

## PURPOSE

Lighting shall be used to illuminate portions of the park including parking lots and designated areas.

## GENERAL INFORMATION

Square, down light fixtures shall be installed in park locations subject to historic light guidelines or City of Alexandria small area plan approval may be modified.

Lighting in POS zoned properties requires a Special Use Permit.

## MATERIALS AND FINISH

The lamp housing shall be die-cast aluminum with a black powder coat finish.

The lens frame shall be die-cast aluminum with a hinge assembly for maintenance. The lens shall be high impact, clear-tempered glass.

The metal pole and fitter shall be finished with a black powder coat finish.

Light fixtures shall be mounted on square aluminum poles with an extended pole mounting arm to offset the fixture.

Light poles shall be 15 feet in height and installed with an anchor base. The anchor bolts shall be recessed into an anchor base casting. Provide tamper resistant covers.

## FEATURES

Light fixtures that require separate ballast boxes are not permitted.

Lamps may include a wire guard.

Lamps shall be metal halide.

LED options may be installed with the approval of the Director of Recreation, Parks and Cultural Activities, and the Director of Transportation and Environmental Services.

Double fixtures are available.

## INSTALLATION

Light poles shall be located so as not to be in conflict with vegetation or plantings.

Lights shall be located a minimum of 3 feet from the edge of all shared-use paths or pedestrian walkways.

Light pole foundations shall be flush to finished grade. Top of footing shall be sloped to shed water.

Connections installed beneath paving shall be sleeved.

Installation work shall be performed in conformity with USBC.

Luminaire shall not extend below fixture housing.

## LIFE CYCLE EXPECTATIONS

A 3 year minimum warranty is required on area light fixtures.

A 3 year minimum warranty is required on poles.

Lights are anticipated to require replacement after 20 years of normal and ordinary use.

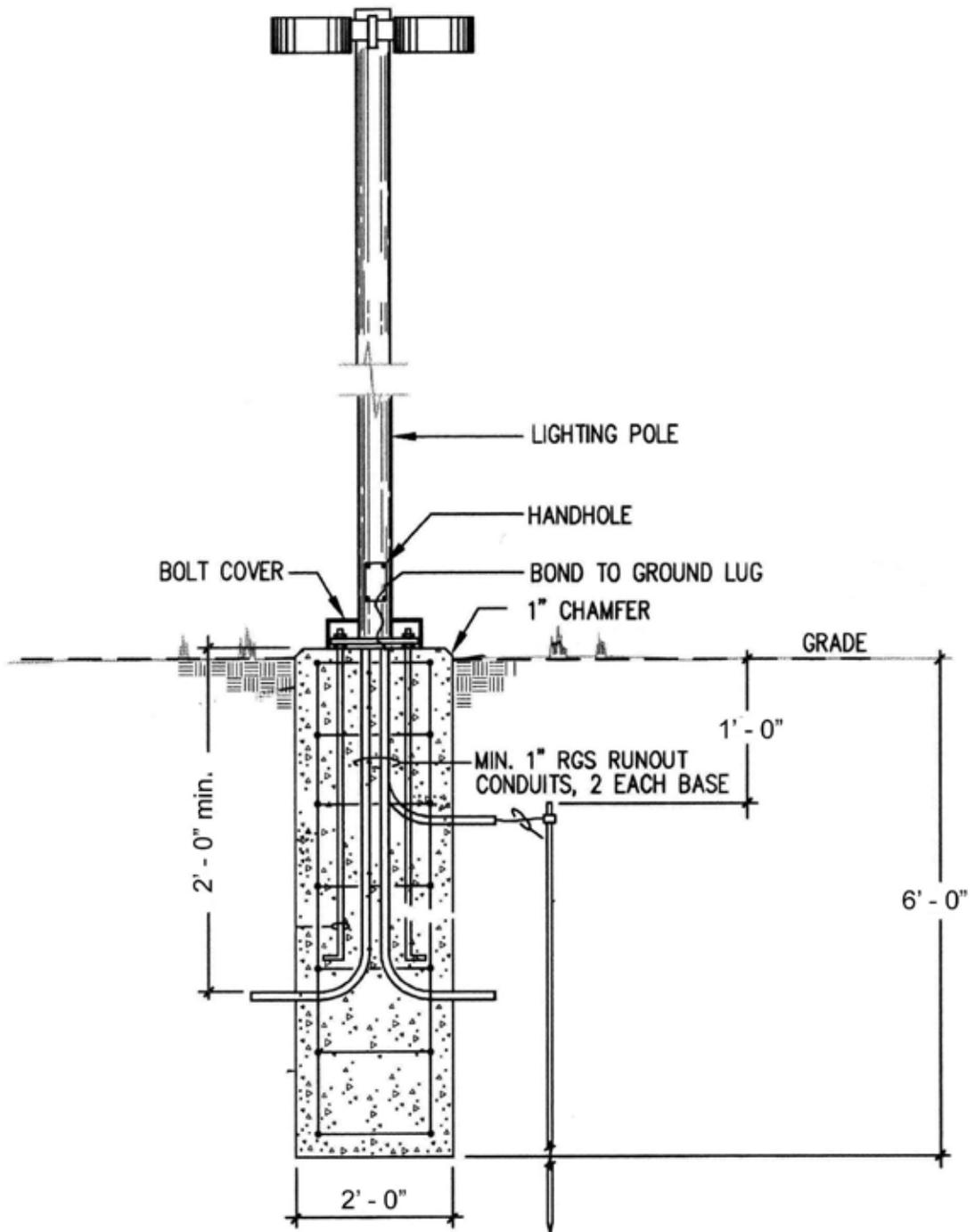


Square light fixture (1)

## IMAGE FOOTNOTES

(1) [www.sitelighting.com](http://www.sitelighting.com); Philips Gardco lighting.

# LIGHTING | AREA



Area light pole assembly

Not to scale

# LIGHTING | ATHLETIC FACILITIES

## PURPOSE

Athletic field and court lighting systems shall be provided to ensure safe play environments where athletic field/court use is desired beyond normal daylight hours.

## GENERAL INFORMATION

Athletic field and court lighting shall be provided as a complete sports lighting system.

The standard system is the Musco Light-Structure Green, or City approved equal.

Lighting levels shall provide safe play for the programmed sports. The average foot candle level on a rectangular playing surface shall be 50 fc and the uniformity shall be 2.0:1.0. The average foot candle level on a court playing surface shall be 30 fc and designated uniformity shall be 2.0:1.0.

Lighting in POS zoned properties requires a Special Use Permit.

## MATERIALS AND FINISH

Light poles and cross arms shall be galvanized steel, and shall meet wind loading requirements of the IBC Building Code and AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

Bases shall be pre-stressed direct burial concrete. Foundations shall be designed by a professional engineer licensed in the Commonwealth of Virginia.

The mounting heights for athletic fields are 60-80 feet above the playing surface. Mounting heights for athletic courts are 20-40 feet above the playing surface.

Wiring shall be contained inside the cross arms and poles.

Light fixtures shall be 1500W or 1000W metal halide lamps with external visors to minimize light glare and spill.

## FEATURES

Light system shall include a remote monitoring system for performance tracking.

Lighting system shall include a remote lighting control system that allows operation via web site, phone, fax and email. System shall be programmable up to a year in advance and accept a seven day schedule.

Lighting system shall include an accessible on-off selector switch located on one of the poles.

Lighting shall include pegs on poles for maintenance access.

Ballasts shall be located on each individual pole.

## INSTALLATION

Light pole installations require separate permits.

Coordinate player-activated switches and timers to minimize additional infrastructure.

Installation work shall be performed in conformity with USBC.

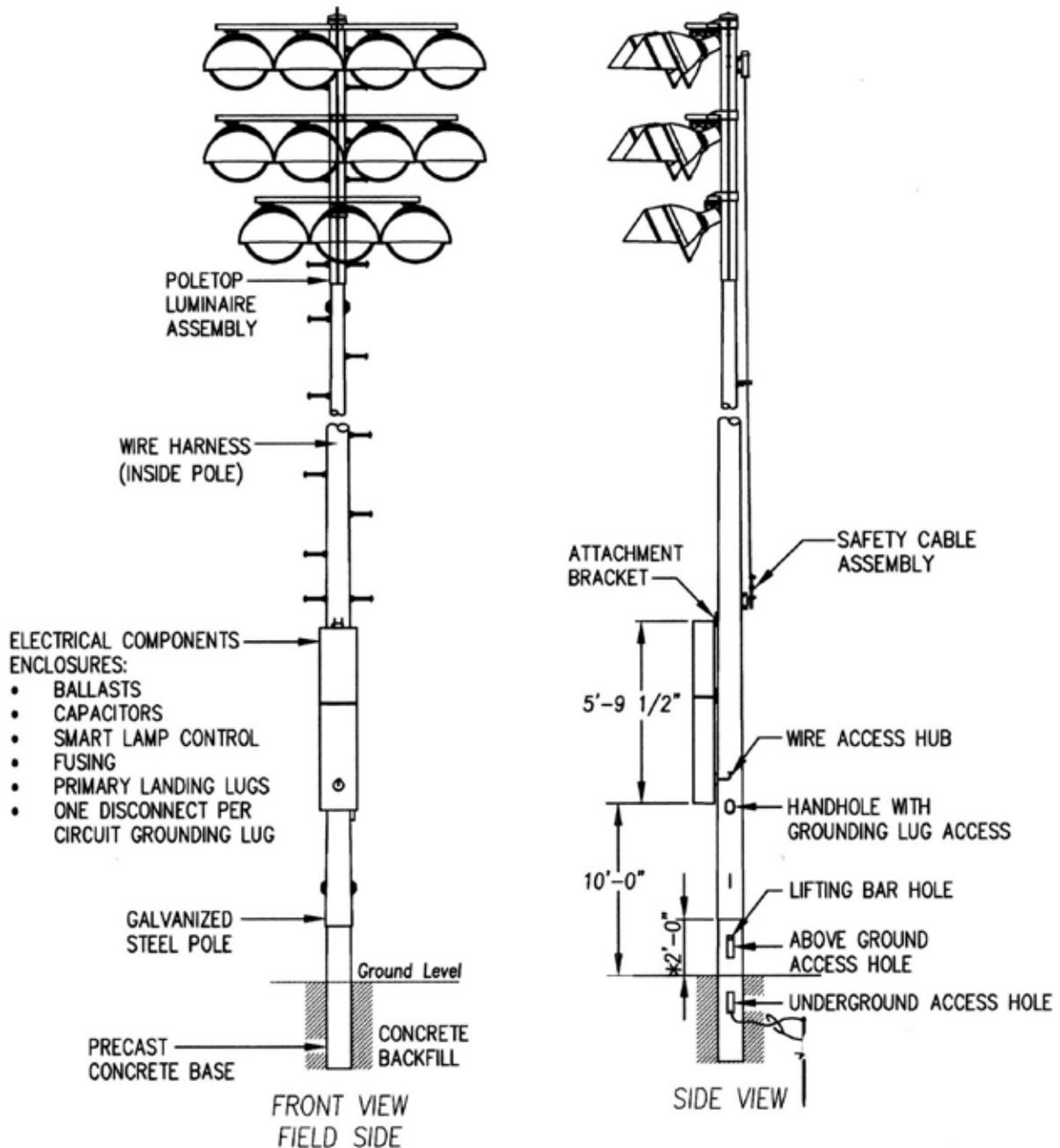
Poles shall include direct burial concrete bases.

## LIFE CYCLE EXPECTATIONS

A 25 year warranty is required on athletic lighting systems.

Lighting systems are anticipated to require replacement after 40 years of normal and ordinary use.

# LIGHTING | ATHLETIC FACILITIES



Typical athletic lighting

Not to scale

# LIGHTING | GROUND RECESSED

## PURPOSE

Ground recessed lights shall be used to illuminate significant park features or items of special interest such as art, flag poles and signs.

## GENERAL INFORMATION

Lighting installations require electrical permits.

Lighting in POS zoned properties requires a Special Use Permit.

## MATERIALS AND FINISH

The lamp housing shall be composite material, resistant to ultraviolet degradation and corrosion.

The lens shall be ADA compliant, anti-slip material and able to withstand loads up to 200 PSI, with a commercial grade frame.

## FEATURES

Lens frame material shall be bronze, aluminum or black finish.

Directional shields shall be provided where appropriate.

Lamps shall be metal halide.

LED options may be installed with the approval of the Director of Recreation, Parks and Cultural Activities.

## INSTALLATION

Lights shall be installed in locations with positive drainage away from lights.

Flush light fixtures shall be installed in hardscape surfaces.

Connections installed beneath paving shall be sleeved.

Installation work shall be performed consistent with USBC.

Install manufacturer's recommended drainage.

## LIFE CYCLE EXPECTATIONS

A 1 year minimum warranty is required on ground recessed light fixtures.

Lamps are anticipated to require replacement after 2 years of normal and ordinary use.

Light fixtures are anticipated to require replacement after 7-10 years of normal and ordinary use.

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# LIGHTING | HISTORIC POLE

## PURPOSE

The historic pole light shall be used as a street or park road light in the City's Historic Districts to illuminate portions of public land or right-of-way.

## GENERAL INFORMATION

Gadsby light fixtures shall be installed in the Gadsby Light District within the Old and Historic District of Alexandria.

Lighting in POS zoned properties requires a Special Use Permit.

## MATERIALS AND FINISH

Lights shall be mounted on fiberglass or aluminum poles.

Poles and fitters shall be finished with a black UV-resistant catalyzed urethane coating.

Light poles/fixtures/luminaires shall be 14 feet total height from finished grade and installed with an anchor base.

The ornamental base cover shall be designed to cover the anchor bolts with one or two pieces, be vandal resistant, and finished to match the post.

The pole top shall meet the requirements of the Department of Transportation and Environmental Services.

No cage, band, or finial shall be installed.

Fixture metal finishing shall be a high-quality, permanently affixed powder coating, done through a heat-finished process.

## FEATURES

Light fixtures that require separate ballast boxes are not permitted.

Globes/post tops shall include full top reflectors.

LED options may be installed with the approval of the Director of the Department of Recreation, Parks and Cultural Activities, and the Director of the Department of Transportation and Environmental Services.

## INSTALLATION

Light poles shall be located so as not to be in conflict with vegetation or plantings.

Lights shall be located a minimum of 3 feet from the edge of all shared-use paths or pedestrian walkways.

Light pole foundations shall be flush to finished grade. Top of footing shall be sloped to shed water.

Connections installed beneath paving shall be sleeved.

Installation work shall be performed in conformity with USBC.

Lights shall be installed on a GFI circuit and switch.

## LIFE CYCLE EXPECTATIONS

A 3 year minimum warranty is required on historic light fixtures.

A 3 year minimum warranty is required on poles.

Lights are anticipated to require replacement after 20 years of normal and ordinary use.

# LIGHTING | HISTORIC POLE

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Gadsby historic pole light



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Historic light fixtures (1)

## IMAGE FOOTNOTES

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(1) <http://www.hadco.com>

# LIGHTING | STREET POLE

## PURPOSE

The street pole light shall be used to illuminate portions of the park system, including streets, park roads and trails.

## GENERAL INFORMATION

Light fixtures shall be installed as a street or park road light in areas not guided by historic light fixture requirements or small area plan requirements.

Lighting in POS zoned properties requires a Special Use Permit.

The standard light fixture is Hadco, Inc., R53, or City approved equal.

## MATERIALS AND FINISH

The globe/post top shall be Type V, clear stabilized acrylic with a Victorian style roof.

No cage, band, or finial shall be installed.

The pole and fitter shall be finished with a black UV-resistant catalyzed urethane coating.

Lights shall be mounted on fiberglass, fluted and tapered decorative poles for post top lights.

Light poles/fixtures/luminaires shall be 14 feet total height from finished grade and installed with an anchor base.

The ornamental base cover shall be designed to cover the anchor bolts in one or two pieces, be vandal resistant and finished to match the post.

## FEATURES

Light fixtures that require separate ballast boxes are not permitted.

Post tops shall include full top reflectors and may include a house side shield if warranted by the pole location.

LED options may be installed with the approval of the Director of Recreation, Parks and Cultural Activities, and the Director of Transportation and Environmental Services.

## INSTALLATION

Light poles shall be located so as not to be in conflict with vegetation or plantings.

Lights shall be located a minimum of 3 feet from the edge of all shared-use paths or pedestrian walkways.

Light pole foundations shall be flush to finished grade. Top of footing shall be sloped to shed water.

Connections installed beneath paving shall be sleeved.

Installation work shall be performed in conformity with USBC.

## LIFE CYCLE EXPECTATIONS

A 5 year minimum warranty is required on street pole light fixtures.

A 3 year minimum warranty is required on poles.

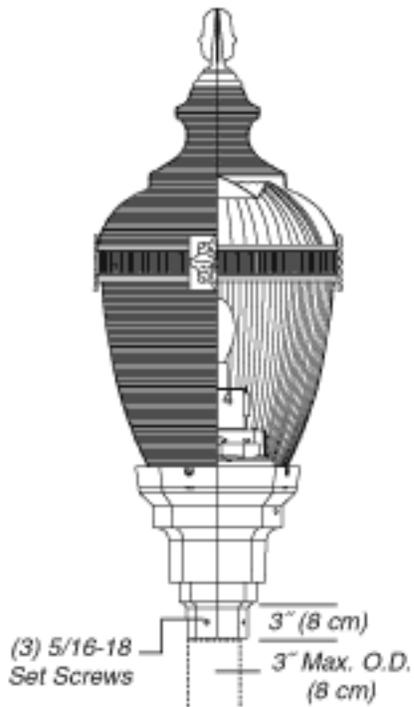
Lights are anticipated to require replacement after 20 years of normal and ordinary use.



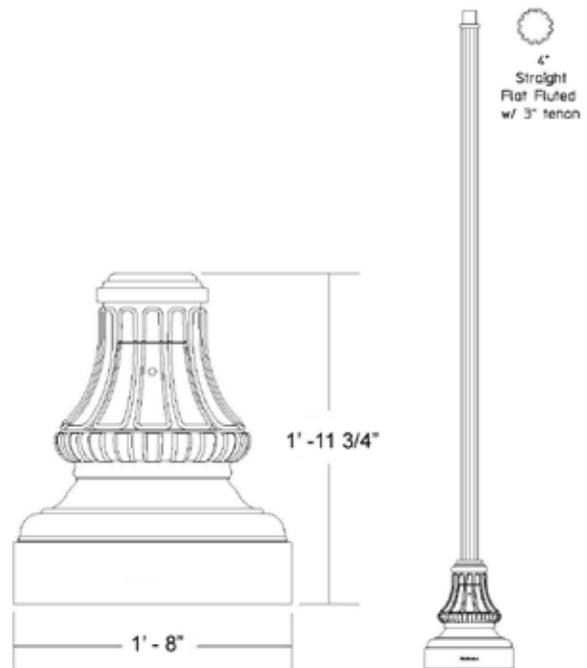
Fiberglass fluted base

# LIGHTING | STREET POLE

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Street light fixture (1)



Virginia Dominion Power - Fiberglass fluted street pole (2)

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## IMAGE FOOTNOTES

(1) <http://www.hadco.com>

(2) <http://www.hadco.com>