** 5" (.120") (See technical information table for complete ordering information.)	Tenon mounting PT Open top **C20** 2-3/8" O.D. (2" NPS) T25 2-7/8" O.D (2-1/2" NPS) T30 3-1/2" O.D. (3" NPS)[3] T35 4" O.D. (3-1/2" NPS)[3] RAD,RAD,RAD,RAD,RAD,RAD Drill mounting[7] DM19 1 at 90° DM28 2 at 180° DM28PL 2 at 180° with one side plugged DM29 2 at 90° DM32 3 at 120° DM39 4 at 90° CXD,CXD,CXD,CXD,CXD,CXD Drill mounting[7] DM19AS 1 at 90° DM28AS 2 at 180° DM29AS 2 at 90° DM32AS 3 at 120° DM39AS 4 at 90° ANSI C136 Drill mounting[7,9] DM19ASCI 1 at 90° DM28ASCI 2 at 180° DM29ASCI 2 at 90° DM32ASCI 3 at 120° DM39ASCI 4 at 90° AASHTO Drill mounting[7,9] DM19ASCT 1 at 90° DM28ASCT 2 at 180° DM29ASCT 2 at 90° DM32ASCT 3 at 90° DM44ASCT 4 at 90° OMNI[10] Jogged drill mounting[7,9] DM19ASCJ 1 at 90° DM28ASCJ 2 at 180° DM29ASCJ 2 at 90° DM39ASCJ 4 at 90°	Shipped installed LRB Lens anchor bolts (Include when anchor bolts are not needed) LFBC Lens full base cover (Include to order pole without a base cover) VD Vibration dampner TP Tamper-resistant handhole cover fasteners HAxy Horizontal arm bracket (1 fixture)[1,6] FBExy Fordmen outlet box electrical[1] CPL12xy 1/2" coupling[1] CPL34xy 3/4" coupling[1] CPL1xy 1" coupling[1] NPL12xy 1/2" threaded nipple[1] NPL34xy 3/4" threaded nipple[1] NPL1xy 1" threaded nipple[1] EHRxy Extra handhole[1,11] MASX Match existing[1] USPORM United States point of manufacture[1] IC Interior coating[1] UL UL listed with label (Includes NEC compliant cover) NEC NEC 410.30 compliant gasketed handhole (Not UL Labeled) Shipped separately (replacement kit available) (blank) FBC Full base cover (plastic) RFBC Round Full Base Cover (Plastic) (blank) TC Top cap (blank) HHC Handhole cover	Standard colors DDB0Z0 Dark bronze DWH0Z0 White DBL0Z0 Black DMB0Z0 Medium bronze DNA0Z0 Natural aluminum GAY Galvanized finish Classic colors DSS Sandstone DGC Charcoal gray DTG Tennis green DBR Bright red DSB Steel blue Architectural colors (powder finish) Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

VF1 Series 13'-0"

NOTES:
1. Wall thickness will be signified with a "C" (11 Gauge) or a "D" (10 Gauge) in the shaft base size, e.g. 4-5B-C or 4-5B-D.
2. PT open top poles include top cap. When ordering tenon mounting, cut drill mounting for the same pole. Follow this example: DM28 T35. The combination includes a required extra handhole.
3. Tenon top cap sizes chart for the correct drilling template pattern and orientation compatibility.
4. Insert "1" or "2" to designate fixture size, e.g. DM19ASC2.
5. Specify location and orientation when ordering cuplex. For "X", Specify the height above the base of pole in feet or feet and inches. Example: 10' = 10 or 10'-6" = 10-6. Minimum: 08 = 1 and 200: 06 = 2'-0 for "X". Specify orientation from handhole (A,B,C,D). Refer to the Handhole Orientation diagram below. Example: 1/2" coupling at 1'-6", orientation C = (PL12X15-6).
6. Horizontal arm in 18" x 3-1/8" O.D. tenon standard with one arm per pole, providing 15" max. If ordering two horizontal arm on the same height, specify with fitting. Example: HA28B2
7. Combination of tenon top and drill mount includes extra handhole.
8. Must add original order number of existing pole(s).
9. Not available with tenon top mounting.
10. Offered in enhanced corrosion resistance.
11. Additional colors available; see www.lithonia.com/archcolors or Architectural Colors brochure (Form No. PA-2). Available by formal quote only, consult factory for details.

LITHONIA LIGHTING
OUTDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com
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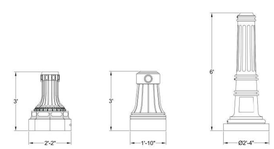
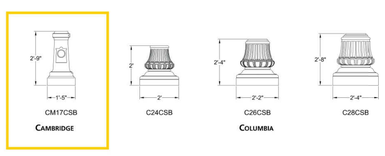
POLE-RSS

BEAM ILLUMINATING ARCHITECTURE

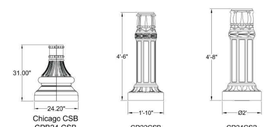
FIXTURE TYPE **VF1**



AN24CSB **ANDOVER** | AT22CSB **ATLANTA** | BF28CSB **BRADFORD**



CM17CSB **CAMBRIDGE** | C24CSB | C26CSB **COLUMBIA** | C28CSB



Chicago CSB
CPB24-CSB
CHICAGO

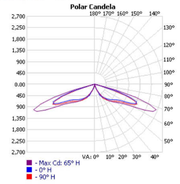
CP22CSB | CP24CSB **CHESAPEAKE**

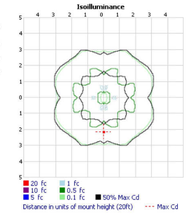
BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: ARDCL P25 XX 27K RS

Test #:	ISF 182928P112
Test Lab:	SCALED PHOTOMETRY
Catalog:	ARDCL P25 XX 27K RS
Description:	American Revolution Deluxe LED Full cutoff with RS distribution
Series:	Series ARDCL LED - Full Cutoff
Lamp Output:	Total luminaire Lumens: 5174.5, absolute photometry *
Input Wattage:	50.7
Luminous Opening:	Rectangle (L: 9.72", W: 5.28")
Max Cd:	2,632.8 at Horizontal: 65°, Vertical: 67.5°
Roadway Class:	Type VS





*Test based on absolute photometry where lamp lumens=lumens total.
*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

Visual Photometric Tool 1.2.46 copyright 2021, Acuity Brands Lighting.
This Photometric report has been generated using methods recommended by the IESNA. Calculations are based on Photometric data provided by the manufacturer, and the accuracy of this Photometric report is dependent on the accuracy of the data provided. End-user environment and application (including, but not limited to, voltage variation and dirt accumulation) can cause actual Photometric performance to differ from the performance calculated using the data provided by the manufacturer. This report is provided without warranty as to accuracy, completeness, reliability or otherwise. In no event will Acuity Brands Lighting be responsible for any loss resulting from any use of this report.

ISF 182928P112
VISUAL PHOTOMETRIC TOOL

PUBLISH
PAGE 1 OF 4

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF1**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: ARDCL P25 XX 27K RS

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	200.6	3.9%
0-40	615.3	11.9%
0-60	2,425.2	46.9%
60-90	2,749.3	53.1%
70-100	807.4	15.6%
90-120	0.000	0%
0-90	5,174.5	100%
90-180	0.000	0%
0-180	5,174.5	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	0.1	0.0%	90-100	0.000	0%
10-20	27.4	0.5%	100-110	0.000	0%
20-30	173.1	3.3%	110-120	0.000	0%
30-40	414.7	8.0%	120-130	0.000	0%
40-50	699.3	13.5%	130-140	0.000	0%
50-60	1,110.6	21.5%	140-150	0.000	0%
60-70	1,941.9	37.5%	150-160	0.000	0%
70-80	783.7	15.1%	160-170	0.000	0%
80-90	23.7	0.5%	170-180	0.000	0%

Roadway Summary

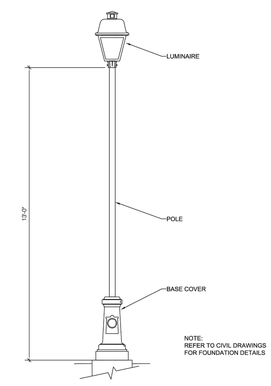
Distribution:		Type VS
Max Cd, 90 Deg Vert:		0.000
Max Cd, 80 to <90 Deg:		100.5
	Lumens	% Lamp
Downward Street Side:	2,587.0	50%
Downward House Side:	2,587.0	50%
Downward Total:	5,173.9	100%
Upward Street Side:	0.000	0%
Upward House Side:	0.000	0%
Upward Total:	0.000	0%
Total Lumens:	5,173.9	100%

LCS Table

BUG Rating	**B3 - U0 - G1**	
Forward Light	Lumens	Lumens %
Low(0-30):	100.2	1.9%
Medium(30-60):	1,111.8	21.5%
High(60-80):	1,363.2	26.3%
Very High(80-90):	11.8	0.2%
Back Light		
Low(0-30):	100.2	1.9%
Medium(30-60):	1,111.8	21.5%
High(60-80):	1,363.2	26.3%
Very High(80-90):	11.8	0.2%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
Trapped Light:	0.6	0%

ISF 182928P112
VISUAL PHOTOMETRIC TOOL

PUBLISH
PAGE 2 OF 4



VF1 & VF1-H ELEVATION

3/8" = 1'-0"

BEAM
ILLUMINATING ARCHITECTURE

BEAM, ltd.
2220 Mount Carmel Avenue
Glenside, PA 19038
T. 215.508.0900
www.beamltd.com

REV.	DESCRIPTION	DATE	DFT.BY	CKD.BY
1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

CHRISTINA SPANGLER
LIGHTING CERTIFIED BY NCQLP
EXPIRATION 12.31.21

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LIGHTING DETAILS
OF
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP MERCER CO., N.J.
SCALE 1"= 40' DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG3.02

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

Valiant™ Full Cutoff LED
Series AVPCL2

PRODUCT OVERVIEW

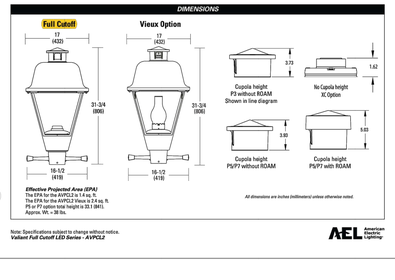
Features:

- Colonial LED lantern, replaces HID models up to 150W HPS for street and area lighting applications
- Eleven (11) LED performance packages deliver just the right amount of light for any given application up to 12,000 lumens
- Available in color temperature choices of 2700K, 3000K, 4000K, and 5000K
- Designed for up-light restrictive applications, AVPCL2 has zero up-light
- Four (4) distinct light distribution options provide design flexibility, available in Type II, Type III, Type IV, and Type V
- Die-cast aluminum housing, engineered for sturdy life-long performance
- Die-cast aluminum hood features a trigger latch (TL) option and captive thumb screws for fast, easy electrical and optical chamber access
- Standard black finish is textured / matte - all other finishes are smooth / gloss.
- Housing is tenon pole-mounted and designed for use with a 3" tall by 2-3/8" to 3" diameter tenon, and secured by three set screws.
- Rated L70, LED life greater than 100,000 hours at 25°C
- Complies with ANSI: C136.2, C136.10, C136.15
- CSA listed and suitable for up to 40°C ambient
- Surge protection device (standard) exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Enhanced (10kV/5kA). 20kV Option exceeds ANSI/IEEE C62.41-2002 Category C High (10kV/10kA) and ANSI C136.2-2015 Extreme (20kV/10kA)
- Equipped with LED electronic 0-10V dimmable driver

Applications:

Streetscapes
Walkways
Pathways
Parks

DIMENSIONS



All dimensions are inches (millimeters) unless otherwise noted.

Effective Projected Area (EPA)
The EPA for the AVPCL2 is 1.4 sq. ft.
The EPA for the AVPCL2 Neck is 1.74 sq. ft.
P5 or P7 option total height is 28.1 (841).
Approx. Wt. = 38 lbs.

Note: Specifications subject to change without notice.
Valiant Full Cutoff LED Series - AVPCL2

American Electric Lighting

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

Valiant™ Full Cutoff LED
Series AVPCL2

ORDERING INFORMATION

Example: AVPCL2 30LEDE10 MVOLT 4K R3

Series
AVPCL2 Valiant Full Cutoff LED

Performance Package

Package	Input Watts	Lumens (nominal)
P10	24	2,600
P15	34	3,500
P20	41	4,000
P25	52	4,700
P30	46	5,200
P35	65	6,900
P40	78	7,800
P45	98	9,000
P50	66	7,900
P55	96	10,400
P60	111	11,900

Voltage
A5 120-277v
AH 347/X; 480V

Color Temperature (CCT)
27K 2700K
30K 3000K
40K 4000K
50K 5000K

Distribution
R2 Type II
R3 Type III
R4 Type IV
R5 Type V

VF2-A R3
VF2-B R4
VF2-V R5

Options
Paint [1]
(blank) Black (standard); textured / matte
GY Gray, smooth / gloss
DDB Dark Bronze, smooth / gloss
WH White, smooth / gloss
BZ Bronze, smooth / gloss

Controls
(blank) 1-pin NEMA photocontrol (standard)
NR No photocontrol receptacle
P7 7-pin NEMA photocontrol
PCL1[1,4] Solid state long-life photocontrol
PS4[1,4] Solid state long-life photocontrol, 347 Volt only
P48[1,4] Solid state long-life photocontrol, 480 Volt only
PCS5[1,4,7] Solid state photocontrol, 120-277V (not CSA Listed)
AD Field adjustable output module
DALI DALI driver (special order)
PND Part night dimming
SR Shorting cap
SNR[7] Shorting cap (not CSA Listed)

Miscellaneous
SS Stainless steel hardware
TL Tool-less latch
NL1U1 1" x 1" NEMA label
NL2U2 2" x 2" NEMA label
RL Not CSA Listed
LDR[1] Ladder Rest
RCC[1,4] HOAM Cupola Cap
NCC No Cupola
CR Epoxy Pre-Coat Finish
20KV 20KV/10kA surge protection device
FDxx Factory programmed driver
VR[1] Versa Option
VRCA[1] ER option with Clear Acrylic lens

House-Side Shields
HSS House Side Shield

Prewired leads
L10 10ft prewired leads
L03 3ft prewired leads
L10 10ft prewired leads
L20 20ft prewired leads
L25 25ft prewired leads
L30 30ft prewired leads

Accessory
House Side Shield shipped separately and installed in the field
AVPCL2FHSSLSM10 AVPCL2 HSS for P10 / P35 / P55
AVPCL2FHSSLSM20 AVPCL2 HSS for P20 / P35 / P40 / P45
AVPCL2FHSSLSM30 AVPCL2 HSS for P30 / P55 / P60

Note: Check the OPTIONS MATRIX on Page 3 for compatibility & restrictions

American Electric Lighting
AEL Headquarters, 3825 Columbus Road, Granville, OH 43023
www.americanelectriclighting.com
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Warranty Five year limited warranty. Complete warranty terms located at: www.acuitybrands.com/support/customer-guides/terms-and-conditions
Actual performance may differ as a result of end-user environment and application.
All values are design or typical values, measured under laboratory conditions at 25 °C.
Specifications subject to change without notice.

Please contact your sales representative for the latest product information.

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

LITHONIA LIGHTING

Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE — These specifications are for USA standards only. RTS poles are not to be utilized for Sportlighting applications requiring use of crossarms to mount luminaires. SPRTS series poles are the correct pole type for Sportlighting projects and are designed to be configured as a complete assembly with the desired crossarm(s) incorporated within the pole nomenclature/ordering description.

CONSTRUCTION — Pole Shaft: The pole shaft is of 11 gauge (0.1196") or 7 gauge (0.1793") with a uniform wall thickness and is made of a weldable-grade (ASTM A-595 Grade A or A572 Grade 55), hot-rolled, commercial-quality carbon steel tubing with a minimum yield of 55,000 psi. Shaft is one-piece construction with a full-length longitudinal high-frequency electric resistance welded and round in cross-section having a uniform linear taper of .14" per foot.

Pole Top: Options include tenon top, drilled for side mount fixture, tenon with drilling (includes extra handhole) and open top. Side drilled and open top poles include a removable steel top cap with set screws.

Handhole: A reinforced handhole with grounding provision is provided at 18" from the base end of the pole assembly on side A. Every handhole includes a cover and cover attachment hardware. 2" x 5" rectangular handhole is provided on pole with 5.9" diameter. Pole shaft with diameters greater than 5.9" are provided with a 4" x 6.5" oval shaped handhole.

Base Cover: A two-piece ABS plastic full base cover is provided with each pole assembly on pole shaft diameters of 9" or less. Shaft sized greater than 9" have a sheet steel two-piece base cover. Additional base cover options are available upon factory request. Bolt cover caps can be substituted on most pole shaft sizes. Options include heavy duty two-piece cast aluminum full base cover and bolt cover caps. All base covers and bolt cover caps are finished to match pole.

Anchor Base/Bolts: Anchor base is fabricated from hot-rolled carbon steel plate that conforms with ASTM A36. Anchor bolts are manufactured to ASTM F1554 Standards Grade 55, 55 KSI minimum yield strength and tensile strength of 75 KSI KSI. Upper portion of anchor bolt is galvanized per ASTM A-153; bolts have an "L"bend on bottom end and are galvanized a minimum of 12" on the threaded end. Each hot-dipped galvanized anchor bolt is furnished with two hex nuts and two flat washers.

HARDWARE - All structural fasteners are high-strength galvanized carbon steel. All non-structural fasteners are galvanized or zinc-plated carbon steel, or stainless steel.

FINISH - Extra durable standard finishes include Dark Bronze, White, Black, Medium Bronze, Natural Aluminum, or Hot-dipped Galvanized finish. Classic colors include Sandstone, Charcoal Gray, Tennis Green, Bright Red and Steel Blue. Architectural Colors and Special Finishes are available by quote and include but are not limited to Hot-dipped Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes.

WARRANTY — 5-year limited warranty. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE Actual performance may differ as a result of end-user environment and application.
Specifications subject to change without notice.

OUTDOOR POLE-RTS

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

Anchor Base Poles

RTS

ROUND TAPERED STEEL

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

RTS Round Tapered Steel Poles

ORDERING INFORMATION Lead times will vary depending on options selected. Consult with your sales representative. **Example:** RTS 30-6-6B DM19 DDB

RTS Series	Nominal Bottom mounting height	Nominal shaft base size/wall thickness[1]	Mounting[2]
RTS	20'-50' (for 1/2 ft increments, add -6 to the pole height. Ex. 25' = 25-6 or 25ft-6in.) (See technical information table for complete ordering information.) VF2 Series 20'-0"	5-5B (.135") 6-5B (.135") 6-6B (.135") 7-6B (.135") 7-6B (.135") 7-7B (.135") 8-6B (.135") 8-6F (.188") 8-7B (.135") 9-6B (.135") 9-6F (.179") 9-7B (.135") 10-6B (.135") 10-6F (.179") 11-6F (.179") 12-6F (.179") 13-6W (.219")	**Tenon mounting** PT Open top P2B 2-3/8" O.D. (2" NPS)[3] T2S 2-3/8" O.D. (2-1/2" NPS)[3] T3B 3-1/2" O.D. (3" NPS)[3] T3S 4" O.D. (3-1/2" NPS)[3] RA5,RA9,RS2,RC9,RW,RYF, Drill mounting[4] DM19 1 at 90° DM28 2 at 180° DM28PL 2 at 180° with one side plugged DM29 2 at 90° [1] DM32 3 at 120° [1] DM39 3 at 90° [1] DM49 4 at 90° [1]

CSA DOG/BSA/ADS/DMERC**/RA & RAX Drill mounting[4]** DM19AS 1 at 90° DM29AS 2 at 180° DM29AS 2 at 90°[1] DM32AS 3 at 120°[1] DM39AS 3 at 90°[1] DM49AS 4 at 90°[1] **RA5 drill mounting[4]** DM19RA5D 1 at 90° DM28RA5D 2 at 180° DM29RA5D 2 at 90° DM32RA5D 3 at 120° DM39RA5D 3 at 90° DM49RA5D 4 at 90° **CSA Drill mounting[4]** DM19ECSA 1 at 90° DM28ECSA 2 at 180° DM29ECSA 2 at 90° DM39ECSA 3 at 90° DM49ECSA 4 at 90° **AEDEC*Assigned drill mounting[4]** DM19AST_ 1 at 90° DM28AST_ 2 at 180° DM29AST_ 2 at 90° DM39AST_ 3 at 90° DM49AST_ 4 at 90°	**DMERC**Assigned drill mounting[4]** DM19NMBT_ 1 at 90° DM28NMBT_ 2 at 180° DM29NMBT_ 2 at 90° DM39NMBT_ 3 at 90° DM49NMBT_ 4 at 90°	**UGPOM** United States point of manufacture[5] **IC Interior coating[6]** **UL** UL listed with ANSI/UL/CSA/IEC compliant cover[7] **NEC** NEC #130.20 compliant grounted handhole (Red UL Labeled)

Options

Shipped installed
LJ&B Lens anchor bolts (Included when anchor bolts are not needed)
VD Vibration damper
TP Tamper resistant handhole cover fasteners
MAxy Horizontal arm bracket (1 Retrofit)[8]
FDLxy Fire/non-outlet/less electrical[9]
CPL12/xy 1/2" coupling[1]
CPL34/xy 3/4" coupling[1]
CPL1/xy 1" coupling[1]
NPL12/xy 1/2" threaded nipple[1]
NPL34/xy 3/4" threaded nipple[1]
NPL1/xy 1" threaded nipple[1]
EHBxy Extra handhole[1]
MAKE Match existing[1]

Finish[10]
Standard colors
DDBRZ Dark bronze
DWHXD White
DBLXD Black
DMBRZ Medium bronze
DNAXD Natural aluminum
GALV Galvanized finish
Shipped separately
prepainment or available
(blank) BRC Full base cover
(blank) TC Top cap
Classic colors
DSL Sandstone
DGC Charcoal gray
DTG Tennis green
DBR Bright red
DSB Steel blue
Architectural Colors and Special Finishes[11]
Galvanized, Paint over Galvanized, RAL Colors, Custom Colors and Extended Warranty Finishes available.

NOTES:
1. Wall thickness will be signified with a "1" (11 Gauge) or a "2" (7 Gauge) in nomenclature. "1" = 0.1196" | "2" = 0.1793"
2. Pole, Anchor Base, Tenon Top Options: When ordering tenon mounting and drill mounting for the same pole, follow the example: DM28 ST2S. The combination includes a requested extra handhole.
3. Refer to the Nexan spec sheet for the correct drilling template pattern and orientation compatibility.
4. Insert "T" or "2" to designate fixture size e.g. DM19ST2T.
5. Specify location and orientation when ordering option.
6. Interior Coating: Standard interior coating is one coat of paint in feet and inches; separate feet and inches with a "-". Example: 10' = 3 and 200 lbs = 20-3
For "X" Specify orientation from handhole (H,B,L,R) Refer to the Handhole Orientation diagram below. Example: 10' coupling at 9' 3" orientation = 09-3 H B L
7. Horizontal arm is 36" x 2-3/8" O.D. tenon standard with radius curve providing 52" rise. If ordering two horizontal arm at the same height, specify with Missy. Example: MA28D
8. Retrofit horizontal arm bracket. Bracket includes extra handhole.
9. Must add original order number of existing pole(s).
10. Our when-mill certifications are required.
11. Possible enhanced corrosion resistance.
11. Additional colors available: see www.lithonia.com/architectural-colors Architectural Colors brochure (Form No. 794.3). Available by formal quote only, consult factory for details.

LITHONIA LIGHTING
OUTDOOR: One Lithonia Way Conyers, GA 30012 Phone: 800-705-SERV (7378) www.lithonia.com
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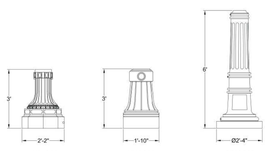
POLE-RTS

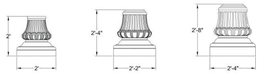
BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2 Series**

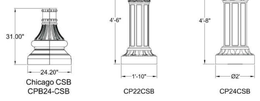


AN24CSB **ANDOVER** | AT22CSB **ATLANTA** | BF28CSB **BRADFORD**

CM17CSB **CAMBRIDGE**



C24CSB | C26CSB **COLUMBIA** | C28CSB



Chicago CSB
CPB24-CSB
CHICAGO

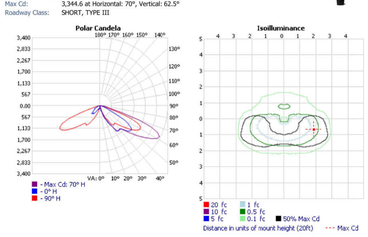
CP22CSB | CP24CSB
CHESAPEAKE

BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2-A**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R3

Test #:	ISF 182817P33
Test Lab:	SCALED PHOTOMETRY
Catalog:	AVPCL2 P30 XX 27K R3
Description:	Valiant? LED Full cutoff with R3 distribution
Series:	Series AVPCL2 LED - Full Cutoff
Lamp Output:	Total luminaire Lumens: 4666.9, absolute photometry *
Input Wattage:	45
Luminous Opening:	Rectangle (L: 6.48", W: 6")
Max Cd:	3,344.6 at Horizontal: 70°, Vertical: 62.5°
Roadway Class:	SHORT, TYPE III



*Test based on absolute photometry where lamp lumens=lumens total.
*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2-A**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R3

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	329.2	7.1%
0-40	891.8	19.1%
0-60	3,069.1	65.8%
60-90	1,597.8	34.2%
70-100	454.7	9.7%
90-120	0.000	0%
0-90	4,666.9	100%
90-180	0.000	0%
0-180	4,666.9	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	1.6	0.0%	90-100	0.000	0%
10-20	67.5	1.4%	100-110	0.000	0%
20-30	260.2	5.6%	110-120	0.000	0%
30-40	562.6	12.1%	120-130	0.000	0%
40-50	875.4	18.8%	130-140	0.000	0%
50-60	1,301.8	27.9%	140-150	0.000	0%
60-70	1,143.1	24.5%	150-160	0.000	0%
70-80	350.8	7.5%	160-170	0.000	0%
80-90	103.9	2.2%	170-180	0.000	0%

Roadway Summary

Distribution:		TYPE III, SHORT
Max Cd, 90 Deg Vert:		0.000
Max Cd, 80 to <90 Deg:		353.1
	Lumens	% Lamp
Downward Street Side:	3,539.1	75.8%
Downward House Side:	1,127.5	24.2%
Downward Total:	4,666.6	100%
Upward Street Side:	0.000	0%
Upward House Side:	0.000	0%
Upward Total:	0.000	0%
Total Lumens:	4,666.6	100%

LCS Table

BUG Rating	B1 - U0 - G1	
Forward Light	Lumens	Lumens %
Low(0-30):	237.1	5.1%
Medium(30-60):	2,110.4	45.2%
High(60-80):	1,139.6	24.4%
Very High(80-90):	52.0	1.1%
Back Light		
Low(0-30):	91.7	2%
Medium(30-60):	629.4	13.5%
High(60-80):	354.5	7.6%
Very High(80-90):	52.0	1.1%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
Trapped Light:	0.3	0%

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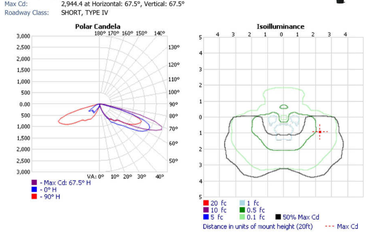
BEAM ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2-B**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R4

Test #:	ISF 182819P33
Test Lab:	SCALED PHOTOMETRY
Catalog:	AVPCL2 P30 XX 27K R4
Description:	Valiant? LED Full cutoff with R4 distribution
Series:	Series AVPCL2 LED - Full Cutoff
Lamp Output:	Total luminaire Lumens: 4719, absolute photometry *
Input Wattage:	45
Luminous Opening:	Rectangle (L: 6.48", W: 6")
Max Cd:	2,944.4 at Horizontal: 67.5°, Vertical: 67.5°
Roadway Class:	SHORT, TYPE IV



*Test based on absolute photometry where lamp lumens=lumens total.
*Cutoff Classification and efficiency cannot be properly calculated for absolute photometry.

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REV.	DESCRIPTION	DATE	DFT.BY	CKD.BY
1.	FINAL SITE PLAN SUBMISSION	05/03/21	JB	CS
1.	PRELIMINARY/FINAL SITE PLAN SUBMISSION	12/16/20	JR	CS

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EXPIRATION 12.31.21

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LIGHTING DETAILS
OF
HOPEWELL PARC
SITUATED IN

HOPEWELL TOWNSHIP
SCALE 1"= 40'
MERCER CO., N.J.
DECEMBER 16, 2020

DRAWN BY JR DATE 12/16/20	FIELD BK	ORDER No.	FILE No.	SHEET No.
CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG3.03

BEAM
ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2-B**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R4

AcuityBrands.

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	234.7	5%
0-40	619.4	13.1%
0-60	2,228.7	47.2%
60-90	2,490.3	52.8%
70-100	1,062.0	22.5%
90-120	0.000	0%
0-90	4,719.0	100%
90-180	0.000	0%
0-180	4,719.0	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	1.4	0.0%	90-100	0.000	0%
10-20	48.6	1.0%	100-110	0.000	0%
20-30	184.7	3.9%	110-120	0.000	0%
30-40	384.7	8.2%	120-130	0.000	0%
40-50	601.8	12.8%	130-140	0.000	0%
50-60	1,007.6	21.4%	140-150	0.000	0%
60-70	1,428.3	30.3%	150-160	0.000	0%
70-80	924.3	19.6%	160-170	0.000	0%
80-90	137.6	2.9%	170-180	0.000	0%

Roadway Summary

Distribution:	TYPE IV, SHORT	
Max Cd, 90 Deg Vert:	0.000	
Max Cd, 80 to <90 Deg:	562.4	
	Lumens	% Lamp
Downward Street Side:	3,756.5	79.6%
Downward House Side:	962.1	20.4%
Downward Total:	4,718.6	100%
Upward Street Side:	0.000	0%
Upward House Side:	0.000	0%
Upward Total:	0.000	0%
Total Lumens:	4,718.6	100%

LCS Table

BUG Rating	**B1 - U0 - G2**	
Forward Light	Lumens	Lumens %
Low(0-30):	144.9	3.1%
Medium(30-60):	1,495.1	31.7%
High(60-80):	2,026.1	42.9%
Very High(80-90):	90.4	1.9%
Back Light		
Low(0-30):	89.5	1.9%
Medium(30-60):	498.4	10.6%
High(60-80):	327.2	6.9%
Very High(80-90):	47.1	1%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
Trapped Light:	0.3	0%

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BEAM
ILLUMINATING ARCHITECTURE

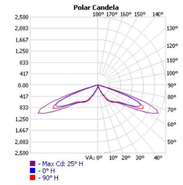
FIXTURE TYPE **VF2-C**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R5

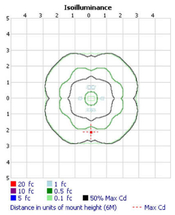
Test #: ISF 182821P33
Test Lab: SCALED PHOTOMETRY
Catalog: AVPCL2 P30 XX 27K R5
Description: Valiant7 LED Full cutoff with R5 distribution
Series: Series AVPCL2 LED - Full Cutoff
Lamp Output: Total luminaire Lumens: 5082.7, absolute photometry *
Input Wattage: 45
Luminous Opening: Rectangle (L: 0.16M, W: 0.15M)
Max Cd: 2,433.8 at Horizontal: 25°, Vertical: 65°
Roadway Class: Type VS

AcuityBrands.
AEL American Electric Lighting

Polar Candela



Isoilluminance



*Test based on absolute photometry where lamp lumens=lumens total.
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ILLUMINATING ARCHITECTURE

FIXTURE TYPE **VF2-C**

OUTDOOR PHOTOMETRIC REPORT
CATALOG: AVPCL2 P30 XX 27K R5

AcuityBrands.

Zonal Lumen Summary

Zone	Lumens	% Luminaire
0-30	187.8	3.7%
0-40	597.2	11.8%
0-60	2,497.6	49.1%
60-90	2,585.0	50.9%
70-100	618.6	12.2%
90-120	0.000	0%
0-90	5,082.7	100%
90-180	0.000	0%
0-180	5,082.7	100%

Lumens Per Zone

Zone	Lumens	% Total	Zone	Lumens	% Total
0-10	0.9	0.0%	90-100	0.000	0%
10-20	32.4	0.6%	100-110	0.000	0%
20-30	154.5	3.0%	110-120	0.000	0%
30-40	409.4	8.1%	120-130	0.000	0%
40-50	688.3	13.5%	130-140	0.000	0%
50-60	1,212.1	23.8%	140-150	0.000	0%
60-70	1,966.5	38.7%	150-160	0.000	0%
70-80	585.9	11.5%	160-170	0.000	0%
80-90	32.7	0.6%	170-180	0.000	0%

Roadway Summary

Distribution:	Type VS	
Max Cd, 90 Deg Vert:	0.000	
Max Cd, 80 to <90 Deg:	68.3	
	Lumens	% Lamp
Downward Street Side:	2,541.2	50%
Downward House Side:	2,541.2	50%
Downward Total:	5,082.4	100%
Upward Street Side:	0.000	0%
Upward House Side:	0.000	0%
Upward Total:	0.000	0%
Total Lumens:	5,082.4	100%

LCS Table

BUG Rating	**B3 - U0 - G1**	
Forward Light	Lumens	Lumens %
Low(0-30):	93.7	1.8%
Medium(30-60):	1,154.4	22.7%
High(60-80):	1,276.8	25.1%
Very High(80-90):	16.3	0.3%
Back Light		
Low(0-30):	93.7	1.8%
Medium(30-60):	1,154.4	22.7%
High(60-80):	1,276.8	25.1%
Very High(80-90):	16.3	0.3%
Uplight		
Low(90-100):	0.000	0%
High(100-180):	0.000	0%
Trapped Light:	0.3	0%

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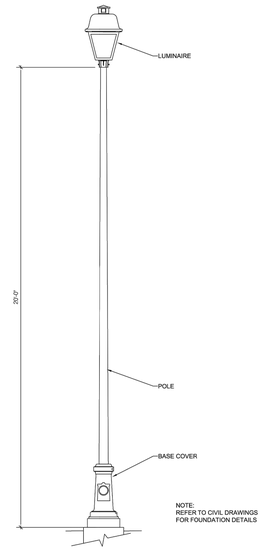

NOTE:
REFER TO CIVIL DRAWINGS
FOR FOUNDATION DETAILS

VF2 SERIES ELEVATION
3/8" = 1'-0"

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LIGHTING DETAILS
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SCALE 1"= 40'

MERCER CO., N.J.
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CHECKED BY CS DATE 12/16/20	PAGE	45051-400-21	203-A-1	LG3.04