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### 4.1 DOT–Approved Street–Lighting Combinations

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<th>Optional Poles</th>
<th>Historic Poles</th>
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<td>Octagonal</td>
<td>Round</td>
</tr>
<tr>
<td>Cobra Head</td>
<td>●</td>
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<tr>
<td>Stad</td>
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<td>Fulton</td>
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<tr>
<td>Alliance</td>
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</tr>
<tr>
<td>Helm</td>
<td>●</td>
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<td>●</td>
</tr>
<tr>
<td>Teardrop</td>
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<tr>
<td>Shielded Teardrop</td>
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</tbody>
</table>

● This combination of an optional pole with the Teardrop or Shielded Teardrop luminaire creates a historic light.

### 4.2 DOT–Approved Pedestrian–Lighting Combinations

<table>
<thead>
<tr>
<th>Luminaires</th>
<th>Standard Poles</th>
<th>Optional Poles</th>
<th>Historic Poles</th>
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<td>Octagonal</td>
<td>Round</td>
</tr>
<tr>
<td>Cobra Head</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Stad</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fulton</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<td>Flushing Meadows</td>
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<td>Helm</td>
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<tr>
<td>Teardrop</td>
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<td>●</td>
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<tr>
<td>Shielded Teardrop</td>
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<td>●</td>
</tr>
<tr>
<td>Type B</td>
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<td></td>
</tr>
<tr>
<td>World’s Fair</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

● This combination of an optional pole with the Teardrop or Shielded Teardrop luminaire creates a historic light.
Introduction

About this Chapter
This chapter outlines options for both new and replacement street lighting for use on New York City streets. Included are those fixtures that meet NYC DOT engineering standards, as well as technical requirements for safety and energy efficiency and for use in a variety of contexts.

Selection Criteria
Fixture types (luminaires) are categorized as Standard, Optional, Historic, and Pilot fixture types for both Street Lights and Pedestrian Lights (see detailed descriptions of these usage categories below). Only the fixtures that are described in the Standard category will be provided and maintained by NYC DOT. All other fixtures must be separately funded; and under certain conditions, will be maintained by NYC DOT. Where energy consumption and quantity of fixtures exceeds NYC DOT “Standard,” a separate maintenance agreement will be required.

• Luminaires & Poles
The selection of lighting includes the specification of both a pole and luminaire. The desired aesthetic and engineering outcomes can be achieved by combining luminaires with different poles. Acceptable combinations are described in this chapter.

• Energy Guidelines
To comply with current citywide energy guidelines, most of the fixtures are available with 150W (watt) and 100W high pressure sodium (HPS) lamps. Energy costs that exceed the 150W standard and 100W standard must be separately funded. NYC DOT engineers will determine where the use of 150W or 100W is appropriate for the particular application.

• Engineering Review
In all cases, the suitability of the fixture type for particular street and lighting conditions must be approved by NYC DOT engineers.

Usage Categories

Standard
These luminaires and pole types will be provided and maintained by NYC DOT. The current standard luminaires for New York City streets are the 100W and 150W Cobra Head (for street lighting) and the 70W and 100W Cobra Head (for pedestrian lighting). For street lighting and pedestrian lighting, the standard pole types are the Davit, Round, and Octagonal poles. The M–2 Traffic Signal Pole is standard for use at all traffic signal locations.

Optional
These luminaires and poles require additional funding for the initial cost of the fixtures. In an effort to reduce carbon emissions citywide, the additional energy costs above the 150W (for street lighting) or 70W and 100W (for pedestrian lighting) standards will also require additional funding for all projects authorized after December 31, 2008.

Historic
Historic fixtures are intended for use in Landmark districts that are designated by the New York City Landmark Preservation Commission (LPC) or for neighborhoods that have substantial historic fabric intact. They will require special approval by NYC DOT and the Design Commission (DC) for use in other areas.

Most historic poles are currently used with only one luminaire, the 250W or 150W teardrop. Until alternate historic luminaires of lower wattage are available that meet NYC DOT technical requirements, this is the only option available.

Pilot
These luminaires are not yet approved for use in New York City. Many of them are currently or soon to be tested. They will require NYC DOT approval prior to specification for any project.
4.0 Introduction

Specifications
For design criteria, technical information, finishes, and color specification, refer to Bureau of Traffic Division of Streetlighting Specifications. The latest edition is available from the NYC Department of Transportation.

Cutoff
Outdoor luminaires may be categorized according to the four classifications established by the IESNA of full cutoff, cutoff, semi-cutoff, and non-cutoff to distinguish the range in quantity of upward light and light above a horizontal plane emitted by a light source.

- **Full cutoff**: Full cutoff fixtures do not emit any upward light (at or above 90 degrees) and up to 10% of their light at or above 80 degrees. They create the narrowest spread of light.
- **Cutoff**: Cutoff fixtures emit up to 2.5% of their light upward (at or above 90 degrees) and up to 10% of their light at or above 80 degrees. They create a slightly wider spread of light.
- **Semi Cutoff**: Semi-cutoff fixtures emit up to 5% of their light upward (at or above 90 degrees), and up to 20% of their light at or above 80 degrees. They create a wider spread of light.
- **Non Cutoff**: Non-cutoff fixtures emit light in all directions. They create the widest spread of light.

Spacing/Typical
X:Y: The spacing of streetlights is dependent on several factors, including the height of the pole, street width, the amount of light the fixture provides, and the lighting levels necessary for the particular street classification. The information provided in this chapter is intended as a guideline to indicate that additional poles and/or fixtures may be required in the selection of certain luminaires.

The spacing between poles is described as a ratio in comparison to the Standard luminaire and pole (SLP), which is currently the Cobra Head luminaire on a round, octagonal, or davit pole. A ratio of 1:1 indicates that an equal number of poles and luminaires would be required for replacement. A ratio of ½:1 indicates twice as many luminaires and poles would be required to achieve similar lighting levels as the SLP.

Lighting Levels
Lighting levels are based on the guidelines established by the IESNA. All lighting designs must be reviewed and approved by NYC DOT engineers.
Notes and Symbols

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPS</td>
<td>High Pressure Sodium</td>
</tr>
<tr>
<td>LED</td>
<td>Light Emitting Diode</td>
</tr>
<tr>
<td>HDG</td>
<td>Hot Dipped Galvanized Steel</td>
</tr>
<tr>
<td>SLP</td>
<td>Standard Luminaire and Pole (cobra head on round, octagonal, or davit pole)</td>
</tr>
<tr>
<td>IESNA</td>
<td>Illuminating Engineering Society of North America</td>
</tr>
<tr>
<td>IESType</td>
<td>Pattern of light distribution defined by the Illuminating Engineering Society.</td>
</tr>
<tr>
<td>W</td>
<td>Watts</td>
</tr>
<tr>
<td>$</td>
<td>Costs: Shown for each luminaire as a “$” symbol, representing relative costs compared to the Standard Luminaire and Pole (SLP). Because actual costs are subject to change, a scale of one to five $ symbols is used rather than specific monetary amounts.</td>
</tr>
</tbody>
</table>
Street Lighting
Cobra Head

**USAGE: STANDARD**

The Cobra Head luminaire was originally introduced by the Westinghouse and General Electric companies in 1957 to accompany an aluminum post designed in 1958 by Donald Deskey and first installed in 1963. Additional poles were later introduced to support the Cobra Head luminaire: the Octagonal, Round, and Davit. The 100W and 150W Cobra Head luminaire are the current standard for New York City streets.

**Applications**
- Streets or highways
- Single or twin mounting

**Lamping/Optics**
- 100W HPS, 150W HPS
- Medium Semi–Cutoff, IES Type 1 (100W HPS)
- IES Type II (150W HPS)

**Material/Color**
- H.D.G. Steel/silver (street)
- Aluminum/silver (highway)

**Cost Compared to SLP**
- Cobra Head is the SLP

**Spacing/Typical**
- 1: 1

*Photo: Cobra Head luminaire and octagonal pole: Pearl Street, Manhattan*
Cobra Head with Standard Poles
Poles shown here are the standard poles provided, tested, and maintained by NYC DOT.
Stad

**USAGE: OPTIONAL**

The Stad luminaire was introduced on the Robert F. Kennedy Bridge (formerly the Triboro Bridge). The design of the luminaire provides a contemporary option to the standard Cobra Head at an additional cost.

**Applications**
- Commercial districts
- Single or twin mounting

**Lamping/Optics**
- 100W HPS or 150W HPS
- Cutoff or Semi-Cutoff, IES Type II or III

**Material/Color**
- Aluminum/silver, black and green

**Cost Compared to SLP**
- $$$$  

**Spacing/Typical**
- 1:1
4.1.2 Street

**Street with Standard Poles**
Standard poles are provided and maintained by NYC DOT.

**Street with Optional Poles**
Optional poles require additional funding.
The Fulton luminaire was selected for installation on the Fulton Street Mall in fall 2008. The design of the luminaire provides a contemporary option to the standard Cobra Head at an additional cost.

**Applications**
- Commercial districts
- Roadway width of 36 feet or less

**Lamping/Optics**
- 100W HPS or 150W HPS
- Cutoff, IES Type II or III

**Material/Color**
- Aluminum/silver

**Cost Compared to Standard Light**
- $$$$

**Spacing/Typical**
- ¾: 1

**Fulton Luminaire and Pole**
No standard NYC DOT pole options.
Alliance

**USAGE: OPTIONAL**

The Alliance luminaire was originally introduced in the Lower Manhattan historic financial district by the Downtown Alliance business improvement district. The design of the luminaire provides a contemporary option to the standard Cobra Head at an additional cost.

### Applications
- Commercial districts
- Roadways with width of 36 ft or more

### Lamping/Optics
- 100W HPS, 150W HPS Cutoff, or semi-cutoff, IES Type II or III

### Material/Color
- Steel/silver and black

### Cost Compared to SLP
- $$$$$

### Spacing/Typical
- 3:1

---

**Alliance Luminaire and Pole**

No standard NYC DOT pole options.
**Helm**

**USAGE: OPTIONAL**

The Helm luminaire was piloted by NYC DOT on Queens Boulevard in 2008. The design of the luminaire provides a contemporary option in place of the standard Cobra Head at an additional cost.

**Applications**

Commercial districts

**Lamping/Optics**

100W HPS or 150W HPS

Curved sag glass optics

Cuttoff, or semi–cutoff, IES Type II or III

**Material/Color**

Aluminum/silver, black, brown and green

**Cost Compared to SLP**

$$$$$

**Spacing/Typical**

1/3: 1

Helm luminaire and WM pole: 39th Street, Queens
4.1.5 Helm

**Helm with Standard Poles**
Standard poles are provided and maintained by NYC DOT.

**Helm with Optional Poles**
Optional poles require additional funding.

**Arms**
- Type 1 for WM Pole
- Type 2 for WM Pole
**Flatbush Avenue**

**USAGE: OPTIONAL**

The Flatbush Avenue pole was installed in 1988 by the Economic Development Corporation on Flatbush Avenue in Brooklyn. The Flatbush Avenue pole can support both historic and optional luminaires.

### Applications

- Commercial and residential streets
- Streets with roadway width of 36 feet or more
- Single or twin mounting (center medians)

### Lamping/Optics

- Teardrop: Non–Cutoff, IES Type III or V (250W HPS)
- Shielded Teardrop: Cutoff, IES Type III or V (250W HPS)
- Stad or Helm: Cutoff or Semi–Cutoff, IES Type II or III (150W HPS)

### Material/Color

Fabricated steel pole/black, brown, and green

### Cost Compared to SLP

$$

### Spacing/Typical

- Teardrop or Shield Teardrop: 3/4: 1
- Stad: 1:1

8’-0”

---

**Historic Luminaire with Flatbush Avenue Pole**

![Historic Teardrop luminaire and Flatbush pole: 49th Street, Queens](image)
The TBTA (Triboro Bridge Tunnel Authority) was introduced in the 1950s and '60s for mid-twentieth-century bridge construction projects such as the Robert F. Kennedy Bridge (formerly the Triboro Bridge). The TBTA replaced wooden lamp posts which lit parkways during the 1920s and '30s. Today, the TBTA can support both historic and optional luminaires.

**Applications**
- Commercial and residential streets
- Single or twin mounting
- Streets with roadway width of 36 feet or more

**Lamping/Optics**
- Teardrop: Non-Cutoff, IES Type III or V (250W HPS)
- Shielded Teardrop: Cutoff, IES Type III or V (250W HPS)
- Stad: Cutoff or Semi-Cutoff, IES Type II or III (150W HPS)

**Material/Color**
- Fabricated steel pole/black, brown and green

**Cost Compared to SLP**
- $$$$$

**Spacing/Typical**
- Teardrop or Shielded Teardrop: ½: 1
- Stad: 1: 1
Historic Luminaires with TBTA Pole

- Shielded Teardrop: 8’-0” (A Version)
- Teardrop: 27’ (A Version)
- 27’ (A Version)
- 8’-0” (A Version)
### Type M

**Usage: Historic**

The Type M pole, originally known as the Mast–Arm post, was introduced in 1908 for wide streets at corners on Broadway north of Columbus Circle and on Seventh Avenue north of Central Park. Bracket versions of the Mast–Arm were also attached to the facades of buildings. The reproduction of the Mast–Arm was introduced in the late twentieth century as the Type M pole.

<table>
<thead>
<tr>
<th>Applications</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Selected historic districts</td>
<td></td>
</tr>
<tr>
<td>Streets with roadway width of 36 feet or more</td>
<td></td>
</tr>
<tr>
<td>Single or twin mounting</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Lamping/Optics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non Cutoff, IES Type III or V</td>
<td></td>
</tr>
<tr>
<td>Teardrop luminaire, 250W HPS</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Material/Color</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Ductile iron pole/black, brown and green</td>
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</table>

<table>
<thead>
<tr>
<th>Cost Compared to SLP</th>
<th></th>
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<tbody>
<tr>
<td>$$$$$</td>
<td></td>
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<table>
<thead>
<tr>
<th>Spacing/Typical</th>
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<tr>
<td>$\frac{3}{4}$: 1</td>
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</table>

**Historic Luminaire with Type M Pole**

![Historic Teardrop luminaire and Type M pole: West 11th Street, Manhattan](image-url)
Type F

**USAGE: HISTORIC**

The Type F pole, originally known as the Reverse Scroll Bracket, was developed in 1913 and installed on narrow streets downtown on Seventh Avenue. Bracket versions of the Reverse Scroll were also attached to the facades of buildings. The reproduction of the Reverse Scroll was introduced in the late twentieth century as the Type F pole.

### Applications

- Selected historic districts
- Streets with roadway width of 36 feet or less
- Single or twin mounting

### Lamping/Optics

- Non-Cutoff, IES Type III or V
- Teardrop luminaire, 250W HPS

### Material/Color

- Ductile iron pole/black, brown, and green

### Cost Compared to SLP

- $$$$$

### Spacing/Typical

- ½: 1

**Historic Luminaire with Type F Pole**

Historic Teardrop luminaire and Type F pole: East 8th Street, Manhattan
Bishops Crook

**USAGE: HISTORIC**

The Bishops Crook was the first of a number of decorative street lights to be introduced as early as 1900 on narrow city streets. Bracket versions of the Bishops Crook were also attached to the facades of buildings. The reproduction of the Bishops Crook was introduced in 1980 at Madison Avenue and 50th Street outside the Helmsley Palace Hotel, which is known today as the New York Palace Hotel.

### Applications
- Selected historical districts
- Streets with roadway width of 36 feet or less

### Lamping/Optics
- Non-Cutoff, IES Type III or V
- Teardrop luminaire, 250W HPS

### Material/Color
- Ductile Iron pole/black, brown and green

### Cost Compared to SLP
- $$$$$

### Spacing/Typical
- ½: 1
NYC DOT is no longer planning to pilot the Type L design
4.1.12 City Light

**City Light**

**USAGE: PILOT**

The City Light is not yet available for use, but is included in the Street Design Manual because it is undergoing engineering review. It is anticipated that the prototype of the light will be available for testing on city streets beginning Fall 2010. An international design competition to develop a new standard streetlight for New York City was held in 2004. The City Light design was selected as the winning entry. NYC DOT, the Office for Visual Interaction, and NYC DDC are working together to develop the proposed design into a luminaire.

<table>
<thead>
<tr>
<th>Applications</th>
<th>Commercial or Residential districts TBD</th>
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<tbody>
<tr>
<td>Lamping/Optics</td>
<td>LED</td>
</tr>
<tr>
<td>Material/Color</td>
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</tr>
<tr>
<td>Cost Compared to SLP</td>
<td>TBD</td>
</tr>
<tr>
<td>Spacing/Typical</td>
<td>TBD</td>
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</tbody>
</table>
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NYC DOT is no longer planning to pilot the LED Type A design
LED Type E

**USAGE: PILOT**

The LED Type E luminaire is a rectangular design housing modular light bars. NYC DOT plans to pilot the luminaire in select locations.

### Applications
- Commercial or Residential districts
- TBD
- Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

### Lamping/Optics
- LED, full cutoff

### Material/Color
- TBD

### Cost Compared to SLP
- TBD

### Spacing/Typical
- TBD
Pedestrian Lighting
The Cobra Head luminaire was originally introduced by the Westinghouse and General Electric companies in 1957 to accompany an aluminum post designed in 1958 by Donald Deskey and first installed in 1963. Additional poles were later introduced to support the Cobra Head luminaire: the Octagonal, Round, and Davit. The 70W and 100W Cobra Head luminaires are the current standard for New York City pedestrian lighting.

**Applications**

Parks, esplanades, pedestrian bridges, walkways, ramps, under elevated trains and bikeways

**Single mounting**

**Lamping/Optics**

70W HPS, 100W HPS

Medium Semi–Cutoff, IES Type II

**Material/Color**

H.D.G. Steel/silver

**Cost Compared to SLP**

Cobra Head is the SLP

**Spacing/typical**

1:1
Stad

**USAGE: OPTIONAL**

The Stad luminaire was introduced on the Robert F. Kennedy Bridge in 2008. The design of the luminaire provides a contemporary option to the standard Cobra Head at an additional cost.

### Applications

- Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

### Lamping/Optics

- 70W HPS or 150W HPS
- Sag or flat lens optics
- Cutoff or Semi-Cutoff, IES Type II or III

### Material/Color

- Aluminum/silver, black and green

### Cost Compared to SLP

- $$$$$

### Spacing/Typical

- 1:1

### Stad with Standard Poles
Fulton

**Usage:** Optional

The Fulton luminaire was selected for installation on the Fulton Street Mall in fall 2008. The design of the luminaire provides a contemporary option in place of the standard Cobra Head at an additional cost.

### Applications
- Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

### Lamping/Optics
- 70W HPS, 100W HPS
- Cutoff, IES Type II or III

### Material/Color
- Aluminum/silver and black

### Cost Compared to SLP
- $$$$

### Spacing/Typical
- ¾: 1

**Fulton Luminaire and Pole**

No standard NYC DOT pole options.

---

Fulton luminaire and pole (Credit: Hess America)
Flushing Meadows

**USAGE: OPTIONAL**

The Flushing Meadows pole and luminaire was first installed in 2004 by the NYC Parks and Recreation Department in Canarsie Park in Brooklyn, NY. The pole is now installed in many city parks, plazas, and along walkways and bikeways.

**Applications**

- Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

**Lamping/Optics**

- 70W HPS, 100W or 150W HPS
- Cutoff, IES Type III or V

**Flushing Meadows Head**

**Material/Color**

- Fabricated steel/black, brown, green, and silver

**Cost Compared to SLP**

- $$

**Spacing/Typical**

- $2/s: 1

---

Flushing Meadows Pole & Luminaire

Flushing Meadows luminaire and pole: 46th Street, Queens
Type B

**USAGE: HISTORIC**

The Type B luminaire and pole was one of two street lights designed in the early 1900s for tungsten incandescent lamps. The Type B pole was first introduced in 1911 by designer Henry Bacon for the Central Park Mall and later installed in other city parks. The reproduction of the Type B pole was introduced in the late twentieth century. The pole is now installed in many city parks, in plazas, and along walkways and bikeways.

**Applications**

Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

**Lamping/Optics**

150W HPS, 100W HPS
Non-Cutoff, IES Type V
Type “Riverside Park” luminaire

**Material/Color**

Ductile iron pole/black, brown, or green

**Cost Compared to SLP**

$$

**Spacing/Typical**

½: 1

---

**Type B Luminaire & Pole**

Type B luminaire and pole: Battery Place, Manhattan
**World’s Fair**

**USAGE: HISTORIC**

The World’s Fair luminaire and pole was first installed in 1964 during the World’s Fair held at Flushing Meadows Park in Queens. The pole is now installed in many city parks, in plazas, and along walkways and bikeways.

<table>
<thead>
<tr>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Lamping/Optics</th>
</tr>
</thead>
<tbody>
<tr>
<td>100W HPS &amp; 150W HPS</td>
</tr>
<tr>
<td>Non-Cutoff, IES Type V</td>
</tr>
<tr>
<td>Type 2085 luminaire</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Material/Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steel/black, brown, or green</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost Compared to SLP</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
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</table>

<table>
<thead>
<tr>
<th>Spacing/Typical</th>
</tr>
</thead>
<tbody>
<tr>
<td>3½: 1</td>
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</table>

**World’s Fair Luminaire and Pole**

![Image of World's Fair luminaire and pole: Battery Park, Manhattan]
4.2.7 TBTA

TBTA

**USAGE: OPTIONAL**

The TBTA (Triboro Bridge Tunnel Authority) pole was originally introduced in the 1950s and ‘60s for mid-twentieth-century bridge construction projects such as the Robert F. Kennedy Bridge (formerly known as the Triboro Bridge). The TBTA replaced wooden lamp posts which lit parkways during the 1920s and ‘30s. The pole was recently installed as pedestrian lighting along the Hudson River Park Greenway and can support both historic and optional luminaires. Historic luminaires render the lights historic.

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**Applications**

Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways.

**Lamping/Optics**

- Teardrop: Non–Cutoff, IES Type III or V (100W HPS or 150W HPS)
- Shielded Teardrop: Cutoff, IES Type III or V (100W HPS or 150W HPS)

**Material/Color**

Fabricated steel/black, brown, or green

**Cost Compared to SLP**

$$$$$

**Spacing/ Typical**

For Teardrop or Shielded Teardrop: ¾: 1

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**Historic Luminaires with TBTA Pole**

[Diagram showing historic luminaires with TBTA pole]
**Round Top Head**

**USAGE: PILOT**

The Round Top Head was installed on the piers in Gantry State Park in Long Island City, Queens. The luminaire is suitable for wet locations. NYC DOT plans to pilot the luminaire by FY 2010 in additional locations throughout New York City.

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**Applications**
Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

**Lamping/Optics**
Cutoff, Type V (150 W HPS)

**Material/Color**
Aluminum/silver

**Cost Compared to SLP**
$$$$

**Spacing/Typical**
½:1
LED Post Top

**Usage: Pilot**

Beginning in 2008, NYC DOT has installed the LED Post Top luminaire at select locations in Central Park on a pilot basis. It is a more energy-efficient, white-light replacement for the Type B Luminaire.

**Applications**

Parks, plazas, esplanades, pedestrian bridges, walkways, and bikeways

**Lamping/Optics**

Available up to 80W maximum

Optional electrical control available for hi/lo dimming; high in energy savings

**Material/Color**

Hard mount tops made of spun aluminum with polyester powder coat finish

LED Post Top luminaire and Type B Pole, Central Park, Manhattan

LED Post Top

The luminaire can be supported by an aluminum or steel decorative pole.
NYC DOT is no longer planning to pilot the LED Type A design
NYC DOT is no longer planning to pilot the LED Type E luminaire.

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Type M–2 Traffic Signal Pole

**Usage: Standard**

Originally approved and first installed in 1953, the M–2 Traffic Signal Pole is standard for use at all traffic signal locations. It can be combined with any standard arm or bracket with the standard Cobra Head or an optional luminaire, or with any arm or bracket in the historic section to provide a consistent streetscape.

**Applications**

Intersections

Single or double mounting

**Lamping/Optics**

Standard: Cobra Head luminaire, 100W HPS or 150W HPS

Optional: Stad luminaire, 100W HPS or 150W HPS; Helm luminaire, 100W HPS or 150W HPS

Historic: Teardrop luminaire, 250W HPS

**Material/Color**

H.D.G. Steel/silver, green and brown

Type M–2 Traffic Signal Pole with standard luminaire: Murray Street, Manhattan

Type M–2 Traffic Signal Pole with historic luminaire: Warren Street, Manhattan
4.3.1 Type M–2 Traffic Signal Pole

Type M–2 Traffic Signal Pole with standard luminaire: Lafayette Street, Manhattan

Type M–2 Traffic Signal Pole with historic luminaire: West 113th Street, Manhattan

8’–0”
20’–0”
27’–0”
15’–3”

3’–8”
0’–12”
1’–11”
Alliance Traffic Signal Pole

**USAGE: OPTIONAL**

The Alliance luminaire was originally introduced in the Lower Manhattan historic financial district by the Downtown Alliance business improvement district. The luminaire and optional traffic signal pole can be used as an alternative contemporary option in place of the standard M–2 Traffic Signal Pole but at an additional cost.

### Applications
Intersections

### Lamping/Optics
See Alliance luminaire, 100W HPS or 150W HPS

### Material/Color
H.D.G. steel/silver and black