

## Steel Streetlight Pole and Arm Assemblies, Boulevard



### 1. Scope

This standard covers the requirements for steel streetlight pole and arm assemblies for Lake Washington Boulevard.

This standard applies to the following Seattle City Light stock numbers:

Stock No.	Description	Color
013464	21-1/2 ft, tapered steel pole	Black
013465	4-ft span, 1-ft rise tapered steel arm	Black

### 2. Application

Steel streetlight poles are only used to support Stock No. 013526, 80-watt Domus LED in black.

These assemblies are used exclusively by the Seattle Parks and Recreation along Lake Washington Boulevard in the Arboretum.

Steel streetlight pole and arm assemblies are special-ordered.

Steel streetlight pole and arm assemblies are owned by the Seattle Parks and Recreation and maintained by Seattle City Light.

Steel streetlight pole and arm assemblies are installed to achieve a mounting height of 22 feet, nominal.

Steel streetlight pole and arm assemblies are installed onto 4-bolt, 11-1/2-inch bolt circle streetlight pole foundations, Stock No. 568028.

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### 3. Industry Standards

Steel streetlight pole and arm assemblies shall meet the applicable requirements of the latest revision of the following industry standards:

**AASHTO Standard Specifications** for Structural Supports for Highway Signs, Luminaires, and Traffic Signals

**ASTM A 153** Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware

**ASTM A 307** Standard Specification for Carbon Steel Bolts and Studs, 60,000 PSI Tensile Strength

**ASTM B 117** Standard Practice for Operating Salt Spray Apparatus

**ASTM D 2247** Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity

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### 4. Requirements

#### 4.1 General

Steel streetlight pole and arm assemblies shall conform to the details in Valmont drawing WA181261P1.

Steel streetlight pole and arm assemblies shall be designed and fabricated to conform to the requirements of AASHTO standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals.

Steel streetlight pole and arm assemblies shall consist of a tapered, galvanized steel shaft welded to a steel base and complete with pressure-mounted nut cover discs.

#### 4.2 Steel Arm

Each steel arm shall be high-strength steel tubing of one-piece construction.

**Table 4.2. 4-ft Steel Bracket Arm – Seattle City Light Stock No. 013465**

Span	4 ft
Rise	1 ft
Base outer diameter	3 in
Finish	Black, RAL 9005
Weight	27 lb

#### 4.3 Pole Shaft

Steel pole shaft shall be high-strength steel tubing of one-piece construction.

**Table 4.3. 22-ft Mounting Height – Seattle City Light Stock No. 013464**

Mounting height, nominal	22 ft
Pole length, nominal	21-1/2 ft
Cross section	Round
Pole-base diameter, nominal	8-1/2 in
Pole-top diameter, nominal	5-1/2 in
Weight	244 lb

#### 4.4 Grounding

A tapped grounding pad equipped with either a 1/4-20 x 1/2 or 3/8-16 x 1 stainless steel screw shall be provided and located on the interior of the pole opposite the handhole or directly adjacent to the handhole.

#### 4.5 Pole Handhole

**Table 4.5. Handhole Specifications**

Size, minimum (in)	5 in x 7-1/2 in
Finish/Color	Match pole finish/color
Location	Centered 18 in above base

The handhole shall be reinforced so as to result in no loss of shaft strength.

The handhole shall be attached with stainless steel screws. The cover shall be weatherproof.

#### 4.6 Pole Base Plate

Base plate shall be fixed and sized to accommodate four one-inch anchor bolts spaced 90 degrees apart on an 11-1/2 inch bolt circle.

#### 4.7 Pole Finish

The finish shall be polyester powder coated black, color RAL 9005.

#### 4.8 Pole Top Cap

A removable pole top cap held in place with three stainless steel set-screws shall be included.

#### 4.9 Festoon Outlet

None required.

#### 4.10 Anchor Bolts

None required.

## 5. Packaging

Steel streetlight pole and arm assemblies shall be protected with a spiral wrapping of heavy waterproof material for protection during shipping and installation. When necessary, rip cord shall be provided for easy removal of the wrapping.

Shipping containers shall be legibly marked with:

- Manufacturer's name
- Product description
- Quantity contained
- Seattle City Light stock number

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## 6. Issuance

Stock Unit: EA

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## 7. Approved Manufacturers

<b>Stock No.</b>	<b>013464</b>
Description	21-1/2-ft Steel Streetlight Pole
Manufacturer	Valmont Industries, Inc.
Catalog No.	DS32-850A216-0'LMA-HH-FPGV-LAB
<b>Stock No.</b>	<b>013465</b>
Description	4-ft Steel Streetlight Arm
Manufacturer	Valmont Industries, Inc.
Catalog No.	4'LMA-FPGV

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## 8. References

**Chao, Yaochiem**; SCL engineer, originator and subject matter expert for 5756.15;  
(yaochiem.chao@seattle.gov)

**Pompeo, Brenda**; SCL engineer, subject matter expert for 5756.15;  
(brenda.pompeo@seattle.gov)

**Valmont; Drawing No. WA181261P1** - Lake Washington Blvd, Lighting Structures,  
dated May 22, 2012

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## 9. Sources

**SCL Material Standard 5683.01**; "Steel Streetlight Pole and Arm Assemblies"  
(canceled/renumbered)