

**ORDINANCE NO. 809**

**AN ORDINANCE OF THE CITY OF WILSONVILLE REVISING SECTION 201.9.01 - ROADWAY AND INTERSECTION LIGHTING OF THE CITY OF WILSONVILLE PUBLIC WORKS STANDARDS – 2015 AND ADDING DRAWINGS TO THE PUBLIC WORKS STANDARD DETAIL DRAWING – 2014.**

WHEREAS, the City’s current Public Works Standards were last updated in 2015 and adopted by Ordinance No. 782 on January 21, 2016; and

WHEREAS, standard engineering practice is to review, revise, and update design and construction standards to maintain compliance with the periodic changes to national and state design requirements, guidelines, and specifications; and

WHEREAS, updating the Public Works Standards and being in conformance with national and state guidelines is critical in producing high quality construction and limiting maintenance costs for the City and exposure to legal liability; and

WHEREAS, the Public Works Standards provide design requirements, material specifications, construction procedures and specifications, testing standards, and acceptance and maintenance requirements for construction of all publicly maintained roadways and pathways, and stormwater, sanitary, and water systems to be used by developers, design engineers, and contractors; and

WHEREAS, the City desires to install dark-sky friendly light emitting diode (LED) street lights for which best practices and standards have been identified for incorporation into Section 2 of the Public Works Standards and the Public Works Standard Detail Drawings; and

WHEREAS, the Public Works Standards for designing and constructing public facilities are intended to protect public health, safety, and welfare; and

WHEREAS, it is to the benefit of the City of Wilsonville, developers, design engineers, and contractors to have all specifications and design requirements relating to publicly maintained infrastructure located within a single source of information; and

WHEREAS, after providing due public notice, as required by City Code and State Law, a public hearing was held before the City Council on September 7, 2017, at which time the City Council gathered additional evidence and afforded all interested parties an opportunity to present oral and written testimony concerning the Public Works Standards; and

WHEREAS, the City Council has carefully considered the public record, including all recommendations and testimony, and being fully advised;

NOW, THEREFORE, THE CITY OF WILSONVILLE ORDAINS AS FOLLOWS:

1. The above-recited findings are hereby adopted as Findings of Fact and Conclusions of Law.
2. Based upon such findings, the City Council hereby adopts the revised Section 201.9.00 – Roadway and Intersection Lighting of the Public Works Standards – 2015, a copy of which is made part of the record hereof and attached hereto as Exhibit A, and the Additional Drawings to the Public Works Standard Detail Drawings – 2014, a copy of which is made part of the record hereof and attached hereto as Exhibit B.

SUBMITTED to the Wilsonville City Council and read for the first time at a regular meeting thereof on the 7<sup>th</sup> day of September, 2017, and scheduled for a second reading at a regular meeting of the Council on the 18<sup>th</sup> day of September, 2017, commencing at the hour of 7:00 p.m. at the Wilsonville City Hall, 29799 SW Town Center Loop East, Wilsonville, Oregon.

  
Kimberly Veliz, City Recorder

ENACTED by the City Council on the 18 day of September 2017, by the following votes:        Yes: 4        No: 0

  
Kimberly Veliz, City Recorder

DATED and signed by the Mayor the 19 day of September 2017.

  
TIM KNAPP, MAYOR

SUMMARY OF VOTES:

|                         |        |
|-------------------------|--------|
| Mayor Knapp             | Yes    |
| Council President Starr | Yes    |
| Councilor Stevens       | Yes    |
| Councilor Lehan         | Absent |
| Councilor Akervall      | Yes    |

Attachments:

Exhibit A – City of Wilsonville Public Works Standards Section 201.9.00

Exhibit B – Standard Detail Drawings RD-1300, RD-1305, RD-1310, RD-1315, RD-1325, RD-1330, RD-1335, RD-1340, and RD-1345

# EXHIBIT A

## CITY OF WILSONVILLE

### PUBLIC WORKS STANDARDS – 2015

#### **201.9.00 LIGHTING**

##### **201.9.01 Roadway and Intersection Lighting**

- a. Street lighting shall be designed in accordance with the most current American National Standard Practice for Roadway Lighting (RP-8-14) prepared by the Illuminating Engineering Society (IES).
- b. Installation of streetlights shall be in accordance with the City's most current policies/agreements regarding the installation and maintenance of street lights.
- c. Street lighting luminaires shall be in conformance with the City's current "Dark Sky" policies.
- d. Street light installation shall be categorized into specific styles for each designated street section into which the street light is installed. Refer to the Standard Detail Drawings.
- e. As lighting technology evolves, the Standard Detail Drawings may be modified as needed.
- f. The warranty for public works projects shall include streetlights.

(updated September 2017)

*This Detail Drawing may not be altered or changed in any manner except by the City Engineer. It is the responsibility of the user to acquire the most current version.*

**STREET LIGHT STYLE ON DESIGNATED STREETS**


Street light installation is categorized into a specific style for each designated street section in which the street light is installed. Luminaires shall be at a minimum Light Emitting Diode (LED) lights in 3000K color with a 7 pin adapter.

The following street light styles shall be utilized on these designated street sections.

- A. Residential Streets - Residential Collectors (49-56 foot right-of-way) LID Local Streets (41-52 foot right-of-way)  
 Type 5 or Type 6  
 Style: Rectangular (Type 5) or Westbrooke (Type 6)  
 Pole: Rectangular - Minimum Thirty (30) foot bronze composite (25 foot mounting height) OR Westbrooke - Eighteen (18) foot black aluminum with four 4 foot mast arm
  
- B. Collector (69-77 foot right-of-way without on-street parking, 79-93 foot right-of-way with on-street parking)  
 Type 1  
 Style: Cobrahead  
 Pole: Thirty (30) foot aluminum with 6 foot davit
  
- C. Commercial/Industrial Street (62 foot right-of-way)  
 Type 1  
 Style: Cobrahead  
 Pole: Thirty five (35) foot aluminum with 8 foot davit
  
- D. Minor Arterial Street (73-81 foot right-of-way,) Major Arterial (95-107 foot right-of-way)  
 Type 1  
 Style: Cobrahead  
 Pole: Thirty (30) foot aluminum with 6 foot davit
  
- E. Grahams Ferry and Tooze Road adjacent to the Villebois Village development  
 Type 1  
 Style: Cobrahead  
 Pole: 35 foot black fiberglass direct bury pole (30 foot mounting height) with 6 foot arm

Any deviation of street light style for a designated street requires approval of the City Engineer.

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|  |              |                |   |
|--|--------------|----------------|---|
| Street Light Style, Types and Districts PG 1 |              |                | CITY OF<br>WILSONVILLE<br> |
| DRAWING NUMBER: RD-1300                      | DRAWN BY:    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1300.dwg                       | APPROVED BY: | DATE: 08/28/17 | PUBLIC WORKS STANDARDS  |

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STREET LIGHT TYPES AND LIGHTING DISTRICTS

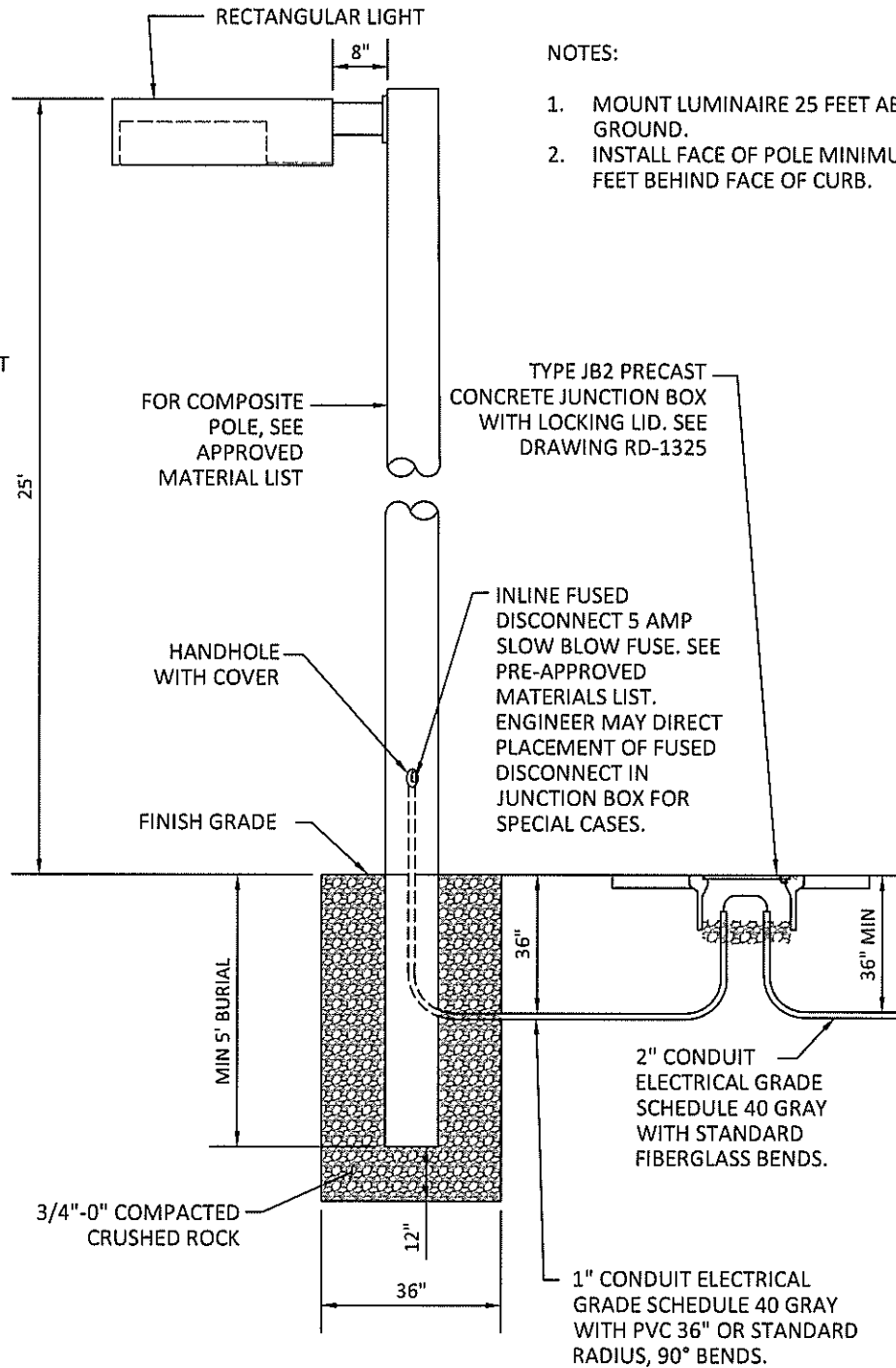
| Street Light Type                 | Lighting District  |
|-----------------------------------|--|
| Type 1: Cobrahead                 | Arterials, Collectors, Commercial and Industrial   |
| Type 2: Acorn                     | Meadows, Daybreak, Coffee Lake, Villebois  |
| Type 3: Town and Country          | Fox Chase, Courtside, Day Dream, Rivergreen, Parkwood, Park at Merryfield, Bouchaine, Roanoke, Murray, Renaissance Boat Club |
| Type 4: Mast Arm & Head           | Old Town   |
| Type 5: Rectangular (aka Shoebox) | Charbonneau  |
| Type 6: Westbrook                 | Villebois  |

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|   |              |                |   |
|---|--------------|----------------|---|
| Street Light Style, Types and Districts PG2 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1300                     | DRAWN BY:    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1300.dwg                      | APPROVED BY: | DATE: 08/28/17 |   |


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FOR LIGHT FIXTURE, SEE  
PRE-APPROVED MATERIALS LIST

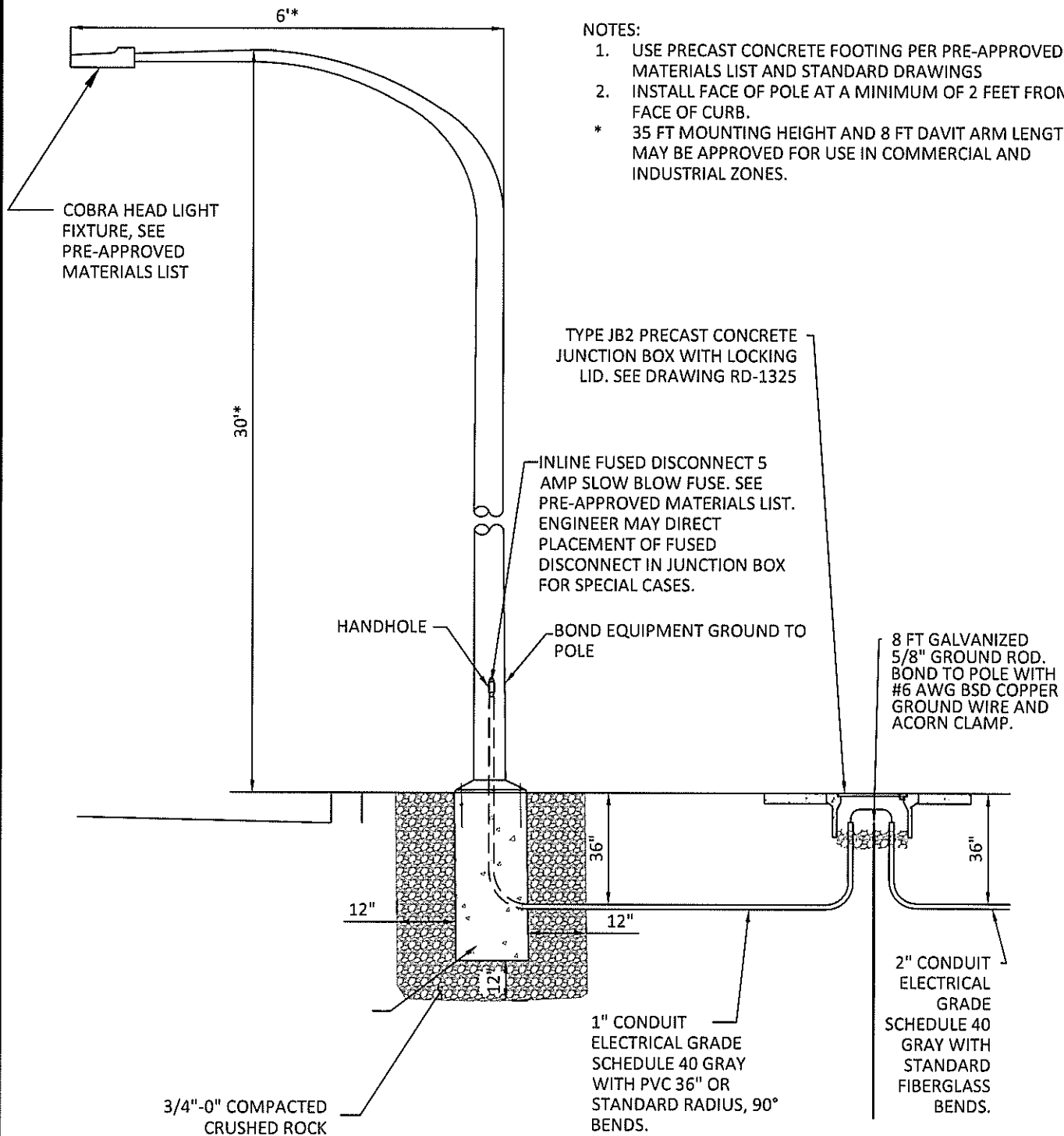


NOTES:

1. MOUNT LUMINAIRE 25 FEET ABOVE GROUND.
2. INSTALL FACE OF POLE MINIMUM 2 FEET BEHIND FACE OF CURB.

|   |                 |                |  |
|---|-----------------|----------------|--|
| Type 5- Rectangular Streetlight/Bronze Composite Pole |                 |                | <p>CITY OF<br/>WILSONVILLE</p>  <p>PUBLIC WORKS STANDARDS</p> |
| DRAWING NUMBER: RD-1305                               | DRAWN BY: SR    | SCALE: N.T.S.  |  |
| FILE NAME: RD1305.dwg                                 | APPROVED BY: NK | DATE: 09/08/17 |  |

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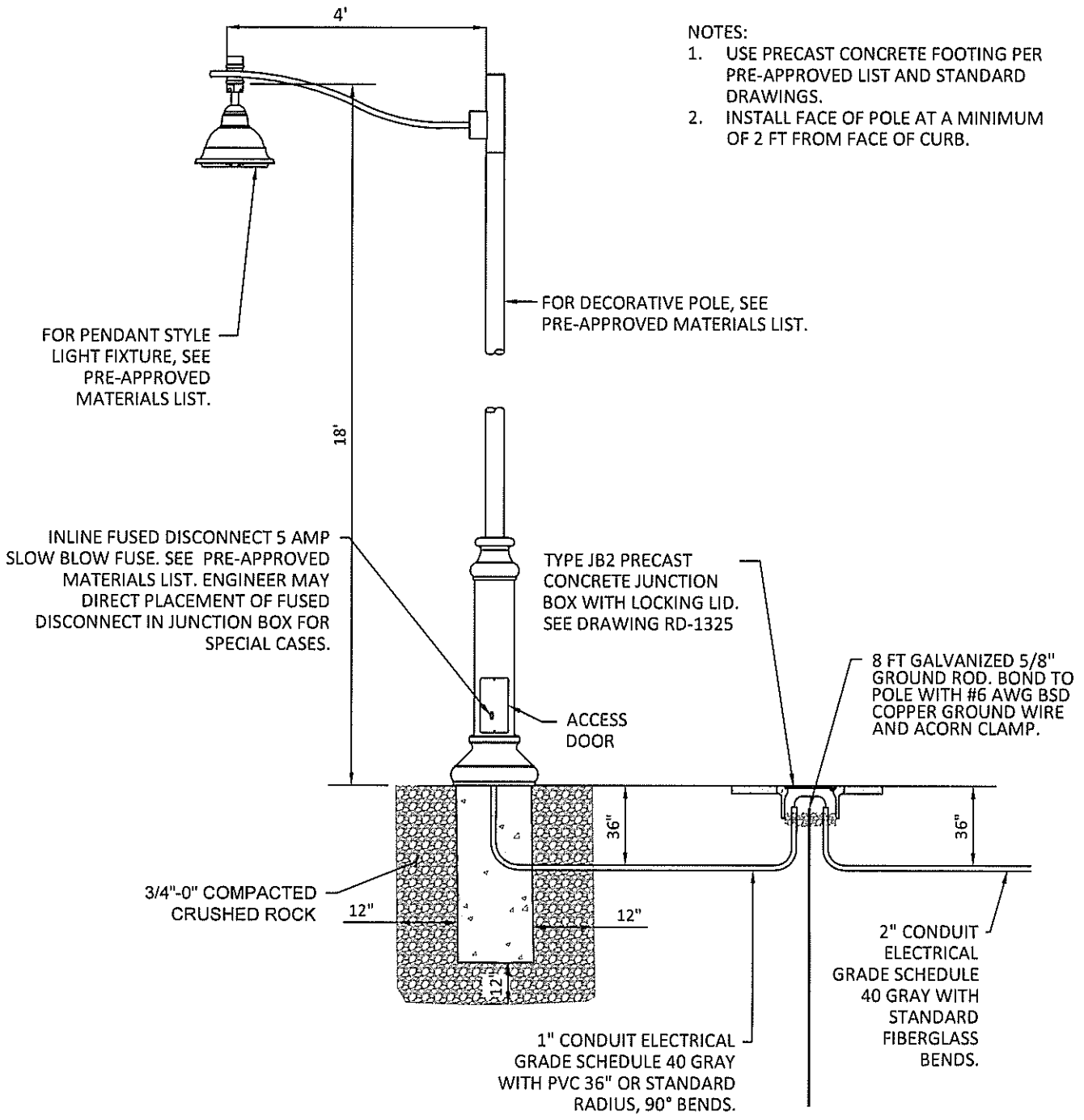
|   |                 |                |   |
|---|-----------------|----------------|---|
| Type 1- Cobrahead Streetlight/Aluminum Pole |                 |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1310                     | DRAWN BY: SR    | SCALE: N.T.S.  |   |
| FILE NAME: RD1310.dwg                       | APPROVED BY: NK | DATE: 09/08/17 |   |



EXHIBIT B

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NOTES:

1. USE PRECAST CONCRETE FOOTING PER PRE-APPROVED LIST AND STANDARD DRAWINGS.
2. INSTALL FACE OF POLE AT A MINIMUM OF 2 FT FROM FACE OF CURB.

FOR PENDANT STYLE LIGHT FIXTURE, SEE PRE-APPROVED MATERIALS LIST.

FOR DECORATIVE POLE, SEE PRE-APPROVED MATERIALS LIST.

INLINE FUSED DISCONNECT 5 AMP SLOW BLOW FUSE. SEE PRE-APPROVED MATERIALS LIST. ENGINEER MAY DIRECT PLACEMENT OF FUSED DISCONNECT IN JUNCTION BOX FOR SPECIAL CASES.

TYPE JB2 PRECAST CONCRETE JUNCTION BOX WITH LOCKING LID. SEE DRAWING RD-1325


ACCESS DOOR

8 FT GALVANIZED 5/8" GROUND ROD. BOND TO POLE WITH #6 AWG BSD COPPER GROUND WIRE AND ACORN CLAMP.

3/4"-0" COMPACTED CRUSHED ROCK

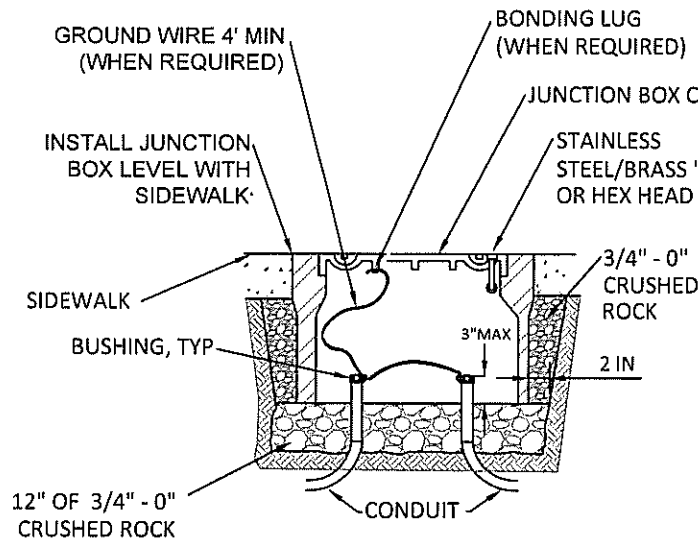
2" CONDUIT ELECTRICAL GRADE SCHEDULE 40 GRAY WITH STANDARD FIBERGLASS BENDS.

1" CONDUIT ELECTRICAL GRADE SCHEDULE 40 GRAY WITH PVC 36" OR STANDARD RADIUS, 90° BENDS.

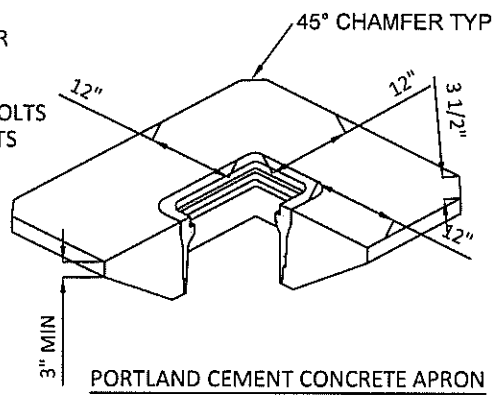
|   |                 |                |  |
|---|-----------------|----------------|--|
| Type 6- Pendant (Westbrook) Streetlight/Black Decorative Pole |                 |                | <p>CITY OF WILSONVILLE</p>  <p>PUBLIC WORKS STANDARDS</p> |
| DRAWING NUMBER: RD-1315                                       | DRAWN BY: SR    | SCALE: N.T.S.  |  |
| FILE NAME: RD1315.dwg   | APPROVED BY: NK | DATE: 09/08/17 |  |

# EXHIBIT B

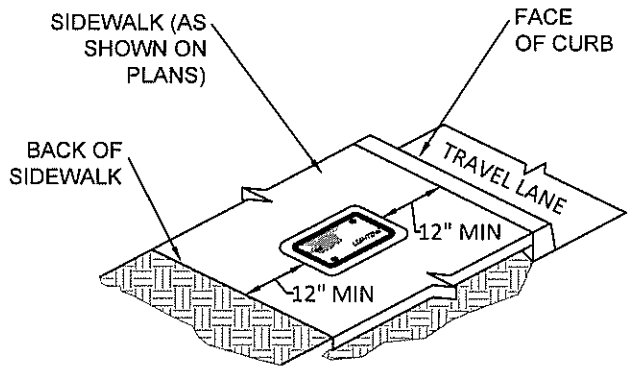
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**INSTALLATION IN SIDEWALK OR AT BACK OF CURB**

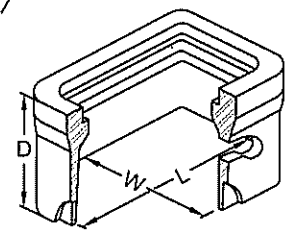
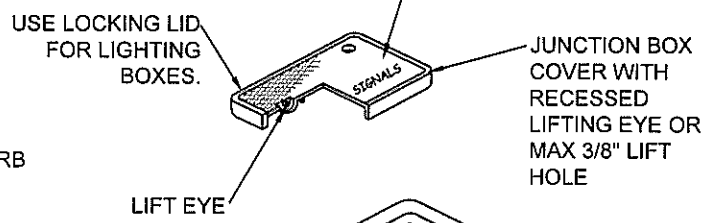


**PORTLAND CEMENT CONCRETE APRON**



**JUNCTION BOX PLACEMENT WITHIN SIDEWALKS**

SHOULD AVOID INSTALLING JUNCTION BOXES IN SIDEWALKS WHENEVER POSSIBLE.  
 (JUNCTION BOXES TO BE LOCATED ONLY IN FLAT AREAS OF SIDEWALKS  
 CONCRETE JUNCTION BOXES ARE NOT TO BE INSTALLED IN SLOPES OF RAMPS OR DRIVEWAYS)  
 JUNCTION BOXES PLACED WITHIN SIDEWALKS SHALL INCLUDE A FULL PANEL REMOVAL AND REINSTALL




**JUNCTION BOX**

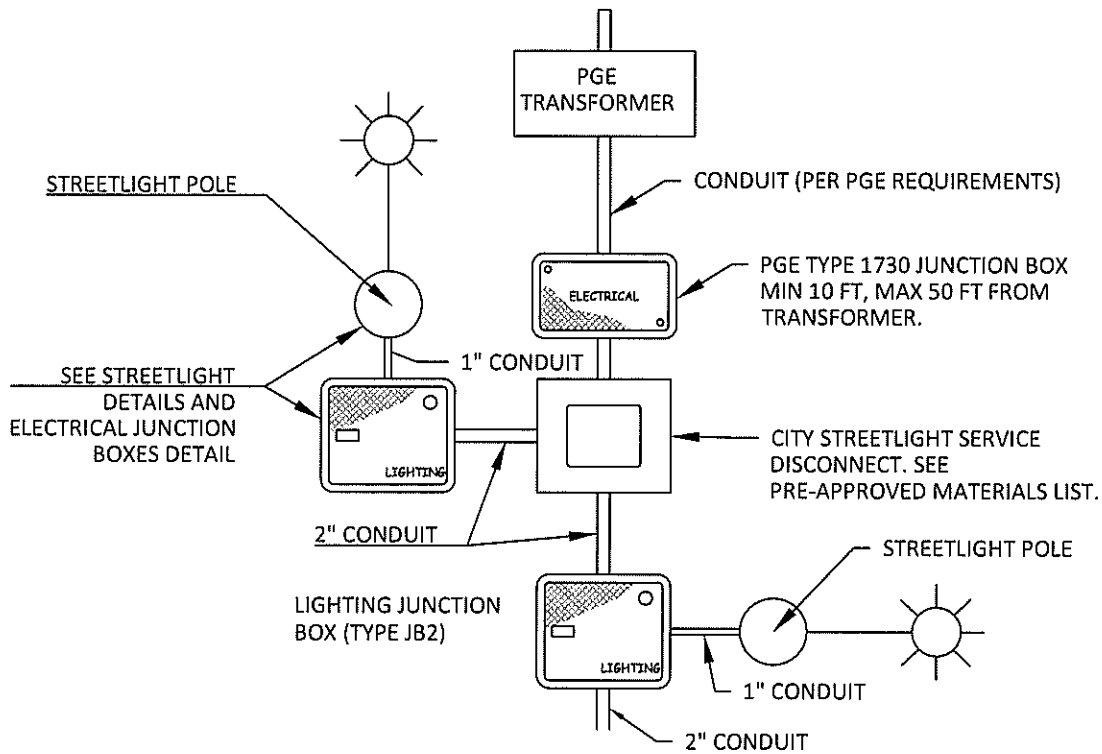
NOT TO BE USED IN TRAVEL LANES, SHOULDERS OR AREAS EXPOSED TO TRAFFIC. SEE PRE-APPROVED MATERIALS LIST.

| TYPE | L   | W   | D   |
|------|-----|-----|-----|
| JB1  | 17" | 10" | 12" |
| JB2  | 22" | 12" | 12" |
| JB3  | 30" | 17" | 12" |

**JUNCTION BOX DIMENSION TABLE**


|                                  |                 |                |  |
|----------------------------------|-----------------|----------------|--|
| <b>Electrical Junction Boxes</b> |                 |                | <b>CITY OF WILSONVILLE</b><br><br><b>PUBLIC WORKS STANDARDS</b> |
| DRAWING NUMBER: RD-1325          | DRAWN BY: SR    | SCALE: N.T.S.  |  |
| FILE NAME: RD1325.dwg            | APPROVED BY: NK | DATE: 08/08/17 |  |

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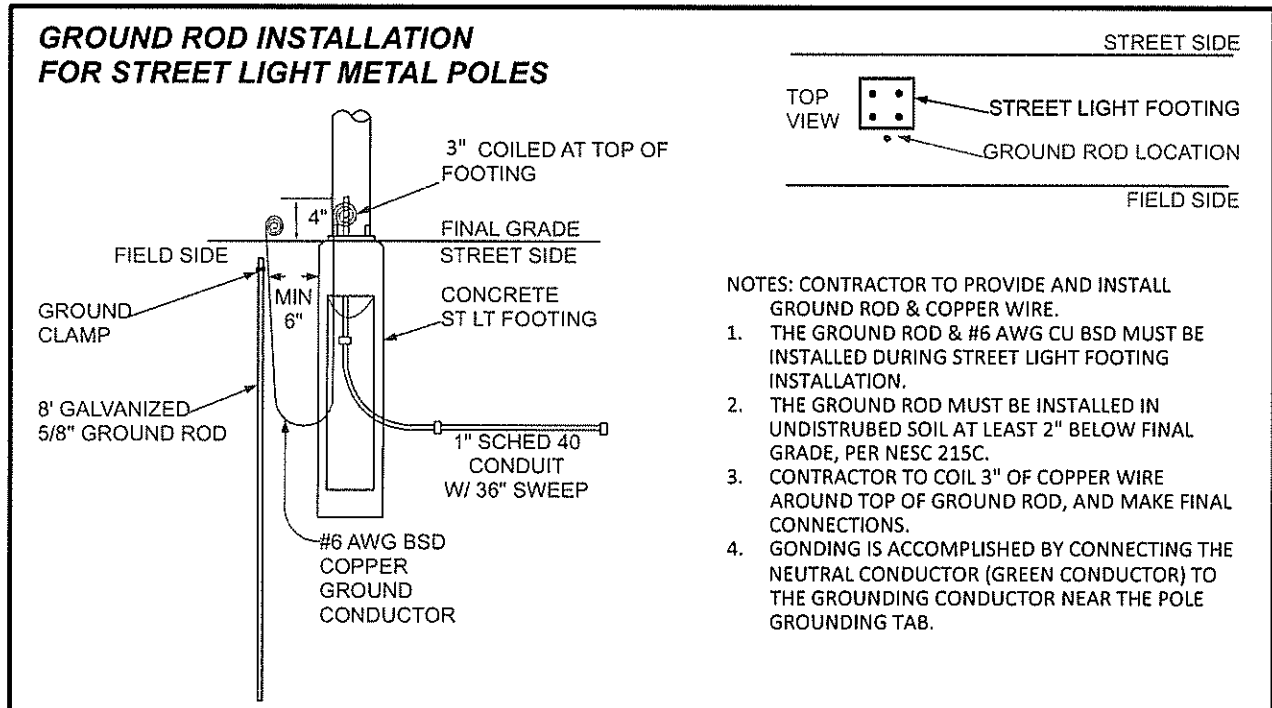
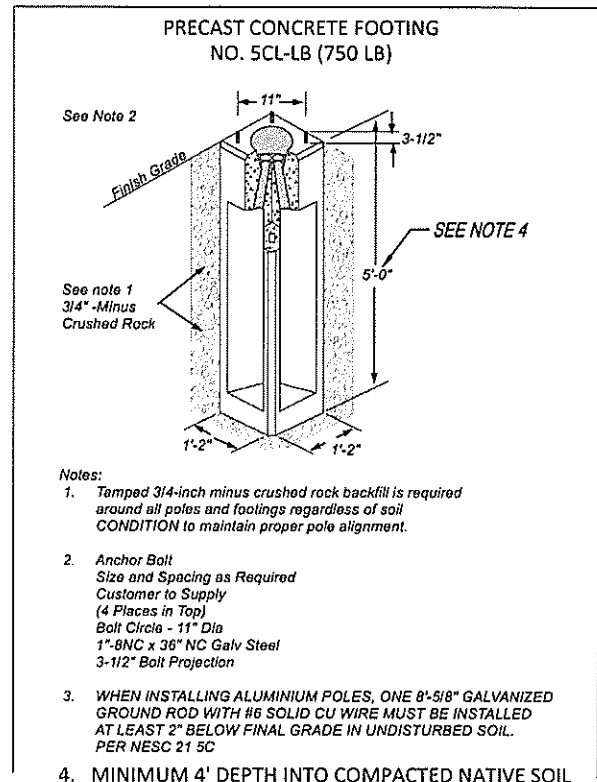
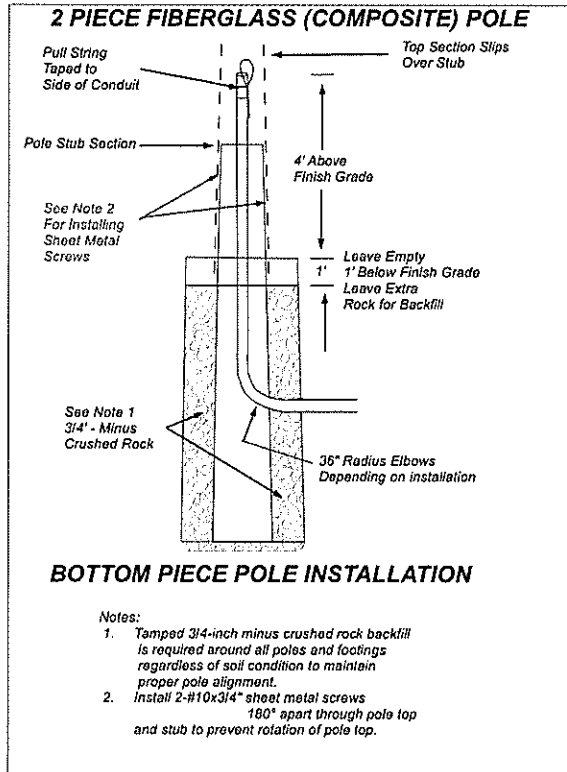


**NOTES:**

1. MINIMUM CONDUCTOR SIZE SHALL BE 10 GA. CONDUCTORS SHALL BE UPSIZED IF REQUIRED TO KEEP VOLTAGE DROP TO LESS THAN 3%. 3-CONDUCTOR 7-STRAND COPPER WIRE WITH .030" XLPE INSULATION, FILLERS, AND CLEAR MYLAR WRAP TAPE NON-SHIELDED OVERALL .045" BLACK PVC JACKET (UL) TC-ER XHHW-2/VW-1 600V 90C DRY/WET, SUN RESISTANT, DIRECT BURY, CC: BLACK/RED/GREEN FOR 220 VOLT AND BLACK/WHITE/GREEN FOR 120 VOLT.
2. ALL EMPTY CONDUITS MUST HAVE A #14 LOCATE WIRE AND A NONCONDUCTIVE PULL LINE, 500 POUND RATED, WITH 6 FEET OF LINE EXTENDING FROM EACH END OF THE CONDUIT.
3. INSTALL ELECTRICAL GRADE SCHEDULE 40 GRAY PVC CONDUIT WITH FIBERGLASS BENDS. ALL PVC JOINTS SHALL BE GLUED. ALL FACTORY OR FIELD CUT CONDUITS SHALL BE CHAMFERED TO PREVENT DAMAGE TO CABLES. A WOODEN, PLASTIC, OR HARD RUBBER MANDREL CONFIGURED FOR THE CONDUIT INSIDE DIAMETER SHALL BE PULLED THROUGH TO TEST FOR OBSTRUCTIONS AND OUT-OF-ROUND CONDUIT.
4. ELECTRICAL BUILDING PERMIT REQUIRED.

|                               |                 |                |  |
|-------------------------------|-----------------|----------------|--|
| <b>Streetlight Disconnect</b> |                 |                | <b>CITY OF<br/>WILSONVILLE</b><br><br><br><b>PUBLIC WORKS STANDARDS</b> |
| DRAWING NUMBER: RD-1330       | DRAWN BY: SR    | SCALE: N.T.S.  |  |
| FILE NAME: RD1330.dwg         | APPROVED BY: NK | DATE: 08/08/17 |  |


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| Streetlight Footing Requirements |                 |                | CITY OF<br><b>WILSONVILLE</b><br><br><b>PUBLIC WORKS STANDARDS</b> |
|----------------------------------|-----------------|----------------|--|
| DRAWING NUMBER: RD-1335          | DRAWN BY: SR    | SCALE: N.T.S.  |  |
| FILE NAME: RD-1335.dwg           | APPROVED BY: NK | DATE: 08/08/17 |  |

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1. ALL CONCRETE FOOTINGS NEED TO BE INSTALLED WITH TOP OF BASE FLUSH TO CURB/SIDEWALK.
2. ALL CROSSINGS MUST EXTEND FROM PROPERTY LINE TO PROPERTY LINE. CROSSINGS TO BE 48 INCHES DEEP, MEASURED FROM FINAL GRADE.
3. DIRECTIONAL BORING REQUIREMENTS: BLACK HDPE (HIGH DENSITY POLYETHYLENE) DUCT OR SCHEDULE 40 PVC WITH A MECHANICAL CONNECTION (CERTA-LOK OR LIKE MECHANICAL CONNECTION PRODUCT) PROJECT EXTRUDED RED STRIPES (WHICH IS A SPECIFICATION REQUIREMENT) MANDREL TEST OF HDPE PIPE IS REQUIRED AFTER INSTALLATION WITH CITY INSPECTOR PRESENT.
4. TRENCH AND ELBOW CONFIGURATIONS, ALL CONDUIT, VAULT AND PAD INSTALLATIONS MUST BE INSPECTED PRIOR TO BACKFILLING.
5. ALL CONDUCTORS TO BE INSTALLED IN GRAY, SCHEDULE 40, ELECTRICAL GRADE, PVC CONDUIT WITH NYLON PULL STRINGS (MIN 500 LBS. TEST). PGE TO DETERMINE THE SIZE AND NUMBER OF CONDUITS REQUIRED. MAINTAIN 12 VERTICAL INCHES AND 24 HORIZONTAL INCHES CLEARANCE BETWEEN GAS AND OTHER UTILITIES. ALL ELBOWS 4 INCH & SMALLER TO BE 36 INCH RADIUS. ALL BENDS MUST BE FACTORY MADE. ALL ELBOWS LARGER THAN 4 INCH TO BE 60 INCH RADIUS. RIGID STEEL OR PGE APPROVED. FIBERGLASS BENDS ARE REQUIRED FOR RUNS OF 151 FEET OR LONGER, OR FOR ANY LENGTH RUN WITH MORE THAN 180 DEGREES IN BENDS. PVC SCHEDULE 40 BENDS ARE ACCEPTABLE FOR RUNS OF 150 FEET OR LESS. THE MAXIMUM TOTAL BENDS IN ANY CONDUIT RUN IS 270 DEGREES.
6. THE AIR GAP, IF ANY BETWEEN THE TOP OF THE FOOTING/PEDESTAL AND THE BOTTOM OF THE POLE SHALL BE GROUTED WITH HIGH STRENGTH, NON-SHRINK GROUT.

|                                  |                 |                |   |
|----------------------------------|-----------------|----------------|---|
| STREETLIGHT FOOTING REQUIREMENTS |                 |                | CITY OF<br>WILSONVILLE<br><br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1340          | DRAWN BY: SR    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1340.dwg           | APPROVED BY: NK | DATE: 08/08/17 |   |

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## APPROVED STREET LIGHTING EQUIPMENT FOR NEW INSTALLATIONS

### LED LIGHTS

At a minimum lights shall be 3000K color; have 7-pin receptacle per ANSI C136.41 and external wattage label per ANSI C136.15.

#### LUMINAIRE: CREE XSP2 LED, ALUMINUM - COBRAHEAD

Product: **BXSP**

Version: **C**

Mounting: **HT** - horizontal tendon

Optic\*: **2ME** - Type II medium; **2LG** - Type II long; **3ME** - Type III medium; **4ME** - Type IV medium

Input power designator: **F** - 139W

CCT: **30K** - 3000K

Voltage: **UL**- Universal 120-277V


Color options: **SV** - silver

Options: **N-Q9** - Utility Label and NEMA Photocell Receptacle

- external wattage label per ANSI C136.15
- 7 - pin receptacle per ANSI C136.41
- Factory connected 0-10V dim lights
- Photocell and shorting cap by others
- Includes Q9 option - Field adjustable output
- Refer to manufacturers Field Adjustable Output Spec sheer for details

\* to be determined by designer - see manufacture specifications

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|   |              |                |   |
|---|--------------|----------------|---|
| Approved Street Lighting Equipment for New Installations Pg 1 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1345                                       | DRAWN BY:    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1345.dwg  | APPROVED BY: | DATE: 08/28/17 |   |

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**LUMINAIRE: PHILIPS HADCO URBAN WESTBROOK NON-FLARED (CXF14) OR FLARED (CXF15)**

Series: **CXF14** or **CXF15**

LEDs\*: **32; 48; 64; 80**

Generation: **G2**

Finish: **A Black**

Optics\*: **2 - Type II; 3 - Type 3; 4 - Type 4; 5 - Type 5**

CCT: **W 3000K**

Voltage: **A 120-277 VAC**

Drive Current\*: **3 - 350mA; 5 - 530mA; 7- 700mA**

Optional Dimming\*:

**DA 4 Hrs 25% reduction; DB 4 Hrs 50% reduction; DC 4 Hrs 75% reduction;**

**DD 6 Hrs 25% reduction; DE 6 Hrs 50% reduction; DF 6 Hrs 75% reduction;**

**DG 8 Hrs 25% reduction; DH 8 Hrs 50% reduction; DJ 8 Hrs 75% reduction;**

**DALI Compatible with DALI; N No Dimming**

Optional Programs:

1st Option: **N No 1st Option**


2nd Option: **CLO Constant light output**

3rd Option: **OTL Over the life**

Surge Protection: **SP2 20Vv/20kA**

\*to be determined by designer - see manufacture specifications

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|   |              |                |   |
|---|--------------|----------------|---|
| Approved Street Lighting Equipment for New Installations Pg 2 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1345                                       | DRAWN BY:    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1345.dwg  | APPROVED BY: | DATE: 08/28/17 |   |

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**LUMINAIRE: AMERICAN ELECTRIC LIGHTING AUTOBAHN ATBO, BRONZE**

Series: **ATBO** - Autobahn LED Roadway

Performance packages\*:

**10BLEDE70** - 10B chips, 700mA Driver; **10BLEDE10** - 10B chips, 1050mA driver; **10BLEDE15** - 10B chips, 1500mA driver

**20BLEDE53** - 20B chips, 525mA driver; **20BLEDE70**- 20B chips, 700mA Driver; **20BLEDE10** -20B chips, 1050mA driver; **20BLEDE13** -20B chips, 1300mA driver; **20BLEDE15** - 20B chips, 1500mA driver;

**30BLEDE70** - 30B chips, 700mA driver; **30BLEDE85**- 30B chips, 850mA Driver; **30BLEDE10** - 30B chips, 1050mA driver; **30BLEDE13** -30B chips, 1300mA driver; **30BLEDE15** - 30B chips, 1500mA driver

Voltage: **MVOLT** - multi-volt, 120 - 227V

Optics\*: **R2** - Roadway Type II; **R3** - Roadway Type 3; **R4** - Roadway Type 4; **R5** - Roadway Type 5

Options:

Color Temperature (CCT): **3K** 3000K CCT, 70 CRI Min.

Paint: **BZ** - Bronze

Surge Protection: **20** - 20kV/10KA SPD

Terminal Block - standard

Misc. :

**NL** - Nema Label

**UMR-XX** - 8 " horizontal arm for round pole, painted to match fixture

Controls:


**P7** - 7 Pin Photocontrol receptacle (dimmable driver included)

**AO** - Field Adjustable Output

**PCLL** - Solid State Long Life Photocontrol

\* to be determined by designer - see manufacturer recommendations

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|---|--------------|----------------|---|
| Approved Street Lighting Equipment for New Installations Pg 3 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
| DRAWING NUMBER: RD-1345                                       | DRAWN BY:    | SCALE: N.T.S.  |   |
| FILE NAME: RD-1345.dwg  | APPROVED BY: | DATE: 08/28/17 |   |



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**POLES AND MAST ARMS**

| Length & Type                                    | Valmont        | Hadco      | P&K Poles (Flagpole Inc) | Union Metal |
|--|----------------|------------|--------------------------|-------------|
| 30 foot, Davit<br>6' Mast Arm<br>(1952) (CU 279) | 3000-85106D4   | 41-176PGE  | RTA8L30AAD1632D          | 920-B179-Y1 |
| 30 foot,<br>Double Davit<br>2-6' Mast            | 3000-856206D4Z | 42-158XPGE | NONE                     | 920-B180-Y1 |
| 35 foot, Davit<br>8' Mast                        | 3500-8108D4    | 41-231PGE  | RTA8M35AAD1832D          | 920-B179-Y2 |

**POLE: DECORATIVE BLACK ALUMINUM (Use with Hadco Westbrook Fixture)**


| Length  | Hadco                            |
|---|----------------------------------|
| 18 Foot, Black, Smooth Anchor Base (11" B.C.)   | CP2871C (40034)                  |
| 4 Foot Pole Extension w/Arm Bracket, Pole Cap, and 18 Foot Smooth Westbrooke Pole (CU 1437)     | CA7897-HFP710-P5A<br>(90002579)  |
| 4 Foot Pole Extension w/Double Mast Arm, Pole Cap, and 18 Foot Smooth Westbrooke Pole (CU 1438) | CA2871L-HFP720-P5A<br>(90003564) |

**POLES: COMPOSITE, 2-PIECE, SMOOTH FINISH, DIRECT-BURIED, TOP PIECE ONLY**

| Length & Type          | Mounting Height & Color | Shakespeare                          | CMT  |
|------------------------|-------------------------|--------------------------------------|--|
| 30 Foot, Direct Buried | 25 Feet, Bronze         | BHT3099S5BL9901<br>(39358) (CU 1111) | MDS30-F-100-S2-HS-PC-NP-1B-22<br>(39372) (CU 1112) |

**POLE FOOTINGS: CONCRETE**

| Precast Concrete Base  | Bolt Circle | Bolt Projection | Bolt Type            | Base Dimensions                   | Utility Vault Company |
|--|-------------|-----------------|----------------------|-----------------------------------|-----------------------|
| For all decorative and post-top anchor base poles 14 to 25 feet. (39083) | 11 inch     | 3-1/2 inch      | 1" - 8 NC Galv Steel | 20" Round by 48" High             | 20R-LB-4- PGE         |
| For 25 to 35 Foot Aluminum Anchor Base Poles (00147)                     |             |                 |                      | 14" Square by 60" High            | 5CL-LB- PGE           |
| For 40 Foot Aluminum Anchor Base Poles (39094)                           |             |                 |                      | 18" Top<br>24" Bottom<br>84" High | 7-LB- PGE             |

|   |              |                |   |
|---|--------------|----------------|---|
| Approved Street Lighting Equipment for New Installations Pg 4 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
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MISCELLANEOUS

GROUT

Non-Shrink Grout, such as Alcrete Twenty Minute Fast Setting Grout, or approved equal

The air gap between the top of pedestal and bottom of light pole shall be grouted with a high-strength, non-shrinking grout meeting ODOT SSC Section 02440.50(b).

MANHOLE COVER: GRAY, PLASTIC, STEEL CORE, UNIVERSAL

Quantum Engineering  
TL-S (90004595)


STREETLIGHT WIRE: UNDERGROUND OR IN POLE

| Streetlight Wire                    | Description  |
|-------------------------------------|--|
| #10 CU 3-Conductor (00036) (CU 635) | #10 AWG, 600 Volt, 3-Conductor, Class B Stranding, Type TC, with Sunlight-Resistant 45-mil PVC Jacket. Suitable for direct burial installations. Insulation to be black, red, and green per NEMA WC-7 for NEC applications (TFN, THWN, THHN), with fillers or binding tape added to produce round outer jacket, rated 90DC dry and 75DC wet, 1,000 ft NR reels. Jacket to display sequential footage markings. 2 reel labels, one attached to the outside flange surface, one attached to the drum wrapping; each to detail total footage, inside or starting footage. |

JUNCTION BOX: FOR UNDERGROUND CONDUCTORS & CONNECTIONS

| Junction Box Description | Junction Box, Concrete Polymer Lid, Fiberglass Reinforced Polymer flared sides, 18" Deep, No Floor, With Skid Resistant Cover Attached by Two Captive stainless steel 3/8-inch Penta-head Bolts, Gray Color, per Material Specification L26107 Note: 12"x12"x12" is 12 inches deep with straight sides. Covers must be marked ELECTRIC or POWER. |
|--------------------------|--|
|--------------------------|--|

| Manufacturer                 | 13" x 24" x 18" (90003478) | 17" x 30" x 18" (90003480) | 12" x 12" x 12" (39031)                                 |
|------------------------------|----------------------------|----------------------------|---|
| Newbasis                     | FCA132418T-00043           | FCA173018T-90026           | PCA1212-90005 (Box: PMB121212SN20<br>Lid: SMC1212B1A20) |
| Quazite (Hubbell)            | A42132418A017              | A42173018A017              | N/A   |
| Oldcastle /Carson Industries | 13241617                   | 17301620                   | HLW1212-12-PC   |
| CDR (Electrimold)            | N/A                        | N/A                        | PA-13-1212-12   |
| Highline                     | CHA132418HE1               | CHA173018HE1               | PHA121212SE1  |
| Armorcast                    | A6001946TAX18-PGE          | A6001640TAX18-PGE          | A6001423TA (Box: A6001423) (Cover: A6001422)            |

|   |              |                |   |
|---|--------------|----------------|---|
| Approved Street Lighting Equipment for New Installations Pg 5 |              |                | CITY OF<br>WILSONVILLE<br><br>PUBLIC WORKS STANDARDS |
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