

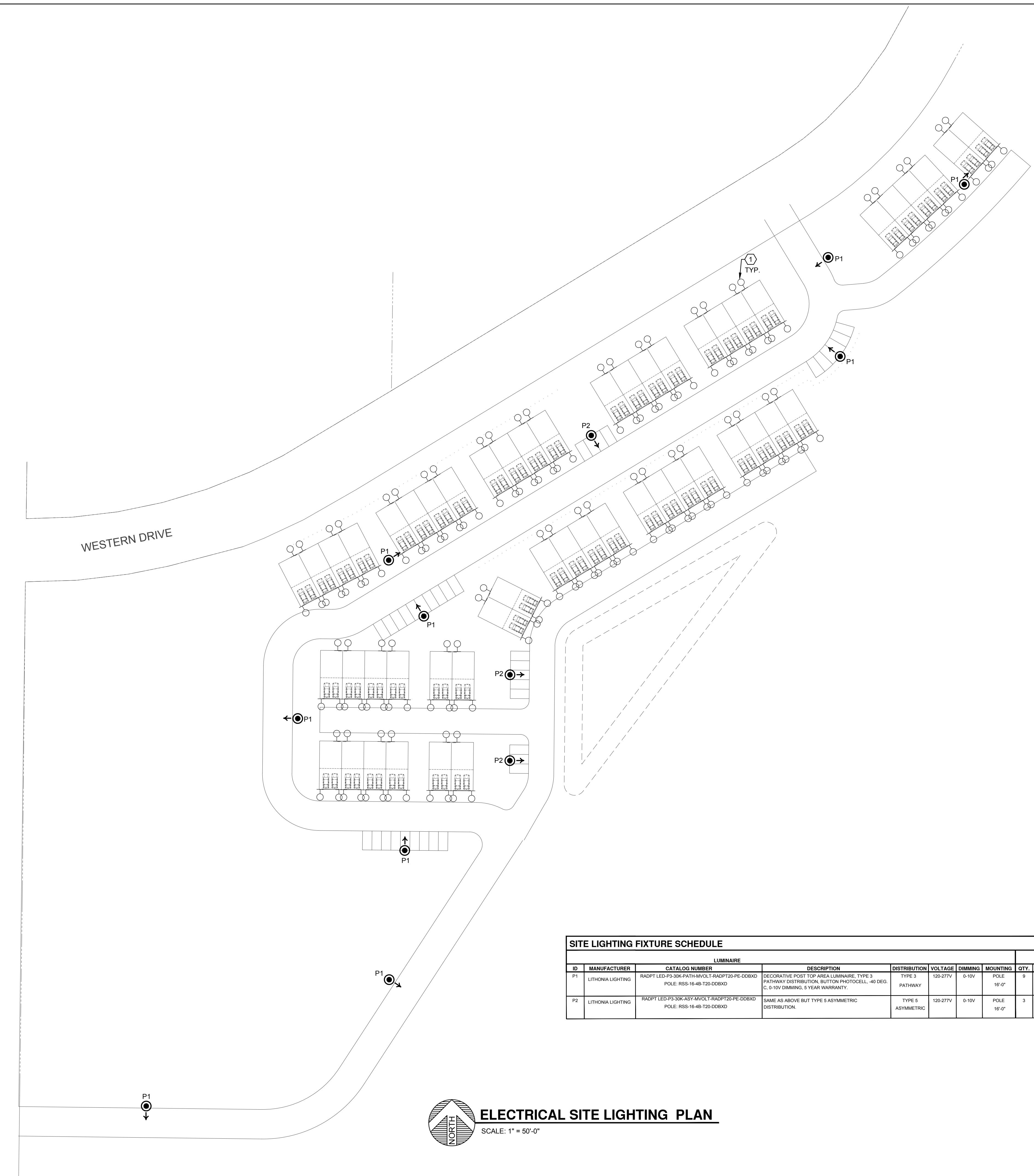
721 WESTERN DR. TOWNHOMES
SITE DEVELOPMENT PLAN PHOTOMETRY
721 WESTERN DRIVE, COLORADO SPRINGS, CO 80915

**ELECTRICAL SITE
DEVELOPMENT
PLAN**

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HEREIN SHALL NOT BE DUPLICATED,
TRANSMITTED, REPRODUCED
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PLANT ENGINEERING CONSULTANTS.

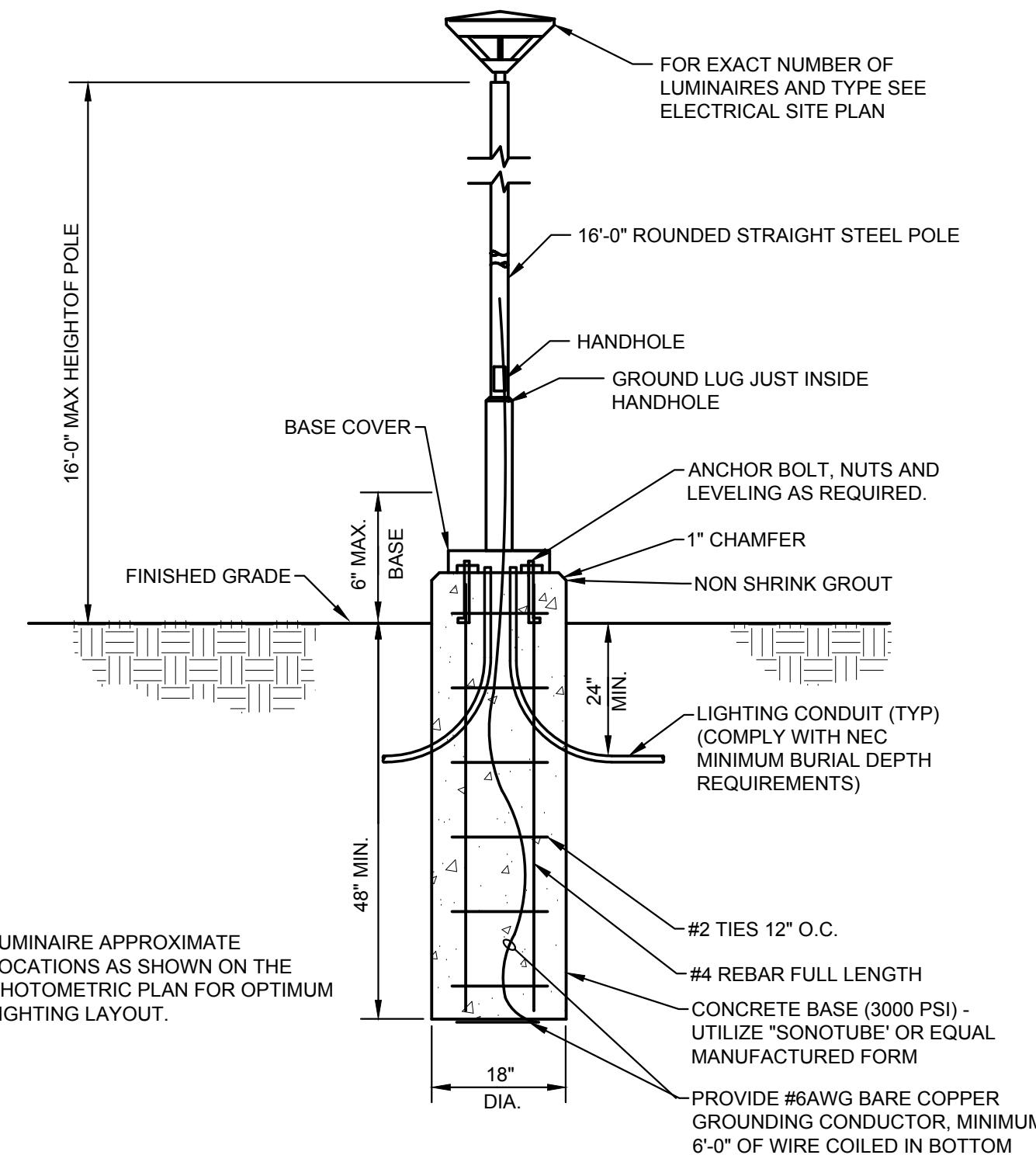
PROJECT 23080
DATE 09/15/2023
DRAWN CAO
CHECKED MP
SHEET

DP1



KEYED NOTES

- ① TYPICAL CARRIAGE LIGHT FOR TOWNHOMES. COORDINATE WITH OWNER.



1 TYPICAL FIXTURE TYPE P1,P2 POLE BASE DETAIL
NOT TO SCALE

| SITE LIGHTING FIXTURE SCHEDULE | | | | | | | | | | | |
|--------------------------------|-------------------|---|---|-------------------|----------|---------|-------------|------|------|-------|-------------|
| LUMINAIRE | | | | | | | | | | | |
| ID | MANUFACTURER | CATALOG NUMBER | DESCRIPTION | DISTRIBUTION | VOLTAGE | DIMMING | MOUNTING | QTY. | TYPE | WATTS | LUMENS |
| P1 | LITHONIA LIGHTING | RADPT LED-P3-30K-PATH-MVOLT-RADPT20-PE-DBBXD POLE: RSS-16-48-T20-DBBXD | DEC-2020 EPOXY POST TOP AREA LUMINAIRE, TYPE 3 PATHWAY DISTRIBUTION, BUTTON PHOTOCELL, -40 DEG C, 0-10V DIMMING, 5 YEAR WARRANTY. | TYPE 3 PATHWAY | 120-277V | 0-10V | POLE 16'-0" | 9 | LED | 54 | 5,707 3000K |
| P2 | LITHONIA LIGHTING | RADPT LED-P3-30K-ASY-MVOLT-RADPT20-PE-DBBXD POLE: RSS-16-48-T20-DBBXD | SAME AS ABOVE BUT TYPE 5 ASYMMETRIC DISTRIBUTION. | TYPE 5 ASYMMETRIC | 120-277V | 0-10V | POLE 16'-0" | 3 | LED | 54 | 5,707 3000K |

SEAL
PRELIMINARY
NOT FOR
CONSTRUCTION

721 WESTERN DR. TOWNHOMES
SITE DEVELOPMENT PLAN PHOTOMETRY
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| REVISIONS | MARK | DATE | COMMENT |
|-----------|------|------------|------------------|
| | | 09/15/2023 | COORDINATION SET |

SHEET TITLE
DEVELOPMENTAL SITE PHOTOMETRIC PLAN

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PROJECT 23080
DATE 09/15/2023
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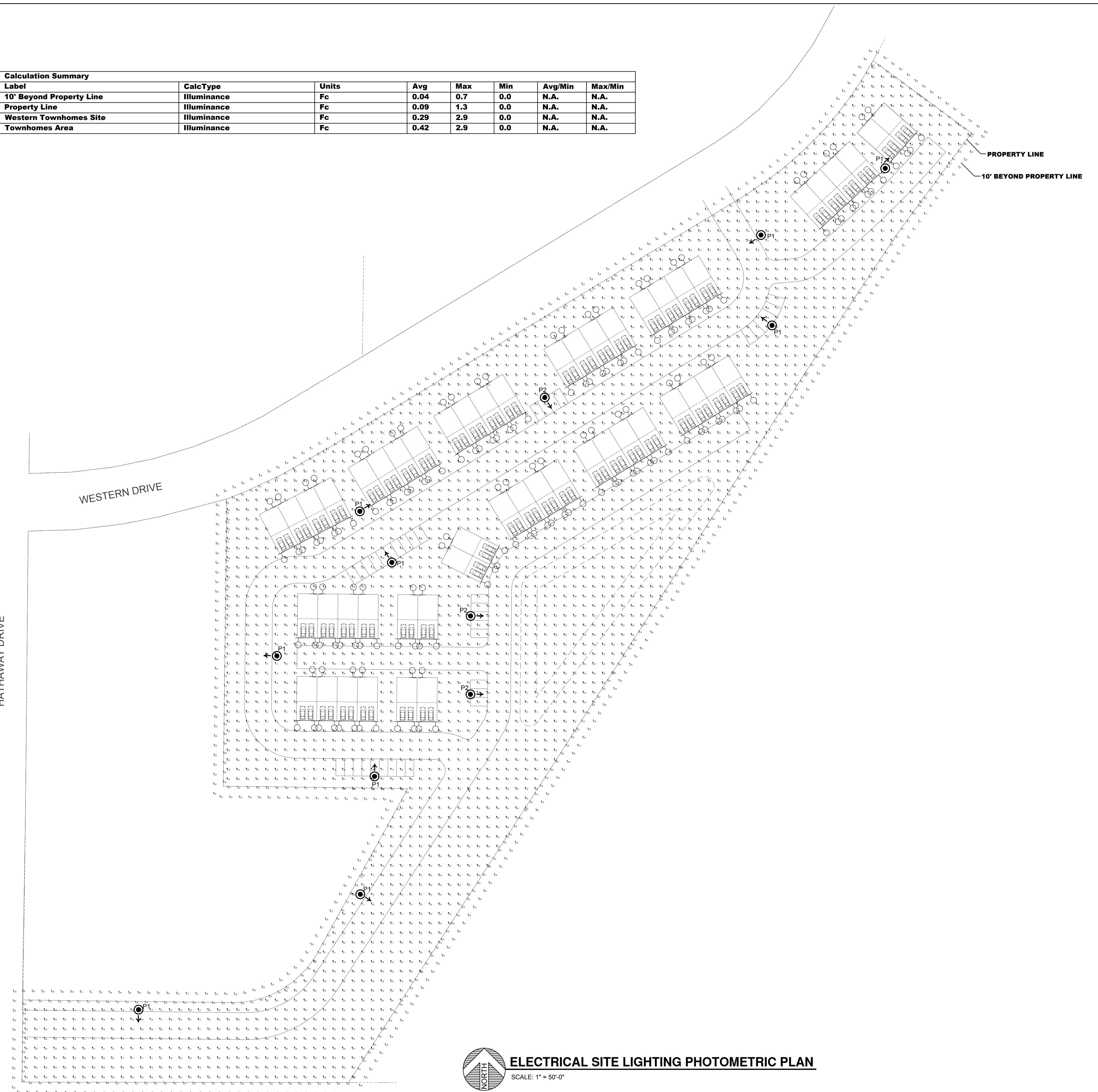
SHEET

DP2

GENERAL NOTES

- A. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. NOT ALL EXISTING CONDITIONS ARE SHOWN FOR CLARITY.
- B. CONTRACTOR SHALL PROVIDE ALL REQUIRED CUTTING, TRENCHING, BACKFILLING, AND RESTORATION.
- C. THESE PHOTOMETRIC CALCULATIONS ARE BASED ON MANUFACTURER'S IES FILES AND 0.85 LIGHT DEPRECIATION FACTOR.
- D. ACTUAL ILLUMINANCE LEVELS MAY DIFFER FROM THE FOOT CANDLE LEVELS SHOWN DUE TO VARIABLE FIELD CONDITIONS, SUCH AS NEARBY EXISTING LUMINAIRES, LUMINAIRE DIRT DEPRECIATION, LANDSCAPING, AND FUTURE DEVELOPMENTS.

| Calculation Summary | | | | | | | |
|--------------------------|-------------|-------|------|-----|-----|---------|---------|
| Label | CalcType | Units | Avg | Max | Min | Avg/Min | Max/Min |
| 10' Beyond Property Line | Illuminance | Fc | 0.04 | 0.7 | 0.0 | N.A. | N.A. |
| Property Line | Illuminance | Fc | 0.09 | 1.3 | 0.0 | N.A. | N.A. |
| Western Townhomes Site | Illuminance | Fc | 0.29 | 2.9 | 0.0 | N.A. | N.A. |
| Townhomes Area | Illuminance | Fc | 0.42 | 2.9 | 0.0 | N.A. | N.A. |





Radean Post Top LED Area Luminaire

Accessories
Ordered and shipped separately.

RADS
House shield (shipped in white)

RADS 08030
Decorative clamped base for #8SS pole
Shipping weight: 1.00 lbs

RADS 08030 U
Full base cover for #8SS pole (specify finish)

Hit the Tab key or mouse over the page to see all interactive elements.

Introduction

The architecturally-inspired shape of the RADEAN™ post top area luminaire embodies the grace and strength of the RADEAN family. The twin copper-core cast aluminum arms support the slender superstructure, creating a beautiful sculpture by day transforming into a beacon of comfort by night. Triangular arms redirect reflection maintaining its visually quiet appearance. With sleek lines and simple silhouettes, these LED luminaires use specialized lighting and visual comfort to transform common areas like courtyards, outdoor retail locations, universities and corporate campuses into pedestrian-friendly nighttime environments.

Specifications

| | |
|-----------------------------|---|
| EPA: | 1.02 ft ² (0.105 m ²) |
| Length: | 24" |
| Width: | 24" |
| H1 Luminaire Height: | 4" (10.16cm) |
| H2 Luminaire Height: | 26" (66.04cm) |
| Weight: | 38lbs (17.24kg) |

Ordering Information

EXAMPLE: RADPT LED P3 30K SYM MVOLT PT4 PE DNAXD

| RADPT LED | Performance package | Color temperature | Distribution | Voltage | Mounting required |
|-----------|---|---|---|--|---|
| RADPT LED | P1 3,000 Lumens P2 5,000 Lumens P3 7,000 Lumens P4 10,000 Lumens P5 15,000 Lumens | 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K | SYM Symmetric type V ASY Asymmetric type IV PATH Pathway type III | MVOLT ² 277 120° 347 208° 460 240° | PT4 ⁴ Slips inside a 4"00 round metal pole RADPT20 Slips over a 2 3/8" diameter tenon (4" tall tenon required) RADPT25 Slips over a 2 7/8" diameter tenon (4" tall tenon required) |

Control options

| | | | |
|-------------------|--|-------------------|-----------------------------------|
| Shipped installed | SF Single Fuse ¹ DF Double Fuse ¹ PE Button photocell ⁴ FAO Field adjustable output ⁴ | Shipped installed | HS House side shield ⁴ |
| | R90 Rotated optics ⁵ | | |

Other options

| | |
|--|--|
| DBXKD Dark bronze DBXLKD Black DNAXD Natural aluminum DWXKD White | DBXLD Textured dark bronze DBXLKD Textured black DNAXD Textured natural aluminum DWXKD Textured white |
|--|--|

Finish required

Ordering Information

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| RADPT LED | Performance package | Color temperature | Distribution | Voltage | Mounting required |
|-----------|---|---|---|--|---|
| RADPT LED | P1 3,000 Lumens P2 5,000 Lumens P3 7,000 Lumens P4 10,000 Lumens P5 15,000 Lumens | 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K | SYM Symmetric type V ASY Asymmetric type IV PATH Pathway type III | MVOLT ² 277 120° 347 208° 460 240° | PT4 ⁴ Slips inside a 4"00 round metal pole RADPT20 Slips over a 2 3/8" diameter tenon (4" tall tenon required) RADPT25 Slips over a 2 7/8" diameter tenon (4" tall tenon required) |

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RADS 08030 U
Full base cover for #8SS pole (specify finish)

Hit the Tab key or mouse over the page to see all interactive elements.

Notes

- 2700K and 3000K may require extended lead-times.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage selection. Double fuse (DF) requires 208, 240 or 480 voltage option.
- 347 voltage selection is required for P1, P2, P3 and P4.
- NLTAR2 is not available with PE or FAO. Must link to external iLight Air network. Does not include occupancy sensor.
- For button photocell, select R90 and rotate luminaire 180° on pole mount sensor.
- Also available as a separate accessory; see Accessories information at left. HS not available with R90. Shield is field rotatable shield in 180° increments.



LITHONIA
LIGHTING.

COMMERCIAL OUTDOOR

One Lithonia Way • Conyers, Georgia 30012 • Phone: 1-800-705-SERV (7378) • www.lithonia.com

RADPT LED
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Rev. 08/24/23

Performance Data

Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-78-08. Data is considered to be representative of the configurations shown. Contact factory for performance data for any configurations not shown here.

| Performance Package | Input Voltage | Distribution | 270W | | | | 300W | | | | 350W | | | | 400W | | | | 500W | | | |
|---------------------|---------------|--------------|--------|---|---|---|-------|--------|---|---|-------|-----|--------|---|-------|---|-----|--------|-------|---|---|-----|
| | | | Lumens | B | U | G | Lumen | B | U | G | Lumen | B | U | G | Lumen | B | U | G | Lumen | B | U | G |
| P1 | 25 | ASY | 2,924 | 2 | 1 | 1 | 115 | 3,022 | 2 | 2 | 2 | 119 | 3,095 | 2 | 2 | 2 | 122 | 3,168 | 2 | 2 | 2 | 125 |
| | | PATH | 2,529 | 2 | 1 | 1 | 100 | 2,613 | 2 | 2 | 2 | 103 | 2,676 | 2 | 2 | 2 | 105 | 2,739 | 2 | 2 | 2 | 108 |
| P2 | 38 | ASY | 3,084 | 2 | 1 | 1 | 121 | 3,189 | 2 | 1 | 1 | 126 | 3,206 | 2 | 1 | 1 | 132 | 3,344 | 2 | 1 | 1 | 132 |
| | | PATH | 4,521 | 3 | 2 | 3 | 119 | 4,672 | 3 | 2 | 3 | 123 | 4,785 | 3 | 2 | 3 | 126 | 4,988 | 3 | 2 | 3 | 129 |
| P3 | 54 | ASY | 3,099 | 2 | 2 | 2 | 103 | 4,040 | 2 | 2 | 2 | 106 | 4,137 | 2 | 2 | 2 | 109 | 4,235 | 3 | 2 | 3 | 111 |
| | | PATH | 4,772 | 2 | 2 | 1 | 126 | 4,931 | 3 | 2 | 1 | 130 | 5,059 | 3 | 2 | 1 | 133 | 5,169 | 3 | 2 | 1 | 136 |
| P4 | 86 | ASY | 6,887 | 3 | 2 | 3 | 119 | 6,600 | 3 | 2 | 3 | 123 | 6,769 | 3 | 2 | 3 | 126 | 6,979 | 3 | 2 | 3 | 129 |
| | | PATH | 10,150 | 4 | 2 | 4 | 118 | 10,489 | 4 | 2 | 4 | 122 | 10,742 | 4 | 2 | 4 | 125 | 10,996 | 4 | 2 | 4 | 128 |
| P5 | 123 | ASY | 14,250 | 4 | 2 | 4 | 115 | 14,724 | 4 | 2 | 4 | 120 | 15,081 | 4 | 3 | 4 | 123 | 15,437 | 4 | 3 | 4 | 126 |
| | | PATH | 12,322 | 4 | 2 | 3 | 123 | 12,733 | 4 | 3 | 4 | 104 | 13,041 | 4 | 3 | 4 | 106 | 13,349 | 4 | 3 | 4 | 109 |
| | | SYM | 15,040 | 4 | 2 | 3 | 123 | 15,541 | 4 | 2 | 3 | 127 | 15,917 | 4 | 2 | 3 | 130 | 16,293 | 4 | 2 | 3 | 133 |

Lumen Ambient Temperature (LAT) Multipliers

Multiplies the extruded performance projections for the RADPT LED platform. Use these factors to determine relative lumen output for average ambient temperatures from 0°C to 40°C.

| Ambient | LAT Factor | |
|---------|------------|------|
| 0°C | 32°F | 1.00 |
| 5°C | 41°F | 1.05 |
| 10°C | 50°F | 1.04 |
| 15°C | 59°F | 1.03 |
| 20°C | 68°F | 1.01 |
| 25°C | 77°F | 1.00 |
| 30°C | 86°F | 0.99 |
| 35°C | 95°F | 0.98 |
| 40°C | 104°F | 0.96 |

Projected LED Lumen Maintenance

Projected maintenance factors for the RADPT LED platform. A 25°C ambient temperature is assumed. Data is based on 10,000 hours of LED testing listed per IESNA LM-08-08 and projected per IESNA TM-21-11.

To calculate LLM, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Projected LED Lumen Maintenance | 2000H | 5000H | 10000H | |
|---------------------------------|-------|-------|--------|------|
| P1 | 1.00 | 0.96 | 0.91 | 0.82 |
| P2 | 1.00 | 0.96 | 0.91 | 0.82 |
| P3 | 1.00 | 0.96 | 0.91 | 0.82 |
| P4 | 1.00 | 0.96 | 0.91 | 0.82 |
| P5 | 1.00 | 0.95 | 0.89 | 0.78 |

Electrical Load

| Lumen Package | LED Drive Current | Voltage | Wattage | Current (A) |
|---------------|-------------------|---------|---------|-------------|
| P1 | 500 | 42.8 | 21.4 | 0.22 |
| P2 | 770 | 43 | 33.1 | 0.23 |
| P3 | 1100 | 43.2 | 47.5 | 0.24 |
| P4 | 900 | 87.3 | 78.6 | 0.25 |
| P5 | 1250 | 88.2 | 110.2 | 0.26 |

Comments

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