City of Greenfield

Street Lighting Standards

BY:
THE CITY OF GREENFIELD
ENGINEERING DEPARTMENT

11-3-00
INTRODUCTION

This document details the current City of Greenfield street lighting standards, with reference items included. The ability to set forth lighting standards within the City is set forth in the Municipal Code (Ref: Item A-9 Municipal Code 21.06.0404). The City standards include details relating to uniform poles, style of fixtures used on residential, collector and major streets, location of lights, WEPCO. City and private light types, height of lights, spacing of lights, cost of lights, glare, pole material, wattage, and lighting patterns.

Streetlights within the City are installed, owned and maintained by:

(1) Wisconsin Electric Power Company (WEPCO);
(2) City of Greenfield;
(3) County of Milwaukee;
(4) State of Wisconsin.

In addition, the City imposes lighting standards for private residential, commercial and industrial development projects.

1. WISCONSIN ELECTRIC POWER COMPANY (WEPCO) LIGHTS

The City of Greenfield has adopted the following standards for Wisconsin Electric Power Company (WEPCO) streetlights where no municipal street lighting system exists (Ref: Item A-14 Board of Public Works 7-1-99; Item A-15 Common Council 7-20-99; and Item A-13 Engineering Department Letter, dated 6-26-00 to WEPCO). This includes decorative streetlights recently provided in some subdivisions and along residential streets. In new developments, subdivision light installation costs are by the developer and operational costs by the City (Ref: Item A-8 Municipal Code 20.08(8)).

- (Item A-1) On streets with a rural cross-section having no curb and gutter - 100-watt high-pressure sodium (HPS) light with a full cut-off cobra head fixture on a 30-foot wooden pole (overhead or underground service depending upon location).

- On streets with an urban cross-section fully improved with curb and gutter using underground service:
  - (Item A-2) 100-watt high pressure sodium (HPS) light with an "acorn luminaire" fixture on a 15-foot Washington pole (e.g. Foxwood Crossing subdivision); or
  - (Item A-3) 100-watt high-pressure sodium (HPS) light with a "dayform traditionaire" or "coach light" type fixture on a 15-foot black fiberglass pole (smooth/direct buried) (e.g. Coldspring Woods Subdivision; S. 122nd St. and W. Barnard Ave.; S. 52nd St. and W. Boltsford Ave.).
2. CITY OF GREENFIELD LIGHTS

The City of Greenfield has adopted the following standards for City-owned and maintained streetlights.

- **(Item A-4)** On **major streets** full cut-off type, with minimal fixture arms, "gullwing" fixtures (bronzes in color) mounted on 30-35' aluminum poles (natural aluminum color) will be utilized (Ref: Item A-10 Plan Commission 3-9-99; Item A-11 Board of Public Works 4-1-99; and Item A-12 Common Council 4-20-99).

- **(Item A-6)** Decorative lighting with a "DMS30 luminaire" ("shepherds head," full cut-off type, black in color) may be placed on decorative ("R-80" type) black poles at a height of 15-20' in commercial areas, in conjunction with the "gullwing" fixtures in the median.

The light spacing in the medians is intended to provide a continuous pattern of light (generally, in the 1-1.5 foot-candle range) without dark areas. Where "gullwing" fixtures are in the median, spacing of decorative lights is not intended to provide continuous lighting; rather it is to provide some aesthetic benefit.

- **(Item A-5)** On **collector streets** with a residential character and a lower volume of traffic, decorative lighting will be used. Specifically, 100-watt high-pressure sodium (HPS) light with an "L-61 hexagonal luminaire" all black-colored fixture on a on decorative ("R-80" type) black pole will be used.

Light spacing on alternate street sides in the curbed right-of-way areas is intended to provide a regular, but not continuous pattern of light (generally, in the 0.7-1.0 foot-candle range).

- **(Item A-6)** On **collector streets in designated commercial development corridors** with a lower volume of traffic, high-pressure sodium (HPS) light with a "DMS30 luminaire" ("shepherds hook," full cut-off type) may be placed on black, decorative type poles.

Light spacing on alternate street sides in the curbed right-of-way areas is intended to provide a regular, but not continuous pattern of light (generally, in the 0.7-1.0 foot-candle range).

- **(Item A-6)** In **City Parks** decorative lighting with a "DMS30 luminaire" ("shepherds hook," full cut-off type) may be placed on decorative ("R-80" type) 18-20' poles.

Light spacing according to Park and Recreation Department requirements.
3. COUNTY OF MILWAUKEE LIGHTS
4. STATE OF WISCONSIN LIGHTS

Both Milwaukee County and the State of Wisconsin own and maintain streetlights within the City of Greenfield along their jurisdictional right-of-ways. These are located near freeway entrance and exit ramps and along County Trunk Highways within the City. The City also maintains lights in both County and State right-of-ways. The lighting fixture and mountings vary, but future installations should be consistent with City standards.

5. PRIVATE RESIDENTIAL, COMMERCIAL AND INDUSTRIAL DEVELOPMENT PROJECTS

In designated development areas, private development projects will be required, as a part of the City Site Development Standards and/or Planned Unit Development, to utilize decorative lighting for private drives, parking areas, streets, etc. Also, within the zoning code, there are specific standards for private exterior lighting (Ref: Item A-7 Municipal Code 21.06.0401).
### ATTACHMENT ITEMS

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>A-1</td>
<td>Brochure of full cut-off cobra head, a light fixture used by WEPCO on rural cross sections streets.</td>
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<tr>
<td>A-2</td>
<td>Brochure of &quot;Acorn Luminaire&quot;, a light fixture used by WEPCO on curb/gutter streets.</td>
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<tr>
<td>A-3</td>
<td>Brochure of &quot;Dayform Traditionaire&quot;, a light fixture used by WEPCO on curb/gutter streets.</td>
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<tr>
<td>A-4</td>
<td>Brochure of &quot;Gullwing&quot;, a light fixture used in the City of Greenfield on major streets</td>
</tr>
<tr>
<td>A-5</td>
<td>Brochure of &quot;Hexagonal Luminaire, LS1,&quot; a light fixture used on collector streets with a residential character.</td>
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<td>A-6</td>
<td>Brochure of &quot;DMS30 luminaire&quot; (&quot;shepherd’s hook,&quot; full cut-off type), a light fixture used on curb and gutter streets and in conjunction with median street lighting in designated commercial development corridors. It is also used within City parks and within private developments.</td>
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<tr>
<td>A-8</td>
<td>Municipal Code – Subdivision and Platting 20.06(3) Street Lighting</td>
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<td>A-10</td>
<td>March 9, 1999 Plan Commission, item #14, regarding street lighting fixtures on W. Layton Ave. (CTH &quot;Y&quot;) from S. 84th St. to S. 108th St. (STH &quot;100&quot;) project 1998#1.</td>
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<td>A-11</td>
<td>April 1, 1999 Board of Public Works, item #15 B, regarding street lighting standards on W. Layton Ave. (CTH &quot;Y&quot;) from S. 84th St. to S. 108th St. (STH &quot;100&quot;) project 1998#1, and item #15 C, relative to City’s street lighting standard.</td>
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<td>A-12</td>
<td>April 20, 1999 Common Council, item 15 – Approve street lighting standards on W. Layton Ave. (CTH &quot;Y&quot;) from S. 84th St. to S. 108th St. (STH &quot;100&quot;) project 1998#1, and City’s major street lighting standard.</td>
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<td>A-13</td>
<td>June 26, 2000 Letter to Wisconsin Electric regarding City street lighting</td>
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<td>A-14</td>
<td>July 1, 1999 Board of Public Works, item #14, relative to Wisconsin Electric Power Company ornamental street lighting on residential streets.</td>
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<td>A-15</td>
<td>July 20, 1999 Common Council, item #14 – Approve Acorn fixture/Washington pole and Coachlight fixture with smooth fiberglass pole as the City’s standard Wisconsin Electric Power Company ornamental street lighting on new and existing curb/gutter streets.</td>
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ATTACHMENTS
Ornamental Series

ACORN LUMINAIRE

Nostalgic styling gives the Acorn Luminaire a truly distinctive look. An outstanding choice to enhance a company or community image.

Common Applications:
- SUBDIVISION STREET LIGHTING
- PARKING LOTS
- RECREATION AREAS
- PATHWAYS
- DOWNTOWN RENOVATIONS

Distinctive Outdoor Lighting from Wisconsin Electric
LIGHTING PATTERNS
IV. Non-cutoff very wide elliptical pattern.

POLES
This luminaire is mounted between 12' - 16'. It is not recommended to mount the 150-watt luminaire below 10' due to glare. Poles available for these luminaires are concrete, black aluminum or black fiberglass. Black-fiberglass poles are available either buried or anchor base.

Anchor-base poles require a concrete foundation. Fiberglass poles installed in parking lot interiors where they would be lit by vehicles must be supported in a concrete foundation that extends 2' above grade.
DAYFORM TRADITIONAIRE

The Lantern Traditionaire is one of the most popular street and area light fixtures. Its traditional design and superior light output make this a versatile model for residential, commercial, and institutional applications.
LIGHTING PATTERNS
I - II Full cutoff elliptical pattern.
A Full cutoff circular pattern.

POLES
This luminaire is mounted between 12' - 18'. It is not recommended to mount the 50-watt luminaire below 12' due to glare. Poles available for these luminaires are concrete, black aluminum or black fiberglass.
Black-fiberglass poles are available either buried or anchor base.

Anchor-base poles require a concrete foundation.
Fiberglass poles installed in parking lot interiors where this concrete lot is not accessible must be mounted via a concrete foundation that extends 2' below grade.
An inspiration born of classic forms and thirty years practical experience, Gullwing is equal parts architecture, engineering and performance. This is a luminaire where the lines between form, function and performance are indistinguishable. By virtue of its minimal, contoured form, integrated die cast construction and powerful 1600W optical systems, it has changed the shape of high performance lighting.
Aesthetically, Gullwing's strength is the simplicity of its form — a natural complement to any architectural vocabulary.

The subtle elimination of the mounting arm allows the Gullwing an uninterrupted transition from luminaire to pole. The striking effect — is that the luminaire and arm become one. But this design serves practical purposes as well. First, it creates a ballast compartment away from the optical system, minimizing both heat and luminaire profile. Second, the tapered transition provides an exceptionally strong and stable connection across the entire face of the pole.
In Gullwing, performance takes on a new shape. Inside this streamlined, ultra-thin luminaire is an optical system that sets new standards for site illumination. The enlarged lens and patent pending Gardco conical "XL" optics provide an optimal lighting package — high lumen lamps to 1000 watts, sharp cutoff glare control, wide spacings and excellent maximum to minimum uniformity. The result of higher performance at every mounting height is economy — in fixture, pole, installation and maintenance costs.
Toolless access for installation and service is a Gardco trademark. Gullwing improves on the tradition with a quick entry door handle providing complete access to optical, electrical and mounting hardware systems. The point of entry is the integral quick-lock handle. The latch firmly engages as the door is closed, creating a weather-tight seal by compressing the hollow core, perimeter gasketing.
To prevent the door frame from accidentally falling into and damaging pole or lens, the door is secured in the lamp service position by a heavy gauge lanyard. As the lanyard is released, the door swings down completely for access to mounting hardware and the electrical compartment.

For safety and ease of relamping, a heavy gauge lanyard secures the door frame in a semi-open position. A quick release is provided to allow the door to swing down so that the optical assembly can be lowered.

An electrical component within the luminaire is factory pre-wired with quick disconnect plugs. The largest component is a 1400 watt heater component which is taped or strapped into mounting bracket. It is removable without tools.
A fundamental difference between competing lighting systems is performance — and performance ultimately affects cost. That said, it is important to recognize that Gullwing, with its patent pending Form Ten XL optical system, is the best performing luminaire made.

The benefits of higher performance levels are numerous. In many applications fewer luminaires are necessary to illuminate a site, compounding fixture, pole installation and maintenance savings. These more efficient luminaires also enable mounting at lower heights, further reducing initial and long-term service costs.

**Enlarged Lens**

Gullwing optical design begins with conical Ten XL optics. The aperture of the lens has been "oversized" so that lamp output can be optimized with measurements, over distribution of lighting ensuring better performance at lower mounting heights.
The Conical Fan Reflector
The Form Ten XL reflector facets form a fan around the lamp — with each facet positioned to be precisely tangent to the top of the arc tube. This patented design captures and redirects luminous to the critical angles just below cutoff — delivering the inherent advantages associated with fan reflectors.

Highly Reflective Material
An essential component of the Form Ten XL is a new anodized aluminum. With reflectivity approaching 95%, the mirror-like finish of the new optics substantially improves the efficiency of luminous transmitted by the reflector.

House Side Shield
The available house-side shield is a natural option to eliminate house-side illumination where absolute cutoff is desired. This shield arrives factory installed, captured within the reflector.

Rotatable Optical Systems
Sardex pioneered the concept of rotatable optics — which enable beam orientation and light distribution to be independent of the reflector. Sardex ensures that representation of the optical systems around traffic patterns changes.

Uniform Distributions
Sardex's long-standing commitment to high-performance lighting is dramatized reflected in the distributions created by the Form Ten XL conical reflector. Three distributions, Types 1, 2, and 3, are each tailored to a specific visual and performance requirement. Each is repeatable in a variety of mounting arrangements, with or without a shield, and targets a specific cutoff at the required angle for each distinct traffic pattern. Sardex also includes Type 1 and 2 (Type 4) optics in the original Form Ten reflector design.

Lamps to 1000W Metal Halide
Sardex introduces the high-powered package, with the first model offering 1000W metal halide. This model will further expand the family, bringing superior performance, aesthetics, and even lower project cost.
Closer inspection of a typical lighting plan demonstrates how the Gullwing conical fan XL optics deliver uniform illumination free from hot spots and striations — even with wide pole spacing. Maximum pavement illumination is 7.99, yielding a maximum to minimum ratio of 6.88:1.

Though five optical systems are available, this site is illuminated using just one. In the center of the parking area, 4XL optics are mounted back-to-back in twin luminaires, with the result being a very efficient square distribution. Note how the addition of the factory-installed house side shield completely eliminates backside trespass at the perimeter — in this instance where traffic lanes abut office and residential areas.
SPECIFICATIONS

HOUSING: A one-piece die cast aluminum housing mounts directly to a pole or wall without the need for a support arm. The low profile rounded form generates wind loading requirements of 1.2 EPA.

LENS ASSEMBLY: A single-piece die cast aluminum lens frame hinges down from the housing and is secured by a stainless steel taryard and hinge pin.

An optically clear, heat and impact resistant tempered flat glass lens is mechanically secured with eight retainers. The electrical and optical chambers are thoroughly sealed with a one-piece memory retentive hollow core EPDM gasket to prevent intrusion by rain, dust and insects.

OPTICAL SYSTEMS: The segmented optical systems are manufactured from homogenous sheet aluminum which has been electrochemically brightened, anodized and sealed. The multifaceted arc image duplicating systems are designed to produce IES Types 1 (1), 2 (2XL), 3 (3XL), 4 (4XL), and 5 (Q). With the 2XL, 3XL and 4XL luminaires, the reflector facets form a conical fan around the arc tube with each facet positioned to be precisely tangent to the top of the arc tube.

A mogul base lampholder is glazed porcelain with a nickel plated screw shell. Position-oriented sockets are supplied standard to accept super metal halide lamps. All units feature lamp stabilizers except 150 HPS.

ELECTRICAL: All electrical components are UL recognized, factory tested, and mounted on a utilized plate with quick electrical disconnects. Each high power factor ballast is the separate component type capable of providing reliable lamp starting down to -20°F.

FINISH: Luminaires are finished with a fade and abrasion resistant, electrostatically applied, thermally cured TGIC powder coat. Units are thoroughly cleaned and provided with a patented chromate acid pretreatment.

LABELS: All fixtures bear UL and CSA (where applicable) wet location and I.B.E.W. labels.

Garco reserves the right to change materials or modify the design of its product without notification as part of the company's continuous product improvement program. Design and optical patents are pending.

DIMENSIONS

31.5" (includes integral arm)

18.0"

6.5"

11.5"

E.P.A. (SQ.FT.)

1-way – 1.2
2-way – 2.4
4-way – 3.2
### Ordering

<table>
<thead>
<tr>
<th>PREFIX</th>
<th>CONFIGURATION</th>
<th>DISTRIBUTION</th>
<th>WATTAGE</th>
<th>VOLTAGE</th>
<th>FINISH</th>
<th>OPTIONS</th>
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<td>150 HPS</td>
<td>120</td>
<td>BRP</td>
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**FINISH**
- BRP - Bronze Paint
- BLP - Black Paint
- WP - White Paint
- NP - Natural Paint
- SC - Special Color Paint
- PS - Powdered Polyester
- RPA1 - Round Pole Adaptor 1" (see note)
- RPA2 - Round Pole Adaptor 2" (see note)
- PTF - Pole Top Filter

### Options
- HF - In-Head Fusing
- LF - In-Pole Fusing
- PC - Receptacle and Photo Control
- PCR - Photo Control (Receptacle Only)
- POLY - Polycarbonate Sag Lens (Not Available in 400W or Higher)
- HS - Houseside Shield
- QS - Quartz Refractor
- RPA1 - 3" Round Pole Adaptor 1" (see note)
- RPA2 - 4" Round Pole Adaptor 2" (see note)
- PTF - Pole Top Filter

**Note:** RPA1 is required for 2" or poles or tapered round poles where top 3" is less than 4".

**RPA2 is used for 4" to 5" round poles.**

### Configurations

Gullwing is designed around square poles, which are inherently more economical than round. In single, twin, and four-way configurations the luminaire-to-pole transition is smooth and natural.

For wall-mounted applications, the design allows mounting to both a j-box and surface conduit. For surface conduit, the splice is made inside the wall adapter. Splice volume is 50 cubic inches.

Gullwing is UL approved for through wiring.
# Square Poles

## Straight Square Aluminum Poles

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<th>Catalog Number</th>
<th>Pole Size</th>
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## Straight Square Steel Poles

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*Note: The table continues with similar information for additional pole sizes.*
### CRUCIFORM POLES

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<th>POLE SIZE</th>
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<tr>
<td>CA-40-40</td>
<td>32.9</td>
<td>9.0</td>
<td>170</td>
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</tbody>
</table>

### STEEL POLE SPECIFICATIONS

#### POLE SHAFT
The pole shaft is a single section design fabricated from hot rolled welded steel tubing (round) or a single piece of 11 gauge (.119") or 7 gauge (.139") commercial carbon steel (square). The formed steel plate is longitudinally welded providing minimum yield strength of 36 KSI (round) or 46 KSI (square).

#### POLE TOP CAP
Each pole assembly is provided with a removable pole top cap.

#### HANDHOLE
The reinforced handhole has an inside opening in the pole shaft. Included is a cover plate with attachment screws. A nut holder is welded to the handhole and includes a 1/2"-13 UNC hex head bolt and nut for grounding.

#### ANCHOR BASE
The anchor base is fabricated from structural quality hot rolled carbon steel plate with minimum yield strength of 35 KSI. The base plate telescopes the pole shaft and is circumferentially welded on center top and bottom.

#### BASE COVER
A base cover completely covers the entire base plate and anchorage. The base cover is attached with provided hardware.

#### ANCHOR BOLTS
Anchor bolts are fabricated from a commercial quality hot rolled carbon steel bar with a minimum guaranteed yield strength of 50 KSI. Bolts have and "L" bend on one end and are threaded on the opposite end to a minimum of 4 1/2". Anchor bolts are completely hot-dipped galvanized a minimum length of 12" on the threaded end. Four (4) properly rated nuts, each finished with two (2) regular hex nuts, two (2) flat washers and one (1) lock washer are provided per pole, unless otherwise specified.

#### FINISH
Poles are available with TGIC powdercoat finish. Natural aluminum, bronze, black or white finishes are available as standard. Special colors are available.
### Round Poles

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Pole Size</th>
<th>Maximum Luminaire Loading</th>
<th>Anchor Bolt Data</th>
</tr>
</thead>
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<tr>
<td></td>
<td>PREFIX</td>
<td>BASE TRENCE (inches)</td>
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<td>STRAIGHT ROUND ALUMINUM POLES</td>
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<td>1.25</td>
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<tr>
<td>WA-12</td>
<td>1111</td>
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<tr>
<td>WA-30</td>
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</tr>
<tr>
<td>WA-40</td>
<td>1411</td>
<td>2</td>
<td>13.0</td>
</tr>
</tbody>
</table>

| STRAIGHT ROUND STEEL POLES | SRS-15-50 | 10 | 3 X 13 | 120 | 6.0 | 7.7 | 10.0 | 6.0 | 2.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-16-50 | 16 | 3 X 16 | 130 | 2.3 | 5.2 | 4.6 | 6.0 | 2.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-20-60 | 20 | 3 X 26 | 130 | 2.3 | 5.2 | 4.6 | 6.0 | 2.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-25-80 | 25 | 3 X 26 | 130 | 2.3 | 5.2 | 4.6 | 6.0 | 2.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-30-100 | 30 | 5 X 20 | 120 | 7.2 | 6.1 | 11.7 | 8.0 | 4.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-25-50 | 25 | 5 X 25 | 120 | 4.0 | 5.5 | 7.2 | 8.0 | 4.75 | 3/4 X 17 X 3 | 3.75 |
| SRS-30-50 | 30 | 5 X 30 | 120 | 4.0 | 5.5 | 7.2 | 8.0 | 4.75 | 3/4 X 17 X 3 | 3.75 |

**Aluminum Pole Specifications**

**Pole Shaft**
The pole shaft is one piece, 4" (RA4) or 5" (RA5) diameter or 4" (SSA1), 5" (SSA5) or 6" (SSA6) square, seamless 6000 series extruded aluminum cylindrical tubing. The shaft is heat treated to achieve a T6 temper with a guaranteed minimum yield strength of 31 KSI.

**Top Cap**
Each pole assembly is provided with a removable cast aluminum pole top cap. The cap is secured with two (2) stainless steel Allen head set screws.

**Handhole**
The handhole has a nominal rectangular inside opening in the pole shaft and tenon assembly. It is included in an aluminum cover plate with attachment screws. The handhole is located 180° with respect to the luminaire arm when viewed from the top of the pole for one arm. For two arms, the handhole is located directly under one arm.

**Base Tenon Assembly**
The tenon anchor base assembly consists of structural quality AS3 carbon steel tubing welded to an AS3 structural steel base with a guaranteed minimum yield strength of 38 KSI. The base tenon telescopes the pole shaft and is circumferentially welded on both top and bottom. The entire assembly is hot dip galvanized after fabrication. Four (4) mechanically galvanized fasteners secure the shaft to the tenon assembly.

**Base Cover**
A heavy wall, spun (round) or fabricated (square) aluminum cover completely conceals the entire base plate and anchorage. The base cover is secured to the base assembly with provided hardware.

**Anchor Bolts**
Anchor bolts are fabricated from a commercial quality hot rolled carbon steel bar with a minimum guaranteed yield strength of 50 KSI. Bolts have "L" bend on one end and are threaded on the opposite end to a minimum of 4 1/2". Anchor bolts are completely hot dipped galvanized. Four (4) properly sized bolts, each furnished with two (2) regular hex nuts, two (2) flat washers and one (1) lock washer are provided per pole, unless otherwise specified.

**Finish**
Poles are available with a TGIC powdercoated finish. Natural aluminum, bronze, black or white finishes are available as standard. Special colors are available.
CITY OF GREENFIELD
S. 76th ST. (LAYTON-EDGERTON)
STREET LIGHTING IMPROVEMENT

CONCEPT DIAGRAM

EXISTING LIGHTING:
- 200,000 WATT LOW PRESSURE SODIUM
- UPHOLDING IN HEIGHT
- TRADITIONAL STYLE

PROPOSED LIGHTING:
- 75,000 WATT HIGH PRESSURE SODIUM
- MODERN UPLIGHT STYLES
L24™, L28™, L60™, and L61™ luminaires feature a one-piece hexagonal tapered cast-aluminum housing with six fully-gasketed tempered-glass or polycarbonate lenses. Their cast-aluminum hood and decorative finial, as well as their spun-copper cupola are secured to the top of the housing by two built-in hinges.

Mechanically assembled onto a decorative one-piece cast-aluminum yoke-mount pole-top adapter, the housing of the L24 features a base with glass lens.

The housing of the L28, L60, and L61 is mechanically assembled onto a cast-aluminum pole-top adapter. The adapter of the L28 model can accommodate a ballast up to 175W.

The L60 model is available with an optional luminous glow top (GT option) when used with an SG optical system.

Optical systems

These luminaires are available with a choice of optical systems including:
- an RR refractor,
- cut-off optics such as the SE which provides excellent optical performance with maximum light control,
- segmented SG (L60 only) cut-off optics set in triple-stage, multi-faceted arc-image duplicating patterns which provide excellent optical performance and light control,
- a RACE optical system which enhances the performance of the refractor with a segmented upright recovery dome for hyper-extensive pole spacings.

Ease of maintenance

All luminaires are fitted with hoods that can be opened thanks to a captive screw.

As well, all feature a unitized ballast assembly with quick-connect terminals. For greater ease of maintenance, this assembly is either integrated into the housings or remote in the mounting or pole base, depending on the optics and lamp wattage (see lamp guide chart).

Luminal surface treatment

All luminaires, mountings and poles are protected by the Luminal™ surface treatment, which involves the chemical treatment of all surfaces prior to the application of a coating of polyester-based textured powder for superior resistance.

Luminaire

The L21™ luminaire consists of a one-piece cast-aluminum tapered hexagonal housing with six lenses on the side and one on the bottom as well as a decorative cast-aluminum hood and finial with spun-copper cupola. Its housing is mechanically assembled to a decorative cast-aluminum yoke-mount pole adapter.

Though also similar to the L24 model, L28™, L60™, and L61™ luminaires are mechanically assembled to a different decorative cast-aluminum pole adapter. The base of the L28 can accommodate a 175W ballast.

The L60 is available with an optional luminous glow top (GT option) when used with an SG optical system.

L24, L28, L60, and L61 are available with the following lenses finishes:

- PCC: Clear Polycarbonate
- PCD: Opal Polycarbonate
- PCBR: Bronze Polycarbonate
- PCFC: Frosted Clear Polycarbonate
- GLC: Clear Tempered Glass
- GLBR: Bronze Tempered Glass
- GLBG: Clear Beveled Tempered Glass
- GLBRS: Bronze Beveled Tempered Glass

Lamp Guide

<table>
<thead>
<tr>
<th>Wattage</th>
<th>L24</th>
<th>L28/L61</th>
<th>L60</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 MH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 MH</td>
<td></td>
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<td></td>
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<tr>
<td>175 MH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>250 MH*</td>
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<tr>
<td>35 HPS</td>
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<tr>
<td>150 HPS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>250 HPS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Aspheric nickel in housing and in base
* Housed lenses are not available with lamp wattages

L21™, L28™, L60™, and L61™ series luminaires accommodate H.I.D. or incandescent lamps as shown in the above table.

The UL or CSA recognized CWA-type ballasts features a 38°F + 3°C rating starting capacity, a lower tactor of 98% or better until a replacement of lamp within ±10% of rated mean voltage. H.P. ballasts operate within ANSI trapoidal limits.

The luminaires have a hood and are one of the edges of the housing to permit easy access to the lamp and/or ballast.

The ballast is integrated in the hood of the luminaire, or in a unitized ballast tray or in remote in the mounting of the pole base.

Ordering Sample

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Luminaire</th>
<th>Optical System</th>
<th>Voltage</th>
<th>Mounting &amp; Configuration</th>
<th>Pole</th>
<th>Finish</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 HPS</td>
<td>L24-251C</td>
<td>RR</td>
<td>128</td>
<td>DCR1</td>
<td>6010</td>
<td>18 75</td>
<td>SE</td>
</tr>
</tbody>
</table>
**Configurations**

- 1A
- 2A
- 3A
- 4A
- M

**Luminaires**

**L28-SE**
- Insertion depth of tenon: 4" (102 mm)
- EPA: 2.80 sq.ft.
- Weight: 54 lbs (24.3 kg)

**L60-SG-GT**
- Insertion depth of tenon: 4" (102 mm)
- EPA: 2.85 sq.ft.
- Weight: 49 lbs (22.2 kg)

**L51-RR**
- Insertion depth of tenon: 4" (102 mm)
- EPA: 2.80 sq.ft.
- Weight: 49 lbs (22.2 kg)

**Poles**

- 12 poles shown
- Options:
  - FS: Luminaire integrated fuse
  - GT: Glow top (for L60 only)
  - HS: House shield (for SE and SG optics only)
  - HB: Hinged base (APR4 & APR5 poles only)
  - DR*: Duplex receptacle (120 volts only)
  - GFI*: Duplex receptacle with ground fault interrupter (120 volts only)
  - PH: Photocell
  - LS*: Provision for loudspeaker outlet
  - BA*: Banner arm (for pole only, consult factory for applicability)
  - LBC: Optional base cover

**Finishes**

- 16 Standard Colors Available
- Luminaire powder coat is available in a range of 16 standard colors. This unique coating of thermosetting polyester resins provides a highly-durable UV-resistant exterior finish as per ASTM D7.
- Luminaire coatings are specially formulated for outstanding salt spray resistance according to ASTM B117 standards.
- All surfaces are chemically treated using a four-step (aluminum) or seven-step (steel) process prior to painting. Consult Lumac for complete specifications.
- SCL: Special Color (liquid)
- SCP: Special Color (powder)
- It is possible to order smaller quantities of powder paint at a premium. Your representative will be able to tell you if a powder coat paint can be developed for your project.

Please note that where quantities do not warrant it, Lumac reserves the right to use an oven-cured liquid polyurethane finish.

Consult the Pole Guide for details and the complete line of poles.
At Lumec, blueprints have long since given way to functional reality and the performance of our products is proven and documented.

The following drawings illustrate a few of the many varieties offered. All of our luminaire parts meet or exceed U.L. and/or I.E.C. standards. If you require assistance in selecting the right components, please contact our representative regarding feasibility.

UL numbers beside illustrated luminaire housing, bracket, pole, base cover and configuration.

When ordering various luminaires, please indicate number indicating color for housing bracket and base cover.

The mounting height of the luminaires is measured by dividing the height in feet by the height in feet, or the height source above the ground. For a ballast, refer to the nearest source or the assembly.

All weights and count can unit be calculated in cooperation with our technical services department.

Specifications are not included with luminaire kits. Filter materials are not included with luminaires.

To achieve a high level of customer satisfaction, Lumec designs and manufactures its products according to the most stringent standards.

ISO 9002 Registered

The quality management system of Lumec is ISO 9002-94 registered with GMI.

Lumec, Inc.
Brandon, Connecticut
Telephone: (203) 289-2340
Fax: (203) 289-1480
As of 1998, all products will be ISO.
Domus Series
The DMS10™ luminaire consists of a spun and cast-aluminum exterior housing with a large built-in cast-aluminum mounting adapter/heat sink and flat spin-aluminum skirt.

It can accommodate ballasts up to 400W. When used with a decorative luminous dome (LD option) or luminous dome (LX option) the 250W or 400W ballast must be mounted outside the back of the luminaire.

The lens assembly, with 3L antireflective gaskets, along with the lens and frame, keeps the housing water-tight and is secured by the quarter-turn captive screws. The lens pivots, providing easy access to the lamp and ballast.

Similar to the DMS10, the DMS30 is distinguished by its bell-shaped spun-aluminum skirt.

The DMS20, on the other hand, features a smaller mounting adapter than the DMS10, accepts ballasts of no more than 175W and is only available with the LD and LX options.

The DMS40 is similar to the DMS10 except for its larger mounting adapter and includes ballasts up to 650W which is not available with the LD and LX options.

DMS10, DMS20, DMS30 and DMS40 luminaires are UL listed for Class II and Division 2 applications.

**Lamp Guide**

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Voltage</th>
<th>DMS10/30</th>
<th>DMS10/30</th>
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<tr>
<td>70 H</td>
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<td>500W</td>
<td>500W</td>
<td>500W</td>
</tr>
<tr>
<td>175 H</td>
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<td>500W</td>
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</tr>
<tr>
<td>250 H</td>
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</tr>
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<tr>
<td>400 P</td>
<td>600W</td>
<td>600W</td>
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</tbody>
</table>

**Optical Systems**

**SG optics**
- Segmented cut-off reflector
- Segmented cut-off reflector
- Segmented cut-off reflector
- Asymmetrical

**SG1**
- Asymmetrical

**SG2**
- Asymmetrical

**SG3**
- Asymmetrical

**SG9**
- Symmetrical

**SGFM**
- Forward throw

**SE optics**
- Small-vertical cut-off reflector
- Small-vertical cut-off reflector
- Small-vertical cut-off reflector
- Asymmetrical

**Mountings**

- A 1/8" joint section of extruded aluminum, 3/16" (6 mm) O.D., mechanically assembled to the side of a pole.
- Accepts no ballast.
- A 1/8" joint section of extruded aluminum, 3/16" (6 mm) O.D., welded to a spun-aluminum pole adapter and a hat-cast aluminum post sleeve.
- 2 ballasts max, 1/16W
- A 2 3/8" (69 mm) round aluminum arm covered to a 1 1/2" (38 mm) O.D. pole adapter.
- The mounting comes complete with two bent decorative cast aluminum and a cast aluminum turnbuckle adapter.
- 2 ballasts max, 1/16W
- A 1/4" tube section of extruded aluminum, 1/8" (3 mm) O.D. with spun aluminum decorative post.
- A 1/4" tube section of extruded aluminum, 1/8" (3 mm) O.D.
- Accepts no ballast.

**Drawing Sample**

<table>
<thead>
<tr>
<th>Lamp</th>
<th>Luminaire</th>
<th>Optical System</th>
<th>Voltage</th>
<th>Mounting &amp; Configuration</th>
<th>Pole</th>
<th>Finish</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>70 H</td>
<td>DMS10/30</td>
<td>SE</td>
<td>400W</td>
<td>400W</td>
<td></td>
<td>500W</td>
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<tr>
<td>100 H</td>
<td>DMS10/30</td>
<td>SG1</td>
<td>500W</td>
<td>400W</td>
<td></td>
<td>600W</td>
<td></td>
</tr>
</tbody>
</table>
Mountings

PM
A 90° bent section of extruded aluminum, 2.38" (60 mm) O.D., welded to two 1" (25 mm) extruded aluminum arms, two decorative adaptors and a 4" (102 mm) round pole adaptor.
- 2 ballasts, max. 100W.

RM
A 2.38" (60 mm) O.D. aluminum arm welded to a 4" (102 mm) round pole adaptor and a cast-aluminum luminaire adaptor, with decorative half-sphere. A structural 1/2" (13 mm) rod is welded to the arm and pole adaptor.
- 2 ballasts, max. 100W.

Configurations

1A
2
2A
3B
4 M

Poles

APR4
APR4 & LBC2
SM6
R40 & TBC1

Finishes

16 Standard Colors Available
The specially-formulated textured (TX) or non-textured Luminal powder coat is available in a range of 16 standard colors. This unique coating of thermosetting polyester resins provides a highly-durable UV-resistant exterior finish as per ASTM G7.

Luminal coatings are specially formulated for outstanding salt-spray resistance according to ASTM B117 standards.

All surfaces are chemically treated using a four-step (aluminum) or seven-step (steel) process prior to painting. Consult Lumec for complete specifications.

SCL Special Color (liquid)
SCP Special Color (powder)
Provide a 4" (102 mm) square color chip.
It is possible to order smaller minimal quantities of powder paint at a premium. Your representative will be able to tell you if a powder coat paint can be developed for your project.

Please note that where quantities do not warrant it, Lumec reserves the right to use an oven-cured liquid polyurethane finish.

Consult the Pole Guide for details and the complete line of poles.

Options

FS Luminaire integrated fuse
HS House shield
DL Polycarbonate drop lens
LD Luminous dome
LR Luminous ring
HB Hinged base
DR* Duplex receptacle
P7 Duplex receptacle with ground fault interrupter
PL* Photoelectric cell
LS* Provision for loudspeaker outlet
BA* Banner arm
IP Interior paint only; consult factory for applicable poles
LBC Optional base cover
* Consult factory for feasibility with cast-aluminum shafts.

Base cover for APR4 & SPM poles only (replace standard base cover).
Advanced blueprints have been made available and our products are proven and reliable.

The following drawings illustrate a few of the many vertical columns. All of these columns are designed to meet specific requirements and are fully customizable. Please contact our representative regarding prices and configurations.

At Lumec, we always strive to deliver the highest quality products, whether it's a garden, a streetlight, or something else.

The following drawings show a few of the many vertical columns we offer. We believe in providing the best solutions to meet any situation.

In terms of design, we continually explore new ideas and collaborate with our engineers to develop innovative solutions.

Lumec products are designed with customer satisfaction in mind. Please contact us for more information.

To achieve a high level of customer satisfaction, Lumec designs and manufactures products according to the most stringent standards.

ISO 9002

The quality management system of Lumec is registered to ISO 9002:94.
CITY OF GREENFIELD
74TH & BARNARD
STREET LIGHTING IMPROVEMENT

CONCEPT DIAGRAM

EXISTING LIGHTING
♦ 150 WATT HIGH PRESSURE SODIUM
♦ 35 FOOT MOUNT HEIGHT
♦ TRADITIONAL STYLE

PROPOSED LIGHTING
♦ 150 WATT HIGH PRESSURE SODIUM
♦ 25 FOOT MOUNT HEIGHT
♦ DECORATIVE STYLE

OCTOBER 2000
DIVISION 21.06.0400 LIGHTING

21.06.0401 EXTERIOR LIGHTING STANDARDS.

Exterior lighting shall meet one (1) of the following standards:

A. REQUIREMENTS FOR THE USE OF NO CUT-OFF TYPE LUMINAIRE. When a light source or luminaire has no cut-off type luminaire (see Figure 21.06.0401(A)), the maximum permitted illumination and the maximum permitted luminaire height shall be as set forth in Table 21.06.0401(A).
Table 21.06.0401(A)
REQUIREMENTS FOR THE USE OF NO CUT-OFF TYPE LUMINAIRES (a)

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Maximum Permitted Illumination (a) (footcandles)</th>
<th>Maximum Permitted Luminaire Height (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-1, R-2, R-2A, R-3, R-3A, R-4, R-4A, R-4B Residential Districts</td>
<td>0.20 (b)</td>
<td>10 (b)</td>
</tr>
<tr>
<td>All Other Districts</td>
<td>Not Permitted</td>
<td>Not Permitted</td>
</tr>
<tr>
<td>City Required Street Lights in All Districts</td>
<td>Per City of Greenfield Requirements and Specifications (Section 21.06.0404 of this Code)</td>
<td>Per City of Greenfield Requirements and Specifications (Section 21.06.0404 of this Code)</td>
</tr>
</tbody>
</table>

(a) These standards do not address illumination levels or fixture height that may be required by the City of Greenfield for the adequate lighting of public street rights-of-way. These represent maximum illumination levels on private property.

(b) Any no cut-off luminaire which does not meet the requirements of this Table requires Plan Commission review and approval.
Figure 21.06.0401(A)

NO CUT-OFF TYPE LUMINAIRE

B. REQUIREMENTS FOR TOTAL CUT-OFF TYPE LUMINAIRES (WITH ANGLE LESS THAN 90 DEGREES). When a luminaire has total cut-off of light at an angle less than ninety (90) degrees and is located so that the bare light bulb, lamp, or light source is completely shielded from the direct view of an observer five (5) feet above the ground at the point where the cut-off angle intersects the ground (see Figure 21.06.0401(B)), then the maximum permitted illumination and the maximum permitted height of the luminaire shall be as set forth in Table 21.06.0401(B). Ground level building and sign lighting shall be reviewed and approved by the Plan Commission.
### Table 21.06.0401(B)

**REQUIREMENTS FOR THE USE OF CUT-OFF TYPE LUMINAIRES WITH ANGLE LESS THAN 90 DEGREES (a,c,d,e)**

<table>
<thead>
<tr>
<th>Zoning District</th>
<th>Maximum Permitted Illumination (a) (footcandles)</th>
<th>Maximum Permitted Luminaire Height (feet)</th>
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<td>R-1, R-2, R-2A, R-3, R-3A, R-4, R-4A, R-4B Residential Districts</td>
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<td>C-1 District</td>
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<td>All Other Districts</td>
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**City Required Street Lights in All Districts**

- Per City of Greenfield Requirements and Specifications (Section 21.06.0404 of this Code)
- Per City of Greenfield Requirements and Specifications (Section 21.06.0404 of this Code)

---

(a) These standards do not address illumination levels or fixture height that may be required by the City of Greenfield for the adequate lighting of public street rights-of-way. These represent maximum illumination levels on private property.

(b) See Section 21.06.0403 for lighting standards for outdoor recreational facilities in the PR Park and Recreation District.

(c) Not greater than the height of the building.

(d) A commercial property abutting a residential district shall have lighting luminaire heights approved by the Plan Commission.

(e) Light source within fifty (50) feet of a residential district shall not exceed twelve (12) feet in height.
Figure 21.06.0401(B)

CUT-OFF TYPE LUMINAIRE
WITH ANGLE LESS THAN 90 DEGREES

TOTAL CUT-OFF TYPE LUMINAIRE WITH ANGLE LESS THAN 90 DEGREES
(8) STREET LIGHTS. The developer shall provide street lights at intersections, and such other locations within the subdivision as required by the Plan Commission, in conformity with a street lighting plan as provided by Wisconsin Electric Power Company. Cost of the light installation shall be paid by the developer. Operational cost will be paid by the City.
21.06.0404 STREET LIGHTING.

Street lighting shall conform to the standards set forth by the State of Wisconsin for State Trunk Highways, Milwaukee County for County Trunk Highways, and the City of Greenfield for City streets and highways.

a) Consider making a recommendation to the Board of Public Works regarding the design of the street lighting fixtures used on the Layton Avenue reconstruction project (84th Street to 108th Street).

Planning Commission members received information showing a variety of styles of street lighting. They agreed that the lighting should be down lighting and that the City no longer use low pressure sodium lights.

Mr. Erickson said that at this time the recommendation for the street lighting would be for the Layton Avenue project. Mr. Kinnick said that the style of lighting would determine the spacing. He said that on a divided highway you can have a combination of down lighting and decorative lighting, but you can’t just have decorative lighting on such a wide street.

Mayor Seider said that on West Layton Avenue he would think that it would be most appropriate to have the down lighting in the median and have either the Gullwing or Shoe Box style. There was further discussion on different lighting types.

Moved by Mayor Seider, seconded by Mr. Smith, to recommend to the Board of Public Works that the Gullwing fixture be the first choice with the Shoe Box as the second choice for the street lighting fixtures to be used on the West Layton Avenue reconstruction project (South 84th Street to South 108th Street). On a roll call vote the motion carried unanimously.
Discussion and decision relative to determining lighting specifications and electric wire relocation for West Layton Avenue (C.T.H. 'Y') from South 84th Street to South 108th Street (S.T.H. '100'), Project 1998 #1 (BPW 1/14/99; 2/8/99; PC 2/23/99; 3/9/99) (Dist. 3 & 4). Mr. Kinnick stated the Planning Commission's first choice was the gullwing and the second choice was the shoebox. Mr. Kinnick stated the proposal is to have the lighting in the median, they would be down lights on standard aluminum poles since if some time in the future the area east is relamped, they could put the gullwing fixture on the same poles.

It was moved by Alderman Ochnikowski, seconded by Mrs. Meyer, to accept the Planning Commission's recommendation for the gullwing fixture using aluminum poles down the median on West Layton Avenue, South 84th Street to South 108th Street, Project 1998 #1 and to accept the gullwing fixture as the city's street lighting standard on all major streets.

Under discussion, Alderman Badem questioned if this fixture met the City's street lighting standard and if the Board wanted to adopt the gullwing fixture for future use on all major roads.

Mr. Kinnick stated the city has to have plans to Milwaukee County by April 15; therefore, they will proceed based on using the gullwing fixtures on aluminum poles using standardized lighting but the lighting will be reduced somewhat from commercial areas since this is a residential area.

Mr. Kinnick stated if the Board adopts the gullwing as the standard that could be addressed when another reconstruction project or lighting project comes to the Board for approval of the plans.

Alderman Badem stated this is only one standard, they had discussed possibly having two standards for business and two for residential.

Motion carried unanimously.
Item #15B Accept Plan Commission's recommendation for the gullwing fixture using aluminum poles down the median on West Layton Avenue, South 84th Street to South 108th Street, Project 1998 #1 and to accept the gullwing fixture as the City's street lighting standard on all major streets.

Motion carried unanimously.
June 26, 2000

Mr. William H. Kobs
Wisconsin Electric
7815 Northwestern Avenue
Racine, WI 53406

Re: City Street Light Standards
WEPCO Lights

Dear Mr. Kobs:

The City of Greenfield has adopted standards for Wisconsin Electric street lights on City streets where no municipal street lighting system exists. Those standards are as follow:

1) Existing streets with a rural cross-section having no curb and gutter:

   100 watt HPS light with a full cut-off Cobra fixture on a 30 foot wooden pole (overhead or underground service dependent on location)

2) Existing or new streets with an urban cross-section having curb and gutter:

   100 watt HPS light with an Acorn fixture on a 15 foot Washington pole or a Coachlight fixture on a 15 foot black fiberglass pole (smooth/direct buried) with underground service

These standards were approved and adopted by the City of Greenfield Board of Public Works (7/1/99) and Common Council (7/20/99). Copies of the respective minutes are enclosed.

Should you have any questions on this matter, please contact me at 414-329-5322.

Sincerely,

CITY OF GREENFIELD

R. Daniel Kinnick, P. E.
Assistant City Engineer
14. Discussion and decision relative to Wisconsin Electric Power Company ornamental street lighting on residential streets (BPW 12/14/98; 1/4/99; 2/8/99; PC 2/23/98; BPW 3/4/99; 4/1/99; 6/3/99). Mr. Kinnick stated he met with Mr. Vandermeuse regarding charges for various type lighting fixtures. Mr. Kinnick stated there are so many variables with regard to the ongoing cost but it is always 1/2 % of whatever the installation costs are.

There was further discussion relative to the type lighting the city should have on residential streets which are maintained by the Wisconsin Electric Power Company. Mr. Kinnick stated at some point in the future when WEPCO is changing lights in a subdivision, that might be the time to replace and upgrade from the wooden pole and cobra fixture to the city's new standard residential street light.

It was moved by Alderman Neitzke, seconded by Alderman Dixon, to recommend the Acorn fixture/Washington pole and Coachlight fixture/smooth fiberglass pole as the city's standard Wisconsin Electric Power Company ornamental street lighting on new and existing curb and gutter cross-section streets. On a roll call vote, motion carried with Mr. Slosiarek voting no.
12. Board of Public Works Meeting held July 1, 1999

It was moved by Alderperson Dixon, seconded by Alderperson Almquist, to approve the following:

Item #14 Acorn fixture/Washington pole and Coachlight fixture/smooth fiberglass pole as the City’s standard Wisconsin Electric Power Company ornamental street lighting on new and existing curb and gutter cross-section streets.

On a roll call vote, the motion carried unanimously.
The problem of ingress and egress through the development has been the focus of many discussions. It was determined that there be only one ingress/egress through the Fountainview development. Mayor Seider stated there will not be a devaluation of property in the area during construction. The developers agreement will require that there are specific guarantees in place as to the precondition and postcondition of the road as well as the future maintenance. The construction damage to the road will be repaired by the contractor. There are noise ordinances that the contractors would have to adhere to and any debris, dust and dirt will be addressed in the developers agreement.

Mr. Jablonski added that when cars are parked on the road it is difficult for another car to get through.

Mayor Seider said it is a private street and the condo associations can restrict parking on one side if they so choose. He indicated there are no plans for the reconstruction of the roads unless damaged by the contractor.

It was moved by Alderperson Almgquist, seconded by Alderperson Dixon, to close the public hearing. Motion carried unanimously.

After further discussion, Mayor Seider indicated a decision on this item is to be placed on the next Common Council agenda.

**Close public hearing**

**Decision NEXT AGENDA**

8. Continuation of public hearing to rezone properties located along South 76th Street from West Coldspring Road to the north City limits, Tax Key Nos. 570-8952-002, 570-8952-003, 570-8955-002, 570-8956-001, 570-8957, 570-8960-001, Part of 570-8986, 571-8984-004, 571-8984-005, 571-8984-006, 571-8997 and Part of 571-8998 from C-3 Commercial and C-4 Commercial to Planned Unit Development--Commercial, Retail Sales & Services (recessed from 5/15/01 Council meeting)

This item is to be placed on the next Common Council agenda.

9. Board of Public Works Meeting held May 10, 2001
   (action taken on Item #12 at 5/15/01 Council meeting)

It was moved by Alderperson Ochnikowski, seconded by Alderperson Dixon, to approve the following:

**Bd. of Pub. Wrks. 5/10/01**

Item #5 Authorize the Department of Public Works to proceed with the reditching project at 4931 South 82nd Street, Tax Key #616-1039 as proposed

Reditching project @ 4931 S. 82nd St.

Item #9a Lighting policy for West Layton Avenue and South 108th Street, West Loomis Road and West Forest Home Avenue be the 175 watt metal halide bronze colored Gullwing fixture on a new 30 foot aluminum pole

Lighting policy for Layton, 108th, Loomis & Forest Home

Item #9b Direct the Department of Public Works to begin undertaking the retrofitting of the lights on West Layton Avenue from South 76th Street to South 43rd Street

Retrofitting of lights on Layton, 76th to 43rd

-15788- C.C. - 6/5/01
Item #9c The Engineering Department and the Department of Public Works enter into negotiations with the Wisconsin Department of Transportation and/or the contractor for replacing the high pressure sodium lights with metal halide lights on West Layton Avenue from South 84th Street to South 108th Street.

Item #9d The priority of replacing street lights be as follows:
1) Complete the Shepherd Hook retrofit lighting on South 74th Street and West Barnard Avenue; 2) Begin retrofitting on West Layton Avenue from South 76th Street to South 43rd Street including the corners of major cross streets; 3) Start at the south end of South 108th Street and proceed north, as funds are available; 4) West Loomis Road and West Howard Avenue

Item #9e Standard for shepherd hook pole and fixture be the very dark green color and no higher than 25'

Motion carried unanimously.

Item #5 Allowing the construction of an asphalt off-the-street parking area in the public right-of-way adjacent to 4641 South 47th Street, Tax Key #601-0276, subject to the property owner executing the standard city agreement is to be placed on the next agenda.

Item #7 Vacation of the alley right-of-way west of South 68th Street from West Coldspring Road to West Plainfield Avenue and request that this matter be placed on the Plan Commission agenda after the appropriate fee is paid

No action is required on this item at this time. This item will be placed on a future Council agenda when the Plan Commission report is acted upon by the Common Council.

10. Legislative Committee Meeting held May 29, 2001

It was moved by Alderperson Ochnikowski, seconded by Alderperson Almquist, to approve the following:

Item #3 Adopt an ordinance amending Section 21.04 of the Municipal Code pertaining to noise sensitive land uses adjacent to freeway corridors

Item #5 The Unlawful Library Acts Policy be amended to be adopted as an ordinance

Item #6 & #7 Adopt an ordinance placing 'Yield' signs at the intersection of West Whitaker Avenue and South Foxwood Boulevard and at the intersection of West Whitaker Avenue, South 121st Street and South 122nd Street

Motion carried unanimously.
TRAFFIC SIGNAL INFORMATION

BY:
THE CITY OF GREENFIELD
ENGINEERING DEPARTMENT

12-14-00
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<td>43</td>
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<td>Milwaukee County C.T.H. T</td>
<td>Aluminum</td>
<td>Yellow</td>
<td>Black</td>
<td>Black</td>
<td></td>
<td></td>
</tr>
</tbody>
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