

**Draft**

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# **Exhibit 1**

## **City of Minneapolis Minneapolis Park & Recreation Board Street Lighting Policy**

**Prepared by**

**Department of Public Works**

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## **Section 1 – Purpose of the Minneapolis Street Lighting Policy**

The City of Minneapolis has developed a Street Lighting Policy that will support the City's goals for livable communities and urban development. Appropriate lighting levels are a security and safety issue.

A policy will help to ensure that areas of Minneapolis receive consistent treatment and it will give clear guidance to elected officials, residents, developers, and the Department of Public Works on all aspects of street lighting system installation and maintenance.

A Street Lighting Policy will

- assist in ensuring quality in the street lighting system and help to create a system that is cost efficient, easy to operate, and maintainable
- contribute to added comfort and safety for pedestrians and motorists
- create a cohesive lighting system throughout the City of Minneapolis
- provide pole and fixture options that are high quality, cost efficient, and maintainable
- prevent additional costs to the City's maintenance and operation budgets.

The Minneapolis Department of Public Works is often approached by developers and property owner proposing to use street lighting fixtures that have not been approved for use on the public right-of-way. A policy defining the fixtures and poles available, and the permissible light levels, will aid in the discussions with developers and property owners.

This Policy will be reviewed and updated, as needed, to incorporate any changes in hardware, lighting technology, or economics and to provide an opportunity for continued public input.

## **Section 2 – History of Minneapolis Street Lighting**

The City of Minneapolis Department of Public Works has been installing and upgrading street lighting for many years. The City of Minneapolis began installing fluorescent lighting systems in the business districts in 1954 and finished in 1963. Beginning in 1967 incandescent or mercury vapor fixtures became the standard for new installations. A 10-year program was approved in 1977 to replace the fluorescent fixtures with high-pressure sodium fixtures. Mercury vapor continued to be used on new installations. The high-pressure sodium "shoebox" fixture was developed in 1978 and began to replace fluorescent fixtures in 1979. Between the years of 1980 and 1983 low-pressure sodium fixtures were tested in Minneapolis and the decision was made to discontinue use. Metal Halide lighting was installed for the first time in 1983 around Riverplace. In 1984 Xcel Energy, formerly NSP, began a program to replace their mercury vapor fixtures with high-pressure sodium.

When changes in technology allowed for new light sources, only the fixtures were changed, and not the location of the pole. This left the spacing of the lights unchanged but the light levels increased. This can be seen in the Central Business District and along major corridors such as West Broadway and Lake Street where light levels significantly exceed the recommended levels.

In 1967 the Como neighborhood residential lighting project was installed. This was the first time that low level ornamental fixtures were used in a residential area in Minneapolis. In the early 1990's other neighborhoods in the City of Minneapolis started to install low level ornamental lighting systems. Currently the neighborhoods of Stevens Square, Loring Park, Lowry Hill, Prospect Park, Field, Regina, Lowry Hill East and parts of the neighborhoods of Logan Park and Central have had low level ornamental

systems installed. Other neighborhoods have expressed interest. Many neighborhood business nodes or commercial corridors have also installed low level lighting systems.

The downtown area of Minneapolis along with some of the major commercial corridors like, Lake Street, Central Ave, and West Broadway have a combination of high and low level ornamental lighting systems. Attachment 1 is a map of ornamental lighting systems in the City of Minneapolis.

Residential areas in Minneapolis, other than those previously mentioned and not shown in Attachment 1, typically have the Xcel Energy wood pole street lighting system. The Xcel Energy wood pole system is also used in alleys throughout the city.

### **Section 3 – Customer Service Program**

Public Works has begun discussions with Xcel Energy to: define service level commitments, develop reporting requirements, and incorporate new language into the service contract between The City of Minneapolis and Xcel Energy. Public Works and Xcel Energy will review street light fixture and pole ownership options to determine what is in the best interest for the City. The City will also explore aesthetic alternatives to the existing wood pole.

### **Section 4 – Best Management Practices**

Public Works has begun discussion with the City’s Communications Department to improve communication with the public and other stakeholders regarding the street lighting system. The defined communication improvements will be incorporated into the street light service level commitments.

The implementation of the 311 system will assist in tracking the response to reported outages. A private citizen will only need to know one number to report any street lighting issue and the request can be directed to the appropriate party.

A portion of the annual street lighting budget will be used each year for research on street lighting. A pilot program may be developed to develop, design, and test new fixtures and technologies. Public Works will continue to review how Minneapolis compares to other cities on:

- Street lighting levels,
- Street lighting practices and policies,
- Use of different technologies,
- Visibility Standards, and
- Balancing Dark Sky concerns with efficiency and energy usage.

### **Section 5 – Achieving appropriate lighting levels for various areas**

The Illuminating Engineering Society (IES) has developed industry guidelines for roadway, pedestrian way, and sidewalk lighting in regards to land uses and roadway classification. Different areas of Minneapolis require different levels of light. Residential areas do not require as much light as commercial or high pedestrian areas. Roadway classification also has a part in the amount of lighting in an area. An example would be a major collector roadway has higher traffic volumes and requires higher

lighting levels than a local residential street. Similarly, a roadway may have a high pedestrian activity (downtown streets) and may need higher light levels.

Lighting levels and uniformity can be modified and changed by altering wattage, mounting height, and pole spacing. Two ways to increase lighting levels without changing the lamp wattage are to decrease the distance between fixtures or to increase the mounting height. Taller mounting heights help to spread the light.

## **Section 6 – Characteristics of Street Lighting Hardware**

The Minneapolis Department of Public Works has developed performance criteria that fixtures and poles must meet to be approved for use. These requirements are in place to ensure that the lighting systems provide quality lighting, are efficient to operate and maintain plus meet safety and structural parameters. All fixtures and poles for use in Minneapolis public right-of-way must meet the performance criteria set by the Minneapolis Department of Public Works. Accommodating a limited number of approved fixtures and poles allows for reasonable inventory costs, shortens procurement time, minimizes cost, and improves the city's responsiveness. The Performance and Maintenance Criteria for Ornamental Lighting Systems is shown in Attachment 2. Likewise, the other components of the lighting system (conduits, foundations, cabinets, source of power, etc.) must be approved by the Department of Public Works.

Lighting fixtures are classified based on the level of cutoff. See Attachment 3 for term definitions and levels of cutoff diagrams. Most of the ornamental light fixtures in use in Minneapolis are semi-cut off.

City street lighting fixtures, service points, and components must be in the public right-of-way and not cross private property. The power connections are underground wiring in conduit for the ornamental system and aboveground wire for the Xcel Energy system.

Solar power for street lighting is a technology that is advancing, but at this point more testing is needed. One hurdle facing solar power is the size and location of solar panels in relation to tree cover and the amount of sunlight that is received. There are other advancing light source technologies on the horizon that may be used in the future, such as Metal Halide with longer lamp life, Light Emitting Diodes (LED's) and QL (Quality Lighting).

## **Section 7 – Approved Fixtures and Poles**

Fixtures and poles approved for use on the right-of-way will be eligible for at other locations within the City of Minneapolis. Currently, the City of Minneapolis has two styles of low-level post-top fixtures approved for use, the lantern and the acorn, and one high-level style, the shoebox. The number of approved fixture and pole styles will be limited to allow for reasonable inventory, improve response time, minimize costs, and shorten procurement time. The City of Minneapolis Department of Public Works is seeking to add up to two more low and mid-level post-top fixtures to the approved list.

The City of Minneapolis has one approved pole style for low level lighting installations and one for high level. The City of Minneapolis Department of Public Works is seeking to add one additional low and mid-level pole to the approved list. Dark paint colors should be used for poles to resist graffiti and fading due to weather and sunlight. See Attachment 4 for the current and proposed approved lighting fixtures and poles.

## **Section 8 – Lighting Districts and Funding of Lighting Systems**

### **Districts:**

The City of Minneapolis will have three distinct districts: Residential, Central Business District (CBD), and Pedestrian Districts. These districts have different lighting level requirements. For further detail on the CBD and Pedestrian Districts, See Section 11 – Central Business or Pedestrian District Ornamental Lighting Systems, for information regarding the lighting level requirements, definition of the areas, and map.

### **Capital Costs:**

The capital costs of ornamental street lighting systems are paid through special assessments to the adjacent benefiting property owners. A street lighting district is established at that time.

Capital costs for the Xcel Energy wood pole system is amortized and paid from the City of Minneapolis general fund with revenue from property taxes.

### **Operation and Maintenance Costs:**

Street lighting operation and maintenance costs are costs paid from the City of Minneapolis' general fund when the systems do not exceed the standard lighting levels and associated operation and maintenance costs. When light levels exceed the city recommended level, the adjacent benefiting property owners are assessed an annual operation and maintenance charge for the extra amount over the standard lighting cost.

There is a maximum light level that will be allowed by the city, regardless of a property owner's or developer's willingness to pay the operation and maintenance charge. This maximum light level varies based on the use of the area (residential, CBD, or pedestrian activity areas).

The differences in cost from our existing or standard lighting levels and the cost for Central Business Districts (CBD) or Pedestrian Districts areas are shown in Attachment 5.

### **Special Features and Services:**

A Special Service District must be created to fund the maintenance of special features such as banners, electricity for outlets mounted on light poles and twinkle lights. Amenities beyond the basic streetlight and pole will not be allowed without a Special Service District.

## **Section 9 – Standard Street and Alley Lighting (Xcel Energy Wood pole system)**

This lighting system is referred to as "non-ornamental" or "wood pole" lighting and is used predominantly in residential areas. Approximately 85% of the City of Minneapolis is lit by the Xcel Energy wood pole system.

### **System Standards:**

Generally speaking this system includes one light at each intersection, one light near the midpoint of short blocks (approximately 300-foot blocks - usually east/west) and two lights on long blocks (approximately 600-foot blocks - usually north/south) at the one-third points. On blocks longer than 600 feet, lights are spaced approximately 200 feet apart. Standard alley lighting follows the same spacing as street lighting, with lights spaced approximately 200 feet apart. The intersection lights are 150-watt high-pressure sodium (HPS) fixtures and the mid-block lights are 100-watt HPS fixtures. The lighting fixture style currently used by Xcel Energy throughout the City is the Cobrahead style light. The fixture is mounted on a wood pole with power fed through overhead lines.

The spacing layouts for street and alley lighting are shown in Attachment 6 – Standard Street Lighting and Attachment 7 – Standard Alley Lighting.

### **Costs:**

This lighting system is installed, operated, and maintained by Xcel Energy. Xcel Energy charges a flat monthly fee to the city for electric usage, any maintenance that is required, and the amortized capital costs. These lights comply with the City's lighting levels. The operation and maintenance costs of this lighting system is provided by the City at no direct cost to the property owners and is paid from the City's General Fund.

There may be costs assessed to property owners if the removal of a light occurs prior to the five-year minimum as required in the Xcel Energy contract with the City of Minneapolis. Also, see the Light Removal Process below.

### **Petition Process to Obtain Standard Street and/or Alley Lighting:**

- 1) Property owners, or residents, can request these lights on their street or alley by submitting in writing a request to the Department of Public Works for a petition. The petition request must include the streets or alleys on which the requested lighting would be located as well as the number of lights being requested, contact name and phone number, and indicate that the affected Council Member has been informed. This petition form will only be prepared if the area does not currently have the maximum allowed number of lights.
- 2) The Department of Public Works will prepare a petition form that will include: (see Attachment 8 for sample petition)
  - Description of petition area
  - Information regarding the five year minimum time period for installation
  - Number of lights that are proposed
  - Declaration of who can sign the petition
  - Percentage of "approval" signatures required for consideration
  - Time deadline for return of petition
  - Contact number of neighborhood representative

- 3) The requestor is then responsible for circulating the petition, obtaining signatures for approval, and returning it to the Department of Public Works for verification within 90 days from the date that the petition was transmitted to the requestor.
- 4) At least 65% of the affected properties (owners and renters) signatures are needed. Affected properties are those that are within the affected frontage of the block(s) abutting the street or alley on which the streetlights are proposed.
- 5) The Petition signatures are verified and a “To The Record” letter is sent to the respective City Council Member(s) for their approval. The signed “To The Record” is then submitted quarterly in receive and file format to the City Council for final documentation.
- 6) Once the project has Council Member approval, The Department of Public Works will direct Xcel Energy to install the respective lighting. Xcel Energy and the Department of Public Works will concur on the final location. Xcel Energy is responsible for the planning, installation, operation and maintenance of these lights.

#### **Light Removal:**

The standard street/alley lights shall have a five-year minimum installation period as required by the Xcel Energy contract with the City of Minneapolis. There may be costs assessed to property owners if the removal of a light occurs prior to the completion of this minimum installation period.

Lighting for mid-block and alley locations may be removed. Intersection lighting is mandated by City Ordinance and can not be removed.

For removal of existing standard lights, the requestor must secure a petition signed affirmatively by property owners or residents representing 100% of the affected front footage of the block(s) abutting the street or alley on which the street light is to be removed using the above petition process.

#### **Additional Lights in Excess of the City Standards:**

There are no provisions for additional city paid lighting in excess of the City’s lighting standards. Property owners can contact Xcel Energy directly to discuss details and costs of additional lighting for their private property. The City is not involved in these light installations or costs.

## **Section 10 – Residential Ornamental Low-level Lighting**

Low-level ornamental lighting has a mounting height of 12 feet and is most commonly found in residential areas.

This ornamental low-level lighting system (previously referred to as "pedestrian level" lighting) is used in residential areas as a replacement for and improvement to the standard street/alley lighting (See Section 7) provided by the City through Xcel Energy. This ornamental low-level system typically results in an increased number of lighting units in a block and a more even distribution of light. The light fixture is lower in height and often considered more pleasing in appearance than the standard street/alley lighting system. These lights are also designed to better illuminate sidewalks as well as roadways. The operation and maintenance costs are similar to the standard street/alley light. See Attachment 5 for the cost comparisons.

The process for installing ornamental low-level lighting is property owner, neighborhood, business association, or developer driven. This type of lighting usually requires an assessment of the capital cost to the adjacent benefiting property owners. Lighting can be installed as a stand-alone project or in conjunction with a street restoration or reconstruction project. There are some cost savings when lighting is installed with a reconstruction project.

### **System Standards:**

Currently, there are two approved fixture styles - the acorn and the lantern. Up to two additional fixture styles may be approved if they meet the criteria set by the Department of Public Works. Fixtures are mounted on an approved pole at a height of 12 feet. This height was chosen to optimize light distribution on the street and sidewalk while minimizing the opportunity for vandalism while maintaining a pedestrian scale.

The lighting system is powered by underground wiring. Generally all overhead light fixtures mounted on wood poles along the streets will be removed in the project area. Wood poles and overhead wiring will be removed wherever possible, if they are not supporting other utilities.

The style of fixture to be installed is selected by the developer, neighborhood, or business group. The Department of Public Works encourages continuity of fixture style in sections of the City to maintain uniformity in style and avoid an inconsistent block-to-block style change. The proposed area must consist of at least four contiguous blocks to be considered under this program. If the entire neighborhood is included in the petition effort, lights will be installed on both sides of the boundary streets, including properties that are in adjacent neighborhoods to maintain the style uniformity.

The design standards for this lighting system are shown in Attachment 9 – Ornamental Low-Level Residential Street Lighting. The lighting project must meet the Average Foot-candles and Uniformity Ratio defined by this policy. Pole spacing and quantity may vary depending on the street width and topography. The Department of Public Works shall review and approve all lighting fixtures, poles, project design and construction.

### **Costs:**

The costs to administer, design and construct the ornamental low-level lighting system are considered capital costs. These capital costs are assessed in full to the adjacent benefiting property owners, unless

other funding sources, such as Neighborhood Revitalization Program funds, are used to reduce the assessable costs. Properties within the assessment influence zones are assessed for the capital costs associated with the lighting system. The assessment rate is applied uniformly to all properties, except those which are exempt from paying special assessments, based on square footage of property, irrespective of land use. Assessments can be paid over a 20-year period with interest determined by the sale of bonds, or they can be paid in full at any time with no penalty. In 2004 dollars the typical annual assessment to a property is \$150 plus interest, over 20 years.

Operation and maintenance costs are basic public services paid by the City's General Fund at no direct cost to the property owners, unless the City's lighting levels are exceeded, or a higher operation and maintenance costing fixture is used. (Non-profit organizations or properties exempt from property taxation will pay for the operation and maintenance costs through a special assessment for operation and maintenance.) If the lighting standards are exceeded, the additional operation and maintenance costs over and above the standard costs are added as an on-going assessment to the benefiting properties for those lights exceeding the City's lighting standards.

### **Petition Process for Ornamental Low-Level Lighting Residential:**

- 1) Any property owner, resident, or developer can request ornamental low-level lighting for their area. The request must be in writing and include the blocks in question for lighting installation, a contact name and phone number, and indication that the affected Council Member and neighborhood association have been informed. These requests are sent to the Department of Public Works.
- 2) Once the petition area has been established, the Department of Public Works will prepare a petition form that will include: (See Attachment 10 Sample Petition)
  - Map and description of petition area
  - Fixture style that will be used
  - Estimated cost for entire project
  - Estimated number and location of lights
  - Funding methods
  - Estimated assessment rate for defined average lot
  - Declaration of who can sign the petition
  - Percentage of "approval" signatures required for consideration
  - Time deadline for return of petition
  - Contact number of neighborhood representative and/or City staff if someone would like to ask additional questions
- 3) Public informational meetings are held to explain the project and process are held.
- 4) Once the petition process has begun, the project boundaries cannot be changed without the written approval of the City Council Member(s) for the project area. Otherwise, new petitions will be prepared showing the new project boundaries and the process will begin again.
- 5) The requester is then responsible for circulating the petition, obtaining signatures for approval, and returning it within the stated time period to the Department of Public Works for verification. The maximum time allowed to complete and return the petitions to the Department of Public Works is one year from the date of petition form was transmitted to the neighborhood, an extension of up to six months may be granted by the City Council Member(s) of the area, if the petition approval received after twelve months is at least 50%.

- 6) Completed petitions are submitted to the Department of Public Works for verification of signatures. The square footage of property in the project area is totaled, the amount of property that is represented by petition signers is calculated, and the percent approval is determined.
- 7) Signatures representing at least 65% of the total square footage of the benefiting property owners as calculated by the Department of Public Works shall be sought within the above given timeframe. Signatures from property managers and tenants may be collected as well. The signatures collected will be included in a petition status spreadsheet prepared by public works. The spreadsheet will illustrate the percentage of property owners, managers, and tenants who are in support of the project. (While the signatures of tenants may be collected, their signature may only count for a portion of the property. Example: a signature of a tenant of a duplex will only count towards half the property.) It remains important to collect signatures of the property owner. Based on area parameters, petition validation efforts, and the 65% threshold, the Department of Public Works will recommend approval or denial. This percentage is a Department of Public Works guideline and is only advisory to the City Council. (The City Council may approve a project with a percentage less than 65% approval of the benefited property and are not required to approve projects with over 65% approval of the benefited property.)
- 8) If the project meets the 65% threshold or City Council Member(s) determine that the interest level warrants continuing the process, then the project is formally submitted by the Department of Public Works to the City Council for authority to proceed or end the petitioning process. After approval to continue the process is received, detailed property assessment rolls are prepared, and notices are sent to property owners notifying them of the official public hearing date. The City Council Transportation and Public Works Committee holds the public hearing, and assuming committee approval, the project is moved on to the City Council and the Mayor for their approval of the project. (If an area starts the petition process and the project does not move forward, no part of that area may start another petition effort for 2 years after the initial petition submittal date.)
- 9) The Department of Public Works will develop a schedule to complete the lighting project based upon workloads, time of year, time required for material procurement, or hire a contractor if necessary.

### **Private Developments:**

New residential or business developments may request to install ornamental low-level lighting as part of the project and pay all the implementation costs. New street lights are encouraged to be installed for at least one block and not on a property-by-property basis. However, if a new development proposes to install street lighting on just their property, the property owner at their own cost must complete and submit to the Department of Public Works for their approval the following items:

- 1) A lighting plan for the entire block (both sides) that indicates where all low-level lights would be installed that is consistent with the lighting fixture and pole style for the general area,
- 2) Define which lights will be installed by the property,
- 3) Define which lights will be removed, (If no lights are to be removed or the installation results in lighting levels or operation and maintenance charges greater than defined for the area, the property owner will be responsible for the additional operation and maintenance charges.)
- 4) Prepare an engineered lighting plan that indicates the average foot-candles and uniformity ratio standards are still met with the respective changes.
- 5) Following the installation the property owner or developer must provide the Department of Public Works with a set of as-built plans, or hire the traffic division to perform construction inspection and as-builts.

The Department of Public Works must approve the material components, and locations of all installations of lighting systems on public right-of-way.

Private lighting systems (systems that use fixtures and poles that are not adopted for use by the City of Minneapolis) may be installed on the public right-of-way in addition to city street lights. Private lighting systems are not to be considered to be substitutes for city standard street lighting. The private systems must be installed by encroachment permit and be reviewed and approved by the Department of Public Works for safety, photometric, and structural requirements. Fixtures will be reviewed based on safety, the amount of light provided, the potential for glare, and the stability of the structures.

### **End of Useful Life:**

The ornamental low-level lighting system has a useful life of approximately 25 years. The City Engineer will determine the end of the lighting system's useful life. Once a lighting system has reached the end of its useful life, the affected area must be re-petitioned to install a new low-level lighting system. Once a system has reached its useful life, the replacement process will be as follows:

- 1) The Department of Public Works will send a notice to the Council Member(s) and the neighborhood association(s) of the lighting area. This notice will request action to:
  - a) remove the old low-level lighting system and install a new low-level system, or
  - b) remove the old low-level lighting system and install the standard street/alley (wood pole) system
- 2) If alternative (a) is selected, The Department of Public Works will send out a petition for the respective replacement lighting system. If alternative (b) is selected or the alternative (a) petition process is unsuccessful, the old system will be removed and the standard street/alley system will be installed.
- 3) Assessments will be charged for the replacement of the low-level lighting systems.

## **Section 11 – Central Business or Pedestrian District Ornamental Lighting Systems**

There are two basic classifications - the Central Business District and Pedestrian Districts (See Attachment 11 – Definition of Districts). The Central Business District has a more intense light level than the Pedestrian District. The process for installation, financing, and removal is essentially the same for both classifications and will apply to new developments, commercial blocks, intersections or areas. In general, this lighting system will accommodate the special increased lighting needs for commercial and high pedestrian activity areas.

### **System Standards:**

Central Business and Pedestrian Districts have more intense lighting level requirements than residential areas. The lighting hardware is mounted on higher poles and/or spaced closer together to produce increased light levels. The street lighting design shall be in accordance with City's lighting standards utilizing City approved poles and fixtures. Low, Mid, and High-level ornamental lighting has varying mounting heights and is generally found in the central business district, node business districts, along major roadways, and in high pedestrian activity areas.

### Central Business District (CBD)

A CBD lighting project must meet the Average Foot-candles and Uniformity Ratio developed in this policy. The light pole spacing standards reflect a typical 60-foot wide commercial street. Pole spacing may vary depending on the street width to provide the approved light levels. The Department of Public Works must review and approve all lighting fixtures and pole placement. The standards for the high, mid and low-level CBD lighting systems are as follows:

- High-Level CBD Lighting -- This is a 30-foot steel street light pole with a 250-watt HPS “shoebox” style lighting fixture. (See Attachment 12 – Central Business District Street Lighting)
- Mid-Level CBD Lighting -- This is a 20-foot pole with a 100 watt HPS double ornamental lighting fixture. The standard mid-level poles have electrical outlets that are not energized unless a Special Service District is created to pay for the operation and maintenance costs. (See Attachment 13 – Mid Level Central Business District Street Lighting Standard)
- Low-level CBD Lighting-- This is a 12-foot pole with a 100 watt HPS ornamental lighting fixture. The standard low-level poles have electrical outlets that are not energized unless a Special Service District is created to pay for the operation and maintenance costs. (See Attachment 14 – Low Level Central Business District Street Lighting Standard) This lighting is reserved for residential areas, and areas with less than typical downtown street widths, within the CBD as defined in Attachment 9.

New ornamental street lights are recommended to be installed on an entire CBD block and not on a property by property basis. However, if a CBD property proposes to install street lighting on just their property, the property owner at their own cost must complete and submit to the Department of Public Works for its approval the following items:

- 1) A lighting plan for the entire CBD block (both sides) that indicates where all low-level lights would be installed that is consistent with the lighting fixture and pole style for the general area,
- 2) Define which lights will be installed by the property,

- 3) Define which lights will be removed. (If no lights are to be removed or the installation results in lighting levels or operation and maintenance charges greater than defined for the area, the property owner will be responsible for the additional operation and maintenance charges.)
- 4) Prepare an engineered lighting plan that indicates that the average foot-candles and uniformity ratio criteria are achieved with the proposed changes.
- 5) Following construction the property must provide the Department of Public Works with a set of as-built plans, or hire the traffic division to perform construction inspection and as-builts.

The Department of Public Works must approve the material components, and locations of all installations of lighting systems on public right-of-way.

Private lighting systems (systems that use fixtures and poles that are not adopted for use by the City of Minneapolis) may be installed on the public right-of-way in addition to city street lighting. Private lighting systems are not to be considered to be substitutes for city standard street lighting. The private systems must be installed by encroachment permit and be reviewed and approved by the Department of Public Works for safety, photometric, and structural requirements. Fixtures will be reviewed based on safety, the amount of light provided, the potential for glare, and the stability of the structures.

#### Pedestrian District (PD)

The PD lighting project must meet the Average Foot-candles and Uniformity Ratio developed in this policy. The light pole spacing standards reflect a typical street width. Pole spacing may vary depending on the street width to provide the necessary light levels. The Department of Public Works must review and approve all lighting fixtures and pole placement. The standards for the high, mid and low-level PD lighting systems are as follows:

- High-Level PD Lighting -- This is a 30-foot metal pole with a 250-watt HPS “shoebox” style lighting fixture. (See Attachment 15 – Ornamental High-level Pedestrian District Street Lighting).
- Mid-Level PD Lighting -- This is a 20-foot pole with a 100 watt HPS post-top lighting fixture. The standard mid-level poles have electrical outlets that are not energized unless a Special Service District is created to pay for the operation and maintenance costs. (See Attachment 16 & 17 – Mid-Level Pedestrian District Street Lighting)
- Low-Level PD Lighting -- This is a 12-foot pole with a 100 watt HPS post-top lighting fixture. The standard low-level poles have electrical outlets that are not energized unless a Special Service District is created to pay for the operation and maintenance costs. (See Attachment 18 – Ornamental Low-Level Pedestrian District Street Lighting) The low-level PD lighting will be used in residential areas.
- Mixed High-Low-Level PD Lighting – This is a mix of the 30-foot metal pole with a 250-watt HPS “shoebox” style lighting fixtures and the 12-foot pole with a 100 watt HPS post-top lighting fixtures. The fixtures will alternate along the street with the other fixture on the opposite side of the street. (See Attachment 19 – Ornamental Mixed High-Low-Level Pedestrian District Street Lighting)

New street lights are encouraged to be installed for the entire PD area and not on a property-by-property basis. However, if a PD property proposes to install street lighting on just their property, the property

owner at their own cost must complete and submit to the Department of Public Works for their approval the following items:

- 6) A lighting plan for the entire PD street block (both sides) that indicates where all low-level lights would be installed that is consistent with the lighting fixture and pole style for the general area,
- 7) Define which lights will be installed by the property,
- 8) Define which lights will be removed, (If no lights are to be removed or the installation results in lighting levels or operation and maintenance charges greater than defined for the area, the property owner will be responsible for the additional operation and maintenance charges.)
- 9) Prepare an engineered lighting plan that indicates the average foot-candles and uniformity ratio standards are still met with the respective changes.
- 10) Following the installation the property owner or developer must provide the Department of Public Works with a set of as-built plans, or hire the traffic division to perform construction inspection and as-builts.

The Department of Public Works must approve the material components, and locations of all installations of lighting systems on public right-of-way.

Private lighting systems (systems that use fixtures and poles that are not adopted for use by the City of Minneapolis) may be installed on the public right-of-way in addition to city street lights. Private lighting systems are not to be considered to be substitutes for city standard street lighting. The private systems must be installed by encroachment permit and be reviewed and approved by the Department of Public Works for safety, photometric, and structural requirements. Fixtures will be reviewed based on safety, the amount of light provided, the potential for glare, and the stability of the structures.

#### **Costs:**

The costs to administer, design and construct a CBD or PD lighting system are considered capital costs. The requesting individual, developer, organization, district, or property owners are responsible for all capital costs for the proposed lighting system. Properties within the assessment influence zones are assessed for the capital costs associated with the lighting system. The assessment rate is applied uniformly to all properties, except those which are exempt from paying special assessments, based on square footage of property, irrespective of land use. Assessments can be paid over a 20-year period with interest determined by the sale of bonds, or they can be paid in full at any time with no penalty.

Operation and maintenance costs are a basic public service paid by the City's General Fund at no direct cost to the property owners unless the City's standard lighting operation and maintenance costs are exceeded. In that circumstance, the added operation and maintenance costs above the standard are added as an on-going assessment to the properties or organizations benefiting from the added lighting. Non-profit organizations or properties exempt from property taxation will pay for the operation and maintenance costs through a special assessment for operation and maintenance.

#### **Process For Installation of CBD and PD Lighting:**

- 1) Property owners or developers within these districts may initiate the installation of ornamental street lighting by submitting a written request including a proposed lighting plan prepared by the Department of Public Works or other qualified professionals. The request must include the blocks proposed for lighting installation, a contact name and phone number, and indicate that the affected Council Member(s) and neighborhood association(s) have been informed. These requests are sent to the Department of Public Works.

- 2) The actual approval process will vary based on how the lighting system is to be funded, i.e. developer, business organization, special service district, property assessment, or outside sources. Depending on the funding source, a petition may or may not be required. (See Attachment 10 Sample Petition)

If a petition is required, the Department of Public Works will prepare a petition form that will include:

- Map and description of petition area
  - Fixture style that will be used
  - Estimated cost for entire project
  - Estimated number and location of lights
  - Funding methods
  - Estimated assessment rate for defined average lot
  - Declaration of who can sign the petition
  - Percentage of “approval” signatures required for implementation
  - Time deadline for return of petition
  - Contact number of neighborhood representative
- 3) Public informational meetings to explain the project and process are held.
  - 4) Once the petition process has begun, the project boundaries cannot be changed without the written approval of the Council Member(s) for the project area. Otherwise, new petitions will be prepared showing the new project boundaries and the process will begin again.
  - 5) The requester is then responsible for circulating the petition, obtaining signatures for approval, and returning it to the Department of Public Works for verification within the stated time period. The maximum time allowed to complete and return the petitions to the Department of Public Works is one year from the date of petition was transmitted to the requestor, an extension of up to six months may be granted by the Council Member(s) of the area, if the petition approval after twelve months is at least 50%.
  - 6) Completed petitions are submitted to the Department of Public Works for verification of signatures. The square footage of property in the project area is totaled, the amount of property that is represented by petition signers is calculated, and the percent approval is determined.
  - 7) Signatures representing at least 65% of the total square footage of the benefiting property owners as calculated by the Department of Public Works shall be sought within the above given timeframe. Signatures from property managers and tenants may be collected as well. The signatures collected will be included in a petition status spreadsheet prepared by public works. The spreadsheet will illustrate the percentage of property owners, managers, and tenants who are in support of the project. (While the signatures of tenants may be collected, their signature may only count for a portion of the property. Example: a signature of a tenant of a duplex will only count towards half the property.) It remains important to collect signatures of the property owner. Based on area parameters, petition validation efforts, and the 65% threshold, the Department of Public Works will recommend approval or denial. This percentage is a Department of Public Works guideline and is only advisory to the City Council. (The City Council may approve a project with a percentage less than 65% approval of the benefited property and are not required to approve projects with over 65% approval of the benefited property.)
  - 8) If the project meets the 65% threshold or City Council Member(s) determine that the interest level warrants continuing the process, then the project is formally submitted by the Department of Public

Works to the City Council for authority to proceed or end the petitioning process. After approval to continue the process is received, detailed property assessment rolls are prepared, and notices are sent to property owners notifying them of the official public hearing date. The City Council Transportation and Public Works Committee holds the public hearing, and assuming committee approval, the project is moved on to the City Council and the Mayor for their approval of the project. (If an area starts the petition process and the project does not move forward, no part of that area may start another petition effort for 2 years after the initial petition submittal date.)

- 9) The Department of Public Works will develop a schedule to complete the lighting project based upon the other workloads, project approval date and the bid process.

### **End of Useful Life:**

The CBD and pedestrian district lighting systems have a useful life of approximately 25 years. The City Engineer will determine the end of the lighting system's useful life. Once a lighting system has reached the end of its useful life, the affected area must be re-petitioned to install a new lighting system. Once a system has reached its useful life, the replacement lighting process will be as follows:

#### Central Business District (CBD)

- 1) The Department of Public Works will send a notice to the Council Member(s) and the property owners of the lighting area. This notice will request a response indicating the preferred option for replacement of the existing system. The options are to:
  - a) remove the old lighting system and install a new high-level system, or
  - b) remove the old lighting system and install a new mid-level or, if appropriate,
  - c) remove the old lighting system and install a new low-level system
- 2) After a response to the notice is received, The Department of Public Works will follow through to install the respective replacement lighting system.
- 3) Assessments will be charged for the removal and replacement of the lighting systems.

#### Pedestrian District (PD)

- 1) The Department of Public Works will send a notice to the Council Member(s) and the business and/or neighborhood association(s) of the lighting area. This notice will request a response indicating the preferred option for replacement of the existing system. The options are to:
  - a) remove the lighting system and install a new high-level system, or
  - b) remove the lighting system and install a new mid-level system, or
  - c) remove the lighting system and install a new low-level system, or
  - d) remove the lighting system and install a new mixed high-low-level system.
- 2) After a response to the notice is received, The Department of Public Works will follow through to install the respective replacement lighting system.
- 3) Assessments will be charged for the removal and replacement of the lighting systems.

## **Section 12 – Park Board Lighting**

The City of Minneapolis Department of Public Works operates and maintains the existing lighting systems along Minneapolis parkways. Much of this system is past the useful life and is failing. This is becoming costly to operate, repair and maintain. Minneapolis Department of Public Works recommends that the Minneapolis Park Board implement a plan to upgrade the parkway lighting system so that it is more reliable and cost efficient to operate and maintain. The Department of Public Works will work with the Park Board, offer technical expertise, general guidance and incorporate the Park Board Lighting System into this Street Lighting Policy.

### **System Standards**

To be determined by Park Board  
(See Attachment 20- Parkway Lighting)

### **Cost**

To be determined

### **Process for installation**

To be determined

### **Useful Life**

To be determined