City of Portland, Maine

Request for Proposals –
Conversion of City Street Lights to LED Fixtures
& Transfer of Ownership from Utility to Municipality
RFP #2917

The City of Portland, Maine is inviting qualified companies to submit proposals for the design and implementation of City-wide street light enhancements and conversions to LED fixtures. Proposals must be submitted no later than **3:00 p.m. on Wednesday, November 9, 2016**. Late, unsigned bids or bids submitted electronically shall not be accepted. Six (6) complete hard copies of your proposal, including any descriptive literature, shall be submitted on the forms provided and in an envelope plainly marked on the outside with the RFP's title and number along with one (1) digital copy on a flash drive.

Proposals from vendors not registered with the Purchasing Office may be rejected; receipt of this document directly from the City of Portland indicates registration. Should a vendor receive this Request from a source other than the City, please contact 207-874-8654 to ensure that your firm is listed as a vendor for this RFP.

GENERAL

Project Background

The City of Portland (City) incurs significant annual costs related to street lighting. Approximately 6,100 of the existing street lights in the City are owned by the local investor owned utility, Central Maine Power. The City owns another 600 lights in, primarily, decorative fixtures. Through this RFP, the City is interested in selecting a service provider to assist it in reducing street light costs by retrofitting these street lights to LED technology and enhancing their functionality by implementing advanced controls. The City anticipates the scope of work to include upgrading the pole mounted street lights as well as lighting in City parking facilities. The City wishes to explore the deployment of environmental sensors and other "smart city" elements in the LED conversion process.

The City seeks to build a network of LED streetlights with advanced controls that can serve as the backbone on which to deploy "smart city" technologies that offer increased functionality of infrastructure, innovative services to residents and visitors, and opportunities for public/private partnerships that may expand services while providing revenue streams to the City. Firms are invited to describe how elements of this vision may be incorporated into this project.

Inventories of utility owned street lights and City owned streetlights are included in this document.

Scope of Services

The City is seeking proposals from qualified service providers (referred to variously as "proposer", "firm", or "contractor"). This proposal is to be a turn-key proposal that includes: undertaking an IGA (Investment Grade Audit) of the street lights and their attributes, performing an independent and certified lighting design analysis which includes designing each unique street to either an RP 8-14 standards where applicable or at a standard to be specified; providing a comprehensive financial analysis to indicate ROI (Return On Investment), savings and payback period; completing all applicable incentive applications; carrying out all procurement requirements; applying on behalf of the City for all available grants and rebates relating to the LED conversion project; performing project management functions; undertaking or overseeing the LED luminaire installation and the recycling/disposal of all waste material; and identifying any Financing Options that the supplier can provide. The service provider must also demonstrate experience in performing street light acquisitions from Electric Utilities or submit a detailed approach to how best perform an acquisition and the options associated with an acquisition. The service provider must also have experience implementing advanced lighting controls to increase the functionality of the lighting system as well as experience deploying environmental sensors that can provide data to support a variety of "smart city" technologies including advanced traffic signal controls, parking control and enforcement, pedestrian and traffic counts, and other public safety functions. The City may also consider additional functionality to include public Wi-Fi, public information kiosks, and electric vehicle charging.

Conflict of Interest

The City seeks to work with firms that represent consumers, not suppliers, avoiding both the appearance, as well as any actual conflict of interest. Any subsequent disclosure of a conflict of interest after the award has been made, but which existed at the time of proposal submission, will be grounds for termination of any resulting contract

General

Pursuant to City procurement policy and ordinance, the City is unable to contract with businesses or individuals who are delinquent in their financial obligations to the City. These obligations may include but are not limited to real estate and personal property taxes and sewer user fees. Bidders who are delinquent in their financial obligations to the City must do one of the following: bring the obligation current, negotiate a payment plan with the City's Treasury office, or agree to an offset which shall be established by the contract which shall be issued to the successful bidder.

It is the custom of the City of Portland, Maine to pay its bills 30 days following equipment delivery and acceptance, and following the receipt of correct invoices for all items covered by the purchase order. If your organization prefers to receive payment via electronic transfer rather than by check, please see the web link below* and include that EFT form with your bid submission. In submitting bids under these specifications, bidders should take into account all discounts; both trade and time allowed in accordance with this payment policy and quote a net price. The City is exempt from the State's sales and use tax as well as all Federal excise taxes.

* http://www.portlandmaine.gov/DocumentCenter/Home/View/817

All materials and equipment used as well as all methods of installation shall comply at a minimum with any and all Federal, OSHA, State and/or local codes, including applicable municipal ordinances and regulations.

Insurance Requirements

The successful bidder shall agree to defend, indemnify and save the City harmless from all losses, costs or damages caused by its acts or those of its agents, and, before signing the contract, will produce evidence satisfactory to the City's Corporation Counsel of coverage for General Public and Automobile Liability insurance in amounts not less than $400,000 per person, for bodily injury, death and property damage, protecting the contractor and the City, and naming the City as an additional insured from such claims, and shall also procure Workers' Compensation insurance.

Equal Employment Opportunities

Vendor shall comply fully with the Nondiscrimination and Equal Opportunity Provisions of the Workforce Investment Act of 1998, as amended (WIA, 29 CFR part 37); the Nontraditional Employment for Women Act of 1991; title VI of the Civil Rights Act of 1964, as amended; section 504 of the Rehabilitation Act of 1973, as amended; the Age Discrimination Act of 1975, as amended; title IX of the Education Amendments of 1972, as amended; and with all applicable requirements imposed by or pursuant to regulations implementing those laws, including but not limited to 29 CFR part 37 and all other applicable laws, including the Maine Human Rights Act, ordinances and regulations regarding equal opportunity and equal treatment.

October 6, 2016

Matthew F. Fitzgerald
Purchasing Manager

PROPOSAL FORMAT

Proposals must be submitted in the following format using the numbering sequence outlined below. This is the minimum information to be provided and will be used in the evaluation process. Proposals are to be limited to a maximum of 25 pages excluding addendums

A. Cover Letter

A cover letter signed by an authorized representative of the company of Proposer shall outline the intent of the response and shall state that the information contained in the Proposal accurately describes the services to be provided

B. Company Profile

- Provide a description of the your firm's company or business, its purpose, history and successes, including the number of years in LED street lighting business and major successes.
- List any similar projects completed or underway, the client/owner, and the approximate value of the work.
- Describe your firm's experience developing projects that conform to relevant state laws, local standards, and local Public Utility Commission rules.
- Provide examples where the firm has successfully assisted municipalities with evaluation and acquisition of their street lights from electric utilities.
- Describe the firm's experience deploying smart city and IoT (internet of things) technology as part of LED street lighting projects.
- Describe partnerships with vendors, technology providers, or service providers and describe how these have added value to previous projects.

C. Key Personnel

Identify key personnel that would be employed for this program and provide a detailed resume/CV of their relevant experience, education & successes. Key personnel should demonstrate ample experience in managing turn-key street lighting projects.

D. References

Include a list of at least three (3) projects that the Proposer has successfully completed an LED retrofit and provide associated references and contact information for the persons or organizations that engaged the Proposer. By submitting a proposal, the Proposer consents to City contacting these references, and consents to City also contacting any other organization for the purposes of evaluating the Proposal.

E. Approach

Describe the approach and/or process proposed to address the project requirements. Include any notable methodologies, tools and techniques, and their respective suitability to this project. Also provide a project plan that reflects your proposed approach/process and demonstrates your ability to meet the milestones.

The following key components must be included in the approach description:

1. Audit

The provider will determine the existing street and outdoor light inventory via a Geographic Information Systems (GIS) inventory assessment of all the street lights and outdoor lights included in the project. The provider should list the attributes that they collect and describe how they relate to the design process.

During the inventory assessment, the provider will report and review all issues with the City weekly so that the City may begin to address them in order to minimize any delay on the eventual conversion.

The proponent must produce an electronic inventory file suitable for use in common GIS software (e.g. ESRI ArcMap), as well as Microsoft Excel, that contains the required attributes.

Based on the inventory, utility bill analysis, and consultation on controls and/or other products, the Proposer will develop an Audit Report which will include:

- Deficiencies in the current street lighting network
- Baseline energy use, energy cost and operations & maintenance costs
- Estimated retrofit energy use and operations & maintenance costs
- Estimated sources of funding, including rebates
- Calculation of estimated total conversion cost (remaining design tasks, product, and installation), energy reduction, and simple payback

The City seeks Proposers who can provide the strongest case for why their Audit will be most accurate and support approval by the City.

2. Financial stability and capability

- Proposer should demonstrate the capacity to finance street lighting projects by having financed or been part of a financing project using an Energy Savings Performance Contract (ESPC).

- Should the City opt for this type of financing, the Proposer must produce an ESPC contract at the time opt in.

- Proposer must have experience with a range of financing mechanisms in order to advise the City on the most advantageous approach.

3. Design

The design of an LED network will have a measurable impact on both the life cycle savings as well as overall light quality. Proposers must include a design component in the scope of work.

The determination of adequate light levels for safety of pedestrians, cyclists, and vehicles is guided by the Illuminating Engineering Society (IES) Standard for Roadway Lighting (RP-8-14). The City recognizes that existing pole placement limits the degree to which IES standards may be met. The City will look favorably upon proposals that use design methodologies that will best deliver adequate lighting through the City for the expected life of the products and the City's desire for specific goals associated with customized lighting levels. IES standards may not be the standard selected by the City. Additionally, the designer should incorporate an analysis of the following data points to identify target areas that may need special consideration:

- Pedestrian/vehicle and bicycle/vehicle crash data for the last 5 years to identify areas where light levels and/or spacing have affected public safety.
- Important localized land uses (e.g. parks, schools, hospitals, etc.)
- Relative volumes of pedestrian and bicycle activity
- Unique neighborhood characteristics

The provider should describe their design process, including how actual light levels are measured before & after the conversion, and how designs are modified for unique street characteristics.

4. Project Management

Proposers shall describe their approach to Project Management and how this will impact cost, quality control and timing of the project.

- Qualifications and experience of Project Team
- Experience in projects managing multiple projects simultaneously
- Experience in projects managing large LED retrofits of similar scale
- Detailed description on how the project will be managed including:

    - A description of the methods to be employed in the performance and coordination of the work that will control the scope, quality, schedule and cost of the Project
    - The anticipated risks and assumptions that will be part of completing the Project
    - Any special challenges or considerations foreseen by the Proposer and proposed solutions for each.

5. Technology Procurement

a. Fixtures

Describe the process for selecting appropriate fixtures.

The Proposer should develop complete and detailed specifications for LED Luminaires to replace lighting fixtures. The specifications will be non-proprietary performance specifications describing all relevant photometric, electrical, physical, and durability characteristics of the luminaires.

The Proposer should provide details on their method of developing specifications and how that ensures that appropriate quality standards are met.

b. Smart Controls, IoT, and other Smart City solutions

The Proposer will advise the City on the use of controls in terms of impact on safety, standardization, and energy and cost savings. The Proposer should be able to present analysis of how advanced controls could impact the total life-cycle costs of the system. The Proposer should also propose to the City other value-add systems and discuss with the City their financial impacts, commercial readiness, and alignment with utility policies. These systems include environmental sensors that can generate data to support additional functionality in allied infrastructure and services including traffic controls, parking, public safety, and electronic communication.

The City will require open APIs in all control systems order to ensure functionality across platforms and to ensure our ability to expand the system.

6. Installation & Maintenance

Based on the finalized design, the Proposer will describe their approach to installation and maintenance or oversight as an owner representative. The following elements should be covered:

- Description of Work
- Required installation schedule
- Reference standards
- Submittals
- Quality Assurance and Warranty
- Installation
- Field Quality Control
- Adjusting and Cleaning
- Disposal

7. Construction Administration

The Proposer will describe their approach to Construction Administration including the following:

- Perform a sampling of spot-checks on installed lights to ensure proper installation procedures are being followed, especially at the beginning of the project
- Manage data on installations and provide a weekly status update of the of the project
- Confirmation of satisfactory installation completion by install contractor

8. Acquisition of Street Lights

The Proposer will describe their experience and methodology for assisting municipalities in acquiring their street lights.

9. Rebates/Incentives

The Proposer will describe their experience and approach to managing rebates/incentives for street lights on behalf of municipalities.

F. Value Added Services

The City seeks opportunities to provide the public with enhanced services and to make management of municipal infrastructure more efficient. Proposers should describe how they can leverage the functionality of an advanced LED streetlight network to offer value added services. These may include public facing elements such as citywide Wi-Fi, electric vehicle charging, and public information kiosks as well as operational functions such as advanced traffic and parking management, public safety applications, and location analytics. Each Proposer should describe services or products it can provide and detail what the Proposer is prepared to supply as part of a contract. The City is open to collaborations with third party partners so discussion may include opportunities for the City to monetize elements of the infrastructure through public/private partnerships.

G. Additional Information

The proposer may provide other information that may be relevant for the review and evaluation of the prospective vendor's experience or capabilities.

H. Project Schedule

The selected Proposer shall begin work immediately upon contract signing and complete the tasks in their entirety within a reasonable yet aggressive schedule.

I. Submission

Six (6) paper copies and one (1) digital copy of the proposal must be submitted. No faxed or e-mailed submissions will be considered. Please submit the electronic copy on a thumb drive in PDF format and enclose with your paper copies.

J. Proposer Selection

At its discretion, the City may select a firm outright or select a finalist(s) for in-person interviews. The City reserves the right to negotiate directly with the firm selected for additional project work at a negotiated contract for services. The City reserves the right to accept or reject any or all proposals for any reason, to negotiate with any individual or firm and to select one or more of the proposals. Attachment B includes a table that identifies the selection criteria which will be used to rank proposals.

K. Questions

All questions shall be directed in writing ONLY to the Purchasing Office at the above address and be received at least five business days prior to the bid opening date (FAX 207-874-8652, or E-mail jrl@portlandmaine.gov). Questions received after this time will not be addressed. Responses from the City that substantially alter this bid will be issued in the form of a written addendum to all bid holders registered in the Purchasing Office. Oral explanations or interpretations given before the award of the contract will not be binding.

PROPOSAL FORM

Request for Proposals –
Conversion of City Street Light System to LED Fixtures
and from Utility Owned To Municipally Owned
and Maintained Fixture on Utility Owned Poles
RFP #2917

**** THIS SHEET MUST BE INCLUDED IN YOUR PROPOSAL ****

The undersigned hereby declares that he/she or they are the only person(s), firm or corporation interested in this proposal as principal, that it is made without any connection with any other person(s), firm or corporation submitting a proposal for the same, and that no person acting for or employed by the City of Portland is directly or indirectly interested in this proposal or in any anticipated profits which may be derived there from.

The undersigned hereby declares that they have read and understand all conditions as outlined in this Request for Proposals, and that the proposal is made in accordance with the same.

The bidder acknowledges the receipt of Addenda numbered: _____

COMPANY NAME: _____

AUTHORIZED SIGNATURE: _____

DATE: _____

PRINT NAME & TITLE: _____

ADDRESS: _____

E-MAIL ADDRESS: _____

PHONE NUMBER: _____ FAX NUMBER: _____

TYPE OF ORGANIZATION - PARTNERSHIP, CORPORATION, INDIVIDUAL, OTHER:

_____

STATE OF INCORPORATION, IF APPLICABLE: _____

FEDERAL TAX IDENTIFICATION NUMBER (Required): _____

NOTE: Proposals must bear the handwritten signature of a duly authorized member or employee of the organization submitting a proposal.

ATTACHMENT A – Participating City Profile

City PROFILE	Approximate Units
Portland, Maine	
• Lane Miles of Road	568
• Street Lights attached to utility or decorative poles and scheduled for replacement through this project	6,700
• Population	66,000

Electricity Supply Costs	Streetlight Group A	Streetlight Group B
Energy Rate	$0.584	$0.0568
Capacity Rate	$0.0002	$0.0001
Total Supply Rate	$0.0586	$0.05569
Supply Spend (annual)	$109,645	$76,640
T&D Rate	$0.161	$0.161
T&D Spend (annual)	$154,505	$217,033
kWh (annual)	1,872,677	1,348,029

ATTACHMENT B – Rating Categories

The following table will be used to rank proposals in the selection process:

RATING CATEGORY	WEIGHT

Company Capability & Experience
• Respondent demonstrates strong knowledge of street light technology, quality standards, and design requirements.
• Respondent documents relevant experience
  o Managing or performing all aspects of the proposed project
  o With comparably sized projects in urban and suburban environment
• Knowledge of municipal street lighting operations and maintenance
• Experience or demonstrated understanding of utility requirements and incentives.
• Experience in assisting municipalities with evaluation and acquisition of their street lights
• Experience providing and/or recommending financing solutions for street light conversions
• Possession of unique tools and technologies to improve system performance
• Experience incorporating smart cities and IoT technologies into LED street light conversions
• Sufficient qualified staff to support project implementation
	40

Project Approach
• Describes a coherent, convincing plan to meet or exceed requirements of scope of work for all tasks
  o Includes a detailed project plan that accelerates implementation where possible
  o Includes a description of a rigorous Audit Report that can be used to support financing of the remaining project costs
  o Includes a design approach that will meet the City's goals of safety, standardization, and minimizing lifecycle costs
  o Includes a project management approach which demonstrates efficiencies in time and cost
  o Describes the City's involvement in all phases and describes an efficient use of their time and resources (e.g. efficient plan for meetings, use of police details or avoiding them)
  o Describes opportunities to implement smart cities and IoT technologies that enhance the capabilities of urban infrastructure and provide improved services to residents and visitors.
  o Identifies opportunities for public/private partnerships that may provide services to the public and potentially generate revenue for the City.
	60

City of Portland Owned Street Lights

AREA/STREETS	WATTS	VOLTAGE	TYPE	METER	METER #	FIXTURES	$PER/MO	STYLE	MISC.
Congress St.	250	120	Metal Halide	No	N/A	51	XXXX	Esplanade	Green Decorative
Congress St.	70	120	Metal Halide	No	N/A	102	XXXX	Esplanade	Green Decorative
Exchange St	100	120	Metal Halide	No	N/A	35	XXXX	Washington	
Fore St. (Exchange - Franklin)	100	120	Metal Halide	No	N/A	20	XXXX	Washington	
Franklin Arterial (Fore - Commercial)	100	120	Metal Halide	No	N/A	3	XXXX	Washington	
Post Office Park	100	120	Metal Halide	Yes	AB22038232	9	$173.05	UNK	Market St.
Moulton/Dana/Wharf	40/175	120/240	Incad/Merc Vap	Yes	AB28616501	31	$223.39	Lantern	Needs updating
Custom House St.	100	120	Metal Halide	No	N/A	2	XXXX	Washington	
Myrtle St.	250	120	Metal Halide	Yes	City Hall	4	XXXX	Esplanade	Green Decorative
Myrtle St.	70	120	Metal Halide	Yes	City Hall	8	XXXX	Esplanade	Green Decorative
Cumberland/ Chesnut	175	120	Metal Halide	No	N/A	3	XXXX	Esplanade	
Lower Chestnut	175	120	Metal Halide	Yes	AB22728084	14	$113.36	Esplanade	Silver
Somerset/ Pearl	175	120	Metal Halide	Yes	SA57106067	10	$239.78	Esplanade	Silver
Portland Pier	175	120	Merc Vapor	Yes	SA77846414	8	$63.99	Nautical	
High / Free	250	120	Metal Halide	No	N/A	3	XXXX	Esplanade	Green Decorative
High / Free	70	120	Metal Halide	No	N/A	6	XXXX	Esplanade	Green Decorative
Custom House / Fore St. (corner)	100	120	Metal Halide	Yes	Private	7	XXXX	Washington	Pd by Building
Fore River Pkway/ Congress	150	480	HPS	Yes	AB99669129	9	$194.85	Mongoose	Silver / Mast Arm
Fore River Pkwy (Frederick St)	100	480	HPS	Yes	AB21637477	29	$191.05	Hallbrook	Green Trail
Veterans Bridge (Controller)	150	120	HPS	Yes	AB21001121	9	$181.98	Mongoose	Mast Arm
Veterans Bridge /W. Comm.	100	480	HPS	Yes	AB19258963	38	XXXX	Hallbrook	Green Trail
Veterans Bridge /W. Comm.	150	480	HPS	Yes	AB19258963	15	$426.20	Mongoose	Silver
Longfellow Square	70	120	Metal Halide	No	N/A	4	XXXX	Esplanade	Green Decorative
Monument Square	1000	120/240	Metal Halide	Yes	AB06483167	2	$110.00	Round Flood	Pierce Atwood
Monument Square	1000	120/240	Metal Halide	Yes	WH7689591	2	$119.00	Round Flood	Maine Bank & Trust
Monument Square	1000	120/240	Metal Halide	Yes	AB85251348	2	$125.00	Round Flood	22 Monument Sq
Monument Square	250	120	Metal Halide	Yes	O3433482	6	???	Monument Lts	Monument Sq
Lower Congress St (MMC)	70	120	Metal Halide	No	N/A	22	XXXX	Esplanade	Green Decorative
Thompson Pt. (end of Sewall St.)	150	240	HPS	Yes	AB99526656	5	$66.17	Mongoose	
Stone St.	250	120	Metal Halide	No	N/A	3	XXXX	Esplanade	Green Decorative
Cumberland/ Preble	70	120	Metal Halide	No	N/A	10	XXXX	Esplanade	Green Decorative
Baxter / Vannah (Controller)	250	120	Metal Halide	Yes	AB18449378	4	$61.81	Esplanade	Mast Arm
Forest / Bedford (Controller)	150	120	HPS	Yes	61020017	2	$61.13	Cutoff Luminaire	Mast Arm
Marginal / Preble (Controller)	150	120	HPS	Yes	59105141	2	$68.74	Mongoose	Mast Arm
Johnson / Skyway (Controller)	150	240	HPS	Yes	77328932	4	$75.27	Mongoose	Mast Arm
Tommy's Park	100	120	Metal Halide	Yes	SA99043828	3	$25.00	Granville	Crnr Middle/ Exc.
Center / Fore (Controller)	100	120	Merc Vapor	Yes	LG34779885	2	$100.28	Small flood	Gorham's Corner
Marginal / Preble	175	120	Metal Halide	Yes		7		Esplanade	Silver
Congress/ MMC	70	120	Met	Yes		20		Esplanade	Green Decorative
Forest Ave (Congress to Cumberland)	250	120	Metal Halide	Yes		9		Esplanade	Green Decorative
Forest Ave (Congress to Cumberland)	70	120	Metal Halide	Yes		18		Esplanade	Green Decorative
Congress St. (front of City Hall)	250	120	Metal Halide	Yes		8		Esplanade	Green Decorative
Federal (Pierce Attwood)	70	120	Metal Halide	Yes		4		Esplanade	Green Decorative
New Veteran's Bridge				Yes		29		Mongoose	Accent Lts (Silver)
New Veteran's Bridge				Yes		18		unk	Bike-way lts.
Charles St/ MMC						602			

Street Light Inventory - CMP-Leased Units - January 4, 2016

Account Number	Group	Quantity	Type	Wattage	Delivery Cost	Lighting Equipment Cost	Unit Cost	Group Cost
441-149-3430-001	School	3	Sodium Enclosed	250	$5.42	$11.64	$17.06	$51.18
	School	18	Sodum Flood	250	$5.42	$12.07	$17.49	$314.82
	School	7	Sodium Enclosed	150	$3.50	$9.14	$12.64	$88.48
	School	18	Sodium Flood	400	$8.36	$13.52	$21.88	$393.84
	School	1	Sodium Enclosed	400	$8.36	$13.27	$21.63	$21.63
	School	1	Sodium Enclosed	70	$1.72	$8.32	$10.04	$10.04
	School	1	Sodium Cut Off	400	$8.36	$15.01	$23.37	$23.37
	School	1	Metal Halide Cut Off	400	$8.26	$20.80	$29.06	$29.06
	School	1	Sodium Cut Off	150	$3.50	$10.11	$13.61	$13.61
	School	1	Special Facilities					$108.11
		52					Group Cost	$1,054.14
441-149-6480-001	E Pen D	16	Sodium Cut Off	250	$5.42	$12.98	$18.40	$294.40
	E Pen D	25	Sodium Cut Off	100	$2.33	$9.12	$11.45	$286.25
	E Pen D	15	Sodium Cut Off	400	$8.36	$15.01	$23.37	$350.55
	E Pen D	40	Halide Enclosed	100			$4.14	$165.60
	E Pen D	23	Sodium Cut Off	50	$1.17	$9.67	$10.84	$249.32
	E Pen D	3	Metal Halide Flood	250	$5.42	$18.71	$24.13	$72.39
	E Pen D	4	Hald Spc Esplnd	175	$3.80	$28.75	$32.55	$130.20
	E Pen D	13	Sodium Decashield	400	$8.36	$20.21	$28.57	$371.41
	E Pen D	101	Sodium Enclosed	50	$1.17	$8.04	$9.21	$930.21
	E Pen D	90	Sodium Enclosed	70	$1.72	$8.32	$10.04	$903.60
	E Pen D	138	Sodium Enclosed	100	$2.33	$8.74	$11.07	$1,527.66
	E Pen D	194	Sodium Enclosed	150	$3.50	$9.14	$12.64	$2,452.16
	E Pen D	103	Sodium Enclosed	250	$5.42	$11.64	$17.06	$1,757.18
	E Pen D	27	Sodium Enclosed	400	$8.36	$13.27	$21.63	$584.01
	E Pen D	15	Sodium Flood	250	$5.42	$12.07	$17.49	$262.35
	E Pen D	14	Sodium Flood	400	$8.36	$13.52	$21.88	$306.32
	E Pen D	135	Sodium Post Top	100	$2.33	$9.12	$11.45	$1,545.75
	E Pen D	39	Halide Enclosed	250			$9.63	$375.57
	E Pen D	82	Halide Enclosed	70			$3.06	$250.92
	E Pen D	25	Halide Spc Hlbrk	175	$3.80	$25.75	$29.55	$738.75
	E Pen D	85	Sodium Decashield	25	$5.42	$14.35	$19.77	$1,680.45
	E Pen D	21	Sodium Cut Off	70	$1.72	$9.04	$10.76	$225.96
	E Pen D	30	Sodium Cut Off	150	$3.50	$10.11	$13.61	$408.30
	E Pen D	2	Hald Spc Esplnd	70	$1.72	$22.95	$24.67	$49.34
	E Pen D	1	Special Facilities					$577.01
		1241					**Group Cost**	**$16,495.66**

Street Light Inventory - CMP-Leased Units - January 4, 2016

Account Number	Group	Quantity	Type	Wattage	Delivery Cost	Lighting Equipment Cost	Unit Cost	Group Cost
441-149-7680-001	Peaks Isl	223	Sodium Enclosed	70	$1.72	$8.32	$10.04	$2,238.92
	Peaks Isl	2	Sodium Enclosed	100	$2.33	$8.74	$11.07	$22.14
	Peaks Isl	2	Sodium Flood	250	$5.42	$12.07	$17.49	$34.98
	Peaks Isl	20	Sodium Cut Off	70	$1.72	$9.04	$10.76	$215.20
		247					**Group Cost**	**$2,511.24**
441-149-7707-001	LTL DIMND	23	Sodium Enclosed	70	$1.72	$8.32	$10.04	$230.92
	LTL DIMND	1	Sodium Cut Off	70	$1.72	$9.04	$10.76	$10.76
		24					**Group Cost**	**$241.68**
441-149-7712-001	GRT DMND	5	Sodium Cut Off	70	$1.72	$9.04	$10.76	$53.80
	GRT DMND	28	Sodium Enclosed	70	$1.72	$8.32	$10.04	$281.12
	GRT DMND	4	Sodium Enclosed	100	$2.33	$8.74	$11.07	$44.28
	GRT DMND	3	Sodium Enclosed	50	$1.17	$8.04	$9.21	$27.63
		40					**Group Cost**	**$406.83**
441-149-7726-001	Cliff Isl	**43**	Sodium Enclosed	70	$1.72	$8.32	$10.04	$431.72
	Cliff Isl		Special Facilities					$20.94
							Group Cost	**$452.66**
441-150-0429-001	W PEN C	67	Sodium Cut Off	150	$3.50	$10.11	$13.61	$911.87
City Pole	W PEN C	33	Sodm Spc Halbrk	100	$2.33	$25.00	$27.33	$901.89
	W PEN C	4	Sodium Cut Off	400	$8.36	$15.01	$23.37	$93.48
	W PEN C	13	Sodm Spc Esplnd	250	$5.42	$30.36	$35.78	$465.14
	W PEN C	6	Sodium Decashield	400	$8.36	$20.21	$28.57	$171.42
	W PEN C	381	Sodium Enclosed	50	$1.17	$8.04	$9.21	$3,509.01
	W PEN C	4	Sodium Flood	400	$8.36	$13.52	$21.88	$87.52
	W PEN C	93	Sodium Enclosed	70	$1.72	$8.32	$10.04	$933.72
	W PEN C	208	Sodium Enclosed	100	$2.33	$8.74	$11.07	$2,302.56
	W PEN C	305	Sodium Enclosed	150	$3.50	$9.14	$12.64	$3,855.20
	W PEN C	82	Sodium Enclosed	250	$5.42	$11.64	$17.06	$1,398.92
	W PEN C	10	Sodium Enclosed	400	$8.36	$13.27	$21.63	$216.30
	W PEN C	14	Sodium Flood	250	$5.42	$12.07	$17.49	$244.86
	W PEN C	216	Sodium Post Top	100	$2.33	$9.12	$11.45	$2,473.20
	W PEN C	13	Halide Enclosed	250			$9.63	$125.19
	W PEN C	26	Halide Enclosed	70			$3.06	$79.56
	W PEN C	65	Sodium Cut Off	100	$2.33	$9.12	$11.45	$744.25
	W PEN C	12	Sodium Cut Off	250	$5.42	$12.98	$18.40	$220.80
	W PEN C	22	Sodium Cut Off	70	$1.72	$9.04	$10.76	$236.72
	W PEN C	77	Sodium Cut Off	50	$1.17	$9.67	$10.84	$834.68
City Pole	W PEN C	4	Sodm Spc Halbrk	100	$2.33	$25.00	$27.33	$109.32
	W PEN C	1	Metal Halide Flood	400	$8.26	$21.77	$30.03	$30.03
	W PEN C	1	Area Lighting				$21.38	$21.38
	W PEN C	1	Special Facilities				$671.35	$671.35
		1658					**Group Cost**	**$20,638.37**

Street Light Inventory - CMP-Leased Units - January 4, 2016

Account Number	Group	Quantity	Type	Wattage	Delivery Cost	Lighting Equipment Cost	Unit Cost	Group Cost
441-150-0434-001	East A	50	Sodium Cut Off	150	$3.50	$10.11	$13.61	$680.50
	East A	15	Sodium Cut Off	250	$5.42	$12.98	$18.40	$276.00
	East A	22	Sodium Cut Off	100	$2.33	$9.12	$11.45	$251.90
	East A	623	Sodium Enclosed	50	$1.17	$8.04	$9.21	$5,737.83
	East A	134	Sodium Enclosed	70	$1.72	$8.32	$10.04	$1,345.36
	East A	157	Sodium Enclosed	100	$2.33	$8.74	$11.07	$1,737.99
	East A	257	Sodium Enclosed	150	$3.50	$9.14	$12.64	$3,248.48
	East A	44	Sodium Enclosed	250	$5.42	$11.64	$17.06	$750.64
	East A	2	Sodium Enclosed	400	$8.36	$13.27	$21.63	$43.26
	East A	8	Sodium Flood	250	$5.42	$12.07	$17.49	$139.92
	East A	8	Sodium Flood	400	$8.36	$13.52	$21.88	$175.04
City Pole	East A	384	Sodium Post Top	100	$2.33	$9.12	$11.45	$4,396.80
	East A	86	Sodium Cut Off	50	$1.17	$9.67	$10.84	$932.24
	East A	41	Sodium Cut Off	70	$1.72	$9.04	$10.76	$441.16
	East A	3	Sodium Cut Off	400	$8.36	$15.01	$23.37	$70.11
City Pole	East A	9	Hald Spc Esplnd	175	$3.80	$28.75	$32.55	$292.95
	East A	1	Area Lighting				$42.12	$42.12
	East A	1	Special Facilities				$7,280.50	$7,280.50
		1845					**Group Cost**	**$27,842.80**
441-150-0448-001	West B	114	Sodium Cut Off	50	$1.17	$9.67	$10.84	$1,235.76
	West B	7	Sodium Flood	400	$8.36	$13.52	$21.88	$153.16
	West B	17	Sodium Cut Off	100	$2.33	$9.12	$11.45	$194.65
	West B	16	Sodium Cut Off	70	$1.72	$9.04	$10.76	$172.16
	West B	1	Sodium Cut Off	400	$8.36	$15.01	$23.37	$23.37
	West B	535	Sodium Enclosed	50	$1.17	$8.04	$9.21	$4,927.35
	West B	49	Sodium Enclosed	70	$1.72	$8.32	$10.04	$491.96
	West B	78	Sodium Enclosed	100	$2.33	$8.74	$11.07	$863.46
	West B	68	Sodium Enclosed	150	$3.50	$9.14	$12.64	$859.52
	West B	1	Sodium Enclosed	250	$5.42	$11.64	$17.06	$17.06
	West B	4	Sodium Flood	250	$5.42	$12.07	$17.49	$69.96
	West B	49	Sodium Post Top	100	$2.33	$9.12	$11.45	$561.05
	West B	5	Sodium Cut Off	150	$3.50	$10.11	$13.61	$68.05
	West B	1	Sodium Cut Off	250	$5.42	$12.98	$18.40	$18.40
	West B	1	Special Facilities				$68.09	$68.09
		946					**Group Cost**	**$9,724.00**
		6096	**Fixtures**				**Total Cost**	**Per Month** **$79,367.38**
								Per Year **$952,408.56**