

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF INDIANAPOLIS POWER & LIGHT )  
COMPANY ("IPL") FOR AUTHORITY TO INCREASE )  
RATES AND CHARGES FOR ELECTRIC UTILITY )  
SERVICE AND FOR APPROVAL OF: (1) ACCOUNTING )  
RELIEF, INCLUDING IMPLEMENTATION OF MAJOR )  
STORM DAMAGE RESTORATION RESERVE ACCOUNT; )  
(2) REVISED DEPRECIATION RATES; (3) THE )  
INCLUSIONS IN BASIC RATES AND CHARGES OF THE )  
COSTS OF CERTAIN PREVIOUSLY APPROVED )  
QUALIFIED POLLUTION CONTROL PROPERTY; (4) )  
IMPLEMENTATION OF NEW OR MODIFIED RATE )  
ADJUSTMENT MECHANISMS TO TIMELY RECOGNIZE )  
FOR RATEMAKING PURPOSES LOST REVENUES )  
FROM DEMAND-SIDE MANAGEMENT PROGRAMS AND )  
CHANGES IN (A) CAPACITY PURCHASE COSTS; (B) )  
REGIONAL TRANSMISSION ORGANIZATION COSTS; )  
AND (C) OFF SYSTEM SALES MARGINS; AND (5) NEW )  
SCHEDULES OF RATES, RULES AND REGULATIONS )  
FOR SERVICE )

OFFICIAL  
EXHIBITS

CAUSE NO. 44576

IURC  
INTERVENOR'S City  
EXHIBIT NO. 3  
10-1-15  
DATE REPORTER

IN THE MATTER OF THE INDIANA UTILITY )  
REGULATORY COMMISSION'S INVESTIGATION INTO )  
INDIANAPOLIS POWER & LIGHT COMPANY'S )  
ONGOING INVESTMENT IN, AND OPERATIONS AND )  
MAINTENANCE OF, ITS NETWORK FACILITIES )

CAUSE NO. 44602

CITY OF INDIANAPOLIS' SUBMISSION OF DIRECT TESTIMONY OF  
MELODY PARK

The City of Indianapolis, by Counsel, hereby submits the Direct Testimony of  
Melody Park in this Cause to the Indiana Utility Regulatory Commission.

Respectfully Submitted,

/S/ R.M. Glennon  
Robert Glennon, Atty. No. 8321-49

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Telephone: (317) 852-2723

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**VERIFIED DIRECT TESTIMONY OF MELODY PARK**

1    **Introduction**

2    **Q.     Please state your name, business address, and title.**

3    A.     My name is Melody Park, Chief Engineer & Director, Office of Sustainability for the  
4           City of Indianapolis, Department of Public Works, 200 E. Washington Street, Suite 2460,  
5           Indianapolis, IN 460204

6    **Q.     Please describe your educational and business experience.**

7    A.     I have a Bachelor of Science in Civil Engineering from Purdue University, 1992.

8           I am a Professional Engineer in Indiana, and Ohio. I have twenty years of experience in  
9           the public and private sectors leading teams, projects, and managing budgets that includes  
10          time as the Program Director for the Guam Power Authority. I was a Utility Coordinator  
11          at INDOT from 1996 to 1998. I was a Roadway Designer at RW Armstrong &  
12          Associates which includes roadway lighting design from 1998 to 2011. I was Program  
13          Manager Consultant for Guam Power Authority from 2011 to 2013 – working on  
14          Demand Side Management program, smart grid implementation, system upgrade for  
15          power plants, and accounting and budgeting process.

16                 Currently I am responsible for the development and execution of the  
17                 infrastructure capital programs for the City of Indianapolis and Marion County related to  
18                 transportation, storm water, and parks facilities. The City's infrastructure encompasses  
19                 over \$1 billion in respective transportation and storm water infrastructure, and 11,000

1 acres of parkland. Additionally, I am responsible for leading the City's Sustainability  
2 efforts wherein to date I have been involved in projects that saved the City millions of  
3 dollars and improved air, and water quality while simultaneously improving the quality  
4 of life for residents, businesses and visitors.

5 **Q. What is the purpose of your testimony in this proceeding?**

6 A. I will provide information to the Commission and other Parties in this proceeding  
7 regarding the importance of the requested LED street light fixture retrofit program which  
8 we call the "Brighter Indianapolis Program" and the importance of new LED tariffs that  
9 reflect the resulting savings.

10 **Q. How are you familiar with the matters described in your testimony?**

11 A. In the course of my work as Chief Engineer & Director, Office of Sustainability, I am  
12 regularly exposed to and work with these matters and areas of information. Working  
13 with other cities to investigate opportunities for LED conversion that reduce costs and  
14 improve the quality of life for all who enter the City of Indianapolis/Marion County. As a  
15 member of the Urban Sustainability Directors Network, LED conversion has been  
16 determined to be a priority and we have worked collectively to find a solution to this  
17 issue. I have participated in meetings with Dr. Kramer and Mr. Sommer and become  
18 familiar with pertinent matters regarding the requested LED retrofit program and  
19 resulting new LED tariffs.

1

2 **Where We Are**

3 **Q. What are the overall goals of Indianapolis as pursued by the Office of**  
4 **Sustainability?**

5 A. An important goal is to create new opportunities to reduce City operating expenses so  
6 that further improvements and benefits can be delivered to the people of Indianapolis.  
7 In order to create a sustainable community, we work hand in hand with businesses,  
8 community organizations, schools, and local government to meet the economic,  
9 environmental, and social needs of today while at the same time preserving this City to  
10 meet the needs of future generations.

11 **Q. What major challenges does the City of Indianapolis face?**

12 A. Additional infrastructure improvements are needed. Prior to 2010, the City of  
13 Indianapolis' infrastructure was neglected and in disrepair. With the sale of the sanitary  
14 wastewater and water utility system's to Citizens Energy Group, the City invested \$500  
15 million from 2010 thru 2013 into our growing infrastructure needs which included  
16 restoration of deteriorating thoroughfares, residential streets, sidewalks, bridges, and  
17 storm sewers. Even with this substantial investment, the City still needs a major and  
18 sustainable infusion of funds to bring the remaining infrastructure to fair condition. For  
19 purposes of example those infrastructure assets include over 7,000 lane miles of roadway  
20 that DPW is responsible for in the 400 square mile City/County footprint. The dollars  
21 required are:

- 1 • One-time investment of \$1.1 billion to bring entire transportation network to fair
- 2 condition.
- 3 • Need to invest \$150 million each year to maintain the network in fair condition.
- 4 • Total need in missing sidewalks along thoroughfares is approx. \$365 million.
- 5

6           With such demands on the City's budget, we must do more with less. Therefore,

7 Department of Public Works (DPW) has been searching for opportunities where the City

8 can save money without diminishing public service.

9           In addition to those challenges, the City is also looking for viable ways to

10 improve street light illumination of our thoroughfares, residential streets and

11 neighborhoods. The appropriations for streetlight expenses come from the same gas tax

12 revenues that repair roads, bridges, and build sidewalks.

13           The Department of Public Works is responsible for the street light bill, which

14 including traffic lights exceeds \$6 million annually. Department of Public Works

15 primary funding source for our many needs is gas tax revenue at approximately \$40

16 million annually but declining with more efficient and alternatively fueled vehicles. Less

17 than 2% of DPW revenues come from property taxes and are dedicated to specific use,

18 making it extremely difficult for DPW to contribute additional resources to street lights.

19 In short, Department of Public Works funds are insufficient to meet our infrastructure

20 needs.

21           Due to the cost of operating the street light system in Indianapolis, the City does

22 not install any additional streetlights. Currently, if it is determined that additional street

23 lights are needed in an area, lights are relocated from another non-critical location.

24 Lights may also be relocated from vacated streets, which is not a frequent occurrence.

1 Dealing with the cost of street lighting is a challenge. The savings from a LED fixture  
2 retrofit program with matching LED tariffs rates would help with that challenge.

3  
4 **Q. How would the City of Indianapolis' proposal to have new LED municipal street**  
5 **light tariff rates help with these infrastructure improvement efforts?**

6 A. As described by Mr. Sommer and Dr. Kramer, new LED street light tariffs would reflect  
7 the energy savings and lower O&M costs. Thus, any resulting reduction in the lighting  
8 expense paid to IPL could be used to help meet these challenges, particularly helping pay  
9 for the future installation of additional street lights. Mr. Sommer details the LED driven  
10 savings opportunities in his testimony and exhibits.

11 **Brighter Indianapolis LED Program**

12 **Q. Please describe the City's proposed Brighter Indianapolis LED retrofit program.**

13 A. To achieve the financial savings LEDs offer, to enhance public safety, promote urban  
14 renewal, further economic development, and obtain the other benefits LED street lights  
15 offer, the Brighter Indianapolis program would replace the old technology lights in IPL's  
16 service area with new LED fixtures. As described by Mr. Sommer the first streetlights to  
17 be retrofitted would be the most common fixtures, the approximate 60,000 cobra head  
18 fixtures. The initial phase of this program would be retrofit 20,000 of the cobra head HPS  
19 lights with new LED fixtures. Once all the 60,000 cobra heads are retrofitted LED  
20 replacement of other style old technology street lights would be addressed and would  
21 follow.

22 **Q. Where would the Brighter Indianapolis LED fixture program be first deployed?**

1 A. The new fixtures would first be place in areas where LEDs would most enhance public  
2 safety and urban renewal. As Dr. Kramer details, the improved quality of illumination  
3 from LED street lights would help enhance public safety, urban renewal, and economic  
4 development. Hence, we suggest the program first be deployed in the six Focus Areas in  
5 Indianapolis where Community groups, neighborhood watches, churches, police, social  
6 agencies, and others are actively working together to reduce crime. These Focus Areas  
7 have the highest crime rates in Indianapolis. While they hold only 4.7% of Indianapolis'  
8 population, they have 27% of City homicides and 30 % of non-fatal shootings. These six  
9 Focus Areas would be the first to have old street lights changed out to modern, better  
10 illuminating LED street lights. From there we propose that the Brighter Indianapolis LED  
11 fixture retrofit program be deployed near these six Focus Areas and in other older  
12 neighborhoods where the greatest safety improvement may be achieved. From there it  
13 would expand in the remaining areas and in a manner that would be most efficient and  
14 beneficial. As I noted above, any LED street light savings from reduced City electric bills  
15 could be used to add new street lights and poles where needed.

16 **Q. Should the Brighter Indianapolis Program to retrofit old street lights with new LED**  
17 **lights be limited to those streetlights for which IPL bills Indianapolis?**

18 A. No, the street light retrofit program should be applied to all appropriate streetlight  
19 configurations throughout IPL's service area, which is predominately Marion County /  
20 Indianapolis. To retrofit only those street lights billed to the City would create an  
21 Indianapolis patchwork of white and yellow / orange lighting, diminish the diverse  
22 benefits that LEDs bring, and disadvantage residents and businesses that do not have City  
23 billed lights in front of their property and in their neighborhood. Moreover, as explained

1 to me, IPL's street light system is old, fully depreciated, lights are maintained on failure,  
2 and the time is right for mass light LED retrofit.

3 **Q. Is there a streetlight Contract between the City and IPL?**

4 A. Yes there is. There are currently about 92,000 streetlights in Indianapolis. Of those  
5 approximately 29,000 are billed to the City under the Contract. The Contract is attached  
6 as Indianapolis Exhibit 3-A.

7 **Q. Do you have any final remarks?**

8 A. Yes. We at the Department of Public Works are actively looking for ways to improve  
9 conditions for the people of Indianapolis through efficiency, innovation, sustainability,  
10 and partnering with other Indianapolis stakeholders. On behalf of the people of  
11 Indianapolis, we would like to harvest new LED street light electric cost savings from the  
12 lower O&M cost and lower energy usage as described in detail by Mr. Sommer and Dr.  
13 Kramer while at the same time improve public safety, improve our neighborhoods, and  
14 enhance economic development. We hope the Commission, IPL, and other parties will  
15 support our effort to achieve these savings and benefits and in turn promote an even  
16 better place to live and do business for the people who live in, work in, and visit  
17 Indianapolis.

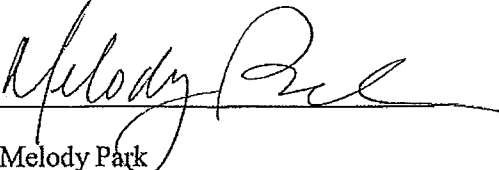
18 **Q. Does that conclude your testimony?**

19 A. Yes, at this time it does.



**VERIFICATION**

The undersigned, Melody Park, under penalty of perjury, affirms that she has read the foregoing testimony, and that the statements and attached exhibits therein contained are true to the best of her knowledge, information, and belief.

  
Melody Park

**CERTIFICATE OF SERVICE**

The undersigned certifies that a copy of the foregoing was served upon the following via electronic email or First Class, United States Mail, postage prepaid this 27<sup>th</sup> day of July 2015 to:

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/s/ Robert M. Glennon

Robert M. Glennon, Atty # 8321-49

IURC Cause Nos. 44576, 44602

Intervenor City of Indianapolis

Exhibit 3-A

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Don

**PUBLIC LIGHTING CONTRACT**

**of**

**Indianapolis Power &  
Light Company**

**with**

**City of Indianapolis**

July 15, 2011 to December 31, 2017

GREGORY A. BALLARD  
Mayor of the City of Indianapolis

RYAN VAUGHN  
President, City-County Council

009601

## PUBLIC LIGHTING CONTRACT

THIS AGREEMENT, made and entered into this 15<sup>th</sup> day of July, 2011, by and between the INDIANAPOLIS POWER & LIGHT COMPANY, One Monument Circle, Indianapolis, Indiana 46204, hereinafter called the COMPANY, and the CITY OF INDIANAPOLIS, County of Marion, State of Indiana, hereinafter called the CITY, by and through its Department of Public Works, acting for the City of Indianapolis, under and by virtue of the authority vested in it by the applicable laws of the State of Indiana,

WITNESSETH:

1. CONSIDERATION FOR SERVICES TO BE RENDERED:

The Company, in consideration of the payments hereinafter set forth, hereby covenants and agrees to furnish and supply said City of Indianapolis in its corporate capacity, with street lights of the number, kind and type hereinafter specified in the attached Exhibit A as of January 1, 2011, and with such additional street lights of the number, kind and type which hereafter may be ordered installed by the City, by and through any of its several Departments, hereinafter referred to as Department, when properly authorized by the Director of the respective Departments, and to furnish and supply energy for traffic control signals and other unmetered service; including maintenance, as specified herein, upon the conditions and stipulations and subject to the limitations as hereinafter set forth; and the City, in addition to any other consideration specified herein, expressly covenants and agrees that it will not use light or power for the above purposes from any other source during the term of this contract.

Any standby or auxiliary service required by the City of Indianapolis, or any service requested by the City of Indianapolis involving unusual capacity requirements or load characteristics, unusual investment on the part of the Company, or other abnormal conditions, shall be covered by an amendment to this contract commensurate with such conditions, and shall be subject to the approval of the Indiana Utility Regulatory Commission ("IURC").

2. COMPANY TO FURNISH EQUIPMENT:

That the Company shall furnish, for use in the performance of this contract, all the necessary materials, labor, plant, machinery and appliances, and shall construct, operate and maintain the same in such streets, avenues, alleys, subways and other public places within said City in such manner as the City may from time to time direct for the duration of this contract.

3. CITY TO FURNISH EQUIPMENT:

If the City elects to install, own and maintain, or cause to be installed and maintained, or if the City becomes responsible for the maintenance of, electric lighting facilities in and upon the highways, streets, avenues, alleys, subways and other public places, the Company covenants and agrees to furnish and supply the City with such electric service or services necessary to properly maintain controlled operation of said lighting facilities so as to be lighted on an average of approximately four thousand one hundred (4,100) hours per year, i.e., during the hours of darkness, the same as the lamps installed, owned, operated and maintained by the Company

009602

hereunder. Electric lighting facilities installed by the City shall be and remain the property of the City; electric lighting facilities installed by parties other than the City or the Company shall be and remain the property of such other parties.

In the event any lighting facility proposed to be installed by the City is to be located on one of the Company's poles or the supporting structure is to be installed within one of the Company's pole lines, the lighting facility shall be installed, owned, operated and maintained by the Company under the applicable rate for the type of lighting installed.

If the City elects to have the Company maintain City-owned lights and the City-owned lights are of a type the Company has agreed to maintain, which are described in Exhibit C attached hereto ("Company Stock Items") then the Company shall and hereby agrees to furnish labor and material for the necessary normal maintenance and repair of City-owned lighting facilities, which shall include the cleaning of globes, glassware, and relamping as provided in Section 7 of the Specifications attached hereto as Exhibit "B" (the "Specifications"), the replacement of globes, lamps and fuses whenever necessary, the repair of or replacement of defective ballasts and the repair, but not replacement, of defective wire or cable; provided, that the City-owned lighting to be maintained by the Company is installed in accordance with the applicable standards and subject to the approval of the Company. For any City-owned lighting facilities not included as a Company Stock Item in place as of the date of this Agreement, for which the City pays for Company maintenance, Company shall only be responsible to provide parts that are reasonably available to Company. Parts shall be deemed reasonably available if they are offered for sale by Company's main and/or secondary suppliers and are not offered at a premium price of more than 150% of the price of similar standard item. Should repair parts not be reasonably available, the Company shall notify City and City shall choose to supply the necessary part at its own expense, remove the light, or replace the light with a Company Stock Item. Should City elect to install City-owned lights which are not Company Stock Items, Company reserves the right to refuse to offer maintenance service. Said lights shall be billed as power only.

Major repairs and maintenance, including the repair or replacement of damaged poles, columns, wiring, cable, fixtures and/or other facilities and equipment, will be done and performed by the Company, upon the request of the City. Prior to the City's written request for any such major repairs and maintenance, the City may require a detailed estimate of the cost and expenses therefore, and when completed, the City may require a sworn statement from a duly authorized representative of the Company as to correctness of the costs and expenses set out in such statement. The Company shall be reimbursed by the City for a total cost of all labor, materials and other costs incurred by the Company in performing the work for the City, plus a percentage of the labor, material and other costs to cover engineering and overhead expenses. The amount to be paid by the City shall be due upon presentation of a bill therefore and shall be payable within thirty (30) days from date of the bill.

The City shall and hereby agrees to grant unto and secure for, the Company all rights, licenses, easements, permits at no expense, and authority necessary for access to and from any and all highways and /or private property upon which the City-owned lighting facilities and appurtenances are installed in order that the Company may properly perform all of the work and services required of the Company hereunder. Should City elect to install, own or maintain

electric lighting facilities in accordance with this Section, it shall do so only on a unit basis. A unit shall be defined as a lighting project, or a subdivision or a group of not less than ten (10) contiguous lights.

4. TERM OF CONTRACT:

The initial term of this contract shall begin at 12:00 noon on the 15 day of July, 2011, and end at 12:00 o'clock midnight on the 31st day of December, 2017; thereafter, the contract shall be deemed renewed automatically for successive terms of six (6) years each, unless either party hereto shall terminate the contract by giving the other party written notice at least 60 days prior to the end of any such term.

5. WORK IN STREETS AND ALLEYS – MOVING POLES:

The construction, reconstruction, repair and maintenance of any part of the Company's facilities and equipment as are now or hereafter may be located in any part of the streets, avenues, alleys and other public places, including the cutting into and repair of streets and pavement and the location or relocation of such facilities and equipment, shall be done subject to and in accordance with the approval of the City, which shall not unreasonably be withheld.

The Company agrees that it will perform all work in streets, avenues, alleys and other public places in accordance with the City's current reasonable standards for maintenance and reconstruction in the public right-of-way, including, but not limited to, the Department of Transportation's Right-of-Way Activity Manual.

The City reserves the right to order changes from time to time in the location of any part of the street lighting system or other equipment described in said specifications, whenever the same are obstructing public improvements proposed or approved by the City; provided that any such changes so ordered, except as otherwise provided in Section 6 of the Specifications, shall be made by the Company at the City's expense upon submission in advance of an estimate of such expense by the Company in the manner set out in Section 6 of the Specifications.

Relocations of standards, poles, guy stubs or other portion of the Company's street lighting system made at the request and expense of a person, or agency, not a party hereto, for good cause as determined by the City, shall be made by the Company with the approval of the City. If the City is to pay a portion of the expense of such change or relocation, the cost shall be estimated in advance by the Company, subject to the approval of the City; and the City, in the order directing the change, shall determine and fix the portion of such expense that the third party requesting such change shall pay in advance to the Company as a condition precedent to the same; the remainder of such expense, if any, the City hereby agrees to pay.

6. PROTECTION ON WORK:

That the Company shall not at any time open or encumber any more of any street, avenue, alley or other public place than shall be necessary to enable it to perform the work of laying its wires, conduits, cables and other equipment and appurtenances with proper economy and efficiency. Any opening or encumbrance of any such street, avenue, alley or other public place shall not be permitted to remain for a longer period than may be necessary in the judgment

of the City; and the Company shall effectually guard all such openings and encumbrances with barricades and lights to protect against accident or injury to any person by reason thereof.

7. CITY RESERVES RIGHTS IN STREETS:

That the City reserves to itself all rights and powers which are now, or hereafter may be, vested in the City concerning the regulation of its streets, avenues, alleys or other public places, to prevent obstructing, damaging or encumbering the same; to regulate and protect sewers; to control the digging into and excavating such streets, avenues, alleys or other public places and to prohibit injury to the same; the City further reserves full right to exercise any and all of its police powers at any time. Nothing contained herein shall be so construed in such a manner as to abridge in any way any of such rights and powers.

8. BILLING INSERTS:

The City may elect one time each year to have the Company insert into Company's customer account bills information sheets prepared by the City, at City's expense, subject to review by the Company and provided by the City at least twenty (20) days prior to the beginning of a billing cycle. The City's information sheet should involve a special event or be of general interest to all of Company's customers. The billing inserts shall be provided in a format acceptable to the Company. City shall work with Company to determine the availability of months for inserts at least six (6) months prior to the City's desired month. Company may not be able to accommodate a request for a specific month due to other obligations.

9. COMPANY TO CONFORM TO ORDINANCES:

That the Company shall, in all operations connected with the work of construction, reconstruction, repair and maintenance and the lighting herein contemplated and specified, or in furnishing current or light hereunder, and in all other matters appertaining hereto, conform to and obey all City ordinances or laws in any way controlling or limiting the actions of those engaged upon the work or which may affect the materials used. The Company shall take all necessary precautions for the protection of life and property.

10. CONTRACT SUBJECT TO LAWS AND ORDINANCES AND TARIFF:

That this contract, in all matters not herein specified or otherwise governed by Company's tariff as approved by the IURC (the "Tariff") and/or regulations published in the Indiana Administrative Code, shall be subject to the provisions of the Acts of the General Assembly of the State of Indiana and the Ordinances of the City-County Council of the City of Indianapolis in so far as they are applicable hereto.



11. LIABILITY:

The Company agrees to indemnify the City and hold it harmless for all loss, damage and expense caused by or resulting from the Company's negligence in the construction, reconstruction, repair and maintenance of its equipment used in the performance of this contract; provided, that the Company shall not be liable to the City or third persons for loss, damage or expense which results from (a) the failure of any lamp or lamps to be illuminated in any part of the Company's electric lighting installations, unless such failure is a result of negligence by the Company in installing the lamp or in maintaining the lamp as required by this contract; (b) the negligence of the City, its employees, contractors or agents; or (c) lighting levels which result from specifications in this contract which are below standards established by the Illuminating Engineering Society.

12. SPECIFICATIONS:

The contract is based upon the detailed specifications which are set forth and referred to herein as Exhibit B.

13. RATES FOR SERVICE:

The City shall pay to the Company for services covered by Tariff as full compensation for such services supplied pursuant to this contract and to the specifications hereinbefore referenced, the sums of money resulting from the application of the rates as ordered by the IURC. For services provided by Company not covered by Tariff, compensation for said services shall be per this Agreement. If compensation for a certain service is neither set out by Tariff or Agreement, then the parties shall mutually agree to compensation before such work is commenced.

14. BILLS PAYABLE:

The amount of money due the Company for performing service provided in this contract, shall be due and payable in monthly installments upon presentation of a bill therefore and shall be payable within thirty (30) days from date of such bill. It is further agreed and stipulated that all forfeitures accruing and due the City for any reason, from time to time, under this contract, shall first be deducted from the sums to be so paid by the City. Bills will be rendered monthly, by the Company to the City, for services supplied under this contract. Rates are net and are subject to a three percent (3%) collection charge when not paid to the Company within thirty (30) days after date of bill.

15. REMEDIES:

Pursuant to the Tariff, if it is determined that there has been an error in billing, either party shall be entitled to an adjustment to correct that error for up to one (1) year in arrears or to the known date of the error, which ever is shorter. This includes the City receiving credit for lamps not returned to operating condition within the time frames set out in this Agreement during which time the City has continued to pay for service. However, the Company expressly agrees that in no event will the Company attempt to collect any underpayment under this Agreement that predates January 1, 2006.

16. SUBJECT TO INDIANA UTILITY REGULATORY COMMISSION:

This contract shall be subject in all respects, where so provided by law, to the rules, regulations and orders of the IURC, or any other body established by law succeeding to the power now or hereafter exercised by the IURC.

17. ASSIGNMENT:

The rights, powers and privileges granted by the terms of this contract shall be binding upon and shall inure to the benefit of the parties, their successors and assigns; provided, that neither party shall assign, transfer or sublet this contract without the written consent of the other party.

18. EXECUTION:

The officers of Company have been duly authorized to execute this agreement and the City of Indianapolis has authorized the execution of the same by and through its said Department of Public Works by proper action and approval of its Board of Public Works City-County Council, and Mayor.

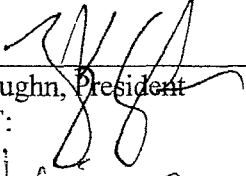
19. NONDISCRIMINATION:

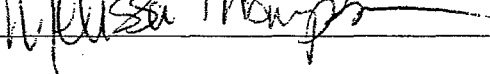
The Company and its subcontractors shall not discriminate against any employee or applicant for employment to be employed in the performance of this Agreement, with respect to her or his hire, tenure, terms, conditions, or privileges of employment, or any matter directly or indirectly related to employment, because of her or his race, sex, sexual orientation, gender identity, color, national origin, ancestry, age, disability, or United States military service veteran status. Breach of this section shall be regarded as a material breach of this Agreement.

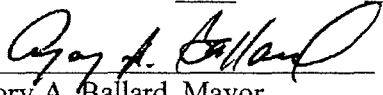
The Company periodically engages in competitive bidding for the underlying services described in this Agreement. Consistent with the Company's policies, the Company shall encourage Minority Business Enterprises and Women's Business Enterprises to participate in the Company's competitive bidding process at such time that a contract to perform such work is put out for bid. In the event the Company bids the contract under this Agreement, the Company agrees to attend a City of Indianapolis Department of Minority and Women Business Development outreach event prior to the bidding of the project.



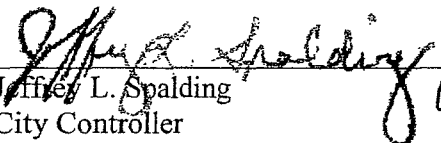
APPROVED BY THE CITY-COUNTY  
COUNCIL THIS 14 DAY OF June, 2011

  
\_\_\_\_\_  
Ryan Vaughn, President  
ATTEST:

BY:   
\_\_\_\_\_  
Melissa Thompson, Clerk of the City County Council

APPROVED THIS 15<sup>th</sup> DAY OF July, 2011  
  
\_\_\_\_\_  
Gregory A. Ballard, Mayor  
City of Indianapolis

APPROVED FOR AVAILABILITY OF FUNDING [ ]  
APPROVED FOR EXECUTION [X]

  
\_\_\_\_\_  
Jeffrey L. Spalding  
City Controller

2mm  
1/6/11

6/16/11

**EXHIBT "A"**  
**SUMMARY OF LEASED LIGHTS BY THE CITY OF INDIANAPOLIS**  
**as of 1/1/2005**

RATE	COST	TYPE	WATTS	TYPE	DESCRIPTION OF RATE	SERV	SERV	SERV	SERV	SERV	SERV	TOTALS
		RATE		LIGHT		#1	#2	#3	#50	#107	#145	
1	\$ 294.36	MU1	1000	MV	POLE	12			1			13
3	\$ 440.52	MU1	1000	MV	METAL COLUMN	5						5
4	\$ 163.56	MU1	400	MV	POLE	2133	11		604			2748
5	\$ 163.56	MU1	400	MV	TRAFFIC COLUMN	13						13
6	\$ 231.96	MU1	400	MV	METAL COLUMN	213	28		167			408
7	\$ 116.28	MU1	175	MV	POLE	967	94		8233			9354
9	\$ 191.16	MU1	175	MV	METAL COLUMN	18	169		1804			1991
10	\$ 188.12	MU1	175	MV	POST TOP		12		22			34
12	\$ 194.76	MU1	400	HPS	POLE	1300	3		64	7		1374
13	\$ 194.76	MU1	400	HPS	TRAFFIC COLUMN	384			20			384
14	\$ 340.92	MU1	400	HPS	METAL COLUMN	1748	1	6	113		10	1878
15	\$ 159.96	MU1	250	HPS	POLE	2044	27		245	2	9	2327
16	\$ 159.96	MU1	250	HPS	TRAFFIC COLUMN	159			23			182
17	\$ 229.68	MU1	250	HPS	METAL COLUMN	515	74		290			879
18	\$ 127.20	MU1	150	HPS	POLE	593	42	1	448	12		1098
19	\$ 127.20	MU1	150	HPS	TRAFFIC COLUMN	17			1			18
20	\$ 199.20	MU1	150	HPS	METAL COLUMN	71	82		90	169		412
21	\$ 109.08	MU1	100	HPS	POLE	202	20	1	1853			2076
22	\$ 109.08	MU1	100	HPS	TRAFFIC COLUMN				1			1
23	\$ 183.96	MU1	100	HPS	METAL COLUMN	2	57		358			417
24	\$ 183.12	MU1	100	HPS	POST TOP	4	19		88			89
25	\$ 286.08	MU1	100	HPS	POST TOP WASH	40	36		201			277
26	\$ 220.44	MU1	150	HPS	POST TOP BALL	16						16
27	\$ 327.72	MU1	150	HPS	POST TOP WASH	284	36		98			418
31	\$ 954.36	MU1	5-150	HPS	METAL COLUMN - CLUSTER W/BALAST	23			52			75
32	\$ 735.80	MU1	1-150 & 4-100	HPS	METAL COLUMN - CLUSTER W/BALAST	28						28
33	\$ 372.24	MU1	400	HPS	METAL COLUMN - BRONZE	265						265
34	\$ 189.92	MU1	400	HPS	TRAFFIC COLUMN - BRONZE	41			8			47
35	\$ 261.00	MU1	250	HPS	METAL COLUMN - BRONZE	7						7
37	\$ 181.92	MU1	175	MV	FIBERGLASS COLUMN				2			2
38	\$ 174.60	MU1	100	HPS	FIBERGLASS COLUMN	1	9		129			139
39	\$ 189.84	MU1	150	HPS	FIBERGLASS COLUMN	13	38		506	12		569
40	\$ 220.44	MU1	250	HPS	FIBERGLASS COLUMN	468	8		123			595
41	\$ 316.08	MU1	400	HPS	FIBERGLASS COLUMN	381	14		5			380
44	\$ 163.56	MU1	175	MV	WALL MOUNTED	109			5			114
45	\$ 167.88	MU1	150	HPS	WALL MOUNTED	100						100
46	\$ 231.24	MU1	250	HPS	FIBERGLASS COLUMN - SQUARE		38		2			40
48	\$ 307.56	MU1	2-250	HPS	FIBERGLASS COLUMN - SQUARE		4					4
49	\$ 202.08	MU1	175	MV	WALL MOUNTED	43			8			51
50	\$ 349.32	MU1	400	HPS	WALL MOUNTED	85						85
51	\$ 213.72	MU1	150	HPS	WALL MOUNTED	42						42
54	\$ 123.96	MU1	400	MV	CUSTOMER OWNED WITH MAINT	22						22
55	\$ 145.44	MU1	250	MV	CUSTOMER OWNED WITH MAINT	85						85
57	\$ 268.08	MU1	5-100	MV	CUSTOMER OWNED WITH MAINT				74			74
59	\$ 135.48	MU1	400	HPS	CUSTOMER OWNED WITH MAINT	212						212
60	\$ 109.56	MU1	250	HPS	CUSTOMER OWNED WITH MAINT	40						40
61	\$ 84.72	MU1	150	HPS	CUSTOMER OWNED WITH MAINT	8			78			86
65	\$ 281.88	MU1	400	HPS	FIBERGLASS COLUMN - SQUARE		4					4
72	\$ 158.16	APL	150	HPS	POLE	2						2
86	\$ 154.32	APL	400	MV	POLE		44					44
87	\$ 158.64	APL	150	HPS	POLE		12					14
88	\$ 208.92	APL	250	HPS	POLE		19	5		11		35
89	\$ 239.88	APL	400	HPS	POLE	2	19		11	7		39
96	\$ 42.24	APL	NA	NA	- WOOD POLE WITH OVERHEAD FEED -				1	3		4
140	\$ 229.68	APL	250	HPS	FLOOD - FIRST FIXTURE					4		4
141	\$ 340.92	APL	400	HPS	FLOOD - FIRST FIXTURE		1					1
142	\$ 281.88	APL	400	MH	FLOOD - FIRST FIXTURE		5					5
157	\$ 208.80	APL	250	HPS	ADDITIONAL FIXTURE - FLOOD		1			6		7
159	\$ 98.36	APL	400	MH	ADDITIONAL FIXTURE - FLOOD		4					4
184	\$ 75,443.28	STL	NA	NA	EXCESS MATERIAL FOR CIRCLE CENTRE MALL	1						1
185	\$ 787.20	STL	150	HPS	PEDESTRIAN LIGHT FOR CIRCLE CENTRE MALL	31			25			56
<b>COLUMN TOTALS</b>						<b>12707</b>	<b>927</b>	<b>13</b>	<b>15789</b>	<b>235</b>	<b>19</b>	<b>29680</b>

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EXHIBIT B  
SPECIFICATIONS

1. STREET LIGHTING SYSTEM:

The present installation of street lighting equipment as shown on Exhibit A which is attached hereto and, by reference, made a part hereof, shall constitute the street lighting system upon which the foregoing Public Lighting Contract (hereinafter referred to as the "Contract") is based, and the City agrees that the same shall be the basis on which payment shall be made under the Contract to the Company, until additions or retirements have been made as hereinafter provided. The Company agrees to furnish area maps and a listing showing pole number, map section, installation date, location, type of mast arms, type of light, last date of service and rate and other mutually agreeable information as technology may permit. An updated set of maps and listing shall be furnished annually during the term of this Contract by electronic file in a format compatible with the City's GIS system.

2. DISCONTINUANCE OF SERVICE:

The City shall have the right to discontinue at any time the use of any light served under the Contract after not less than thirty (30) days' advance written notice to the Company of its intention to discontinue any such light. Except as otherwise stated herein, the Company shall be reimbursed by the City pursuant to the Tariff. Prior to the City's written order for any such discontinuance of service, the City may require a detailed estimate of the costs and expenses, and, when completed, the City may require a sworn statement from a duly authorized representative of the Company as to the correctness of the costs and expenses set out in such statement.

3. ADDITIONAL LIGHTS – COMPANY-OWNED LIGHTS:

(a) The Company shall promptly (as defined in Paragraph c of this Section No. 3) erect and place in operation such number of additional Company Stock Item lights on wood poles and supplied from overhead circuits, as the City may from time to time order and locate in writing.

In ordering additional overhead lights and extensions, due consideration shall be given to the method in which the lighting circuits are laid out and to the character, size and type of lights being used on the circuits and in the district involved.

(b) The Company shall promptly, (as defined in Paragraph c of this Section), erect and place in operation such number of additional Company Stock Item lights on metal poles and supplied from underground circuits, known as standards, as the City may from time to time order and locate in writing.

(c) Individually controlled residential or intersection lights shall be installed within ninety (90) calendar days of the date the order is received by the Company, unless easements are required to make the installation. In cases where easements are required, such lights shall be installed within one hundred five (105) calendar days of receipt of order, unless

009611

necessary easements cannot be obtained through negotiation with property owners; in such event, the Company's only obligation with respect to such order is to notify the City in writing of such fact. Thereafter the City shall either assume the responsibility for obtaining the necessary easements or order the light cancelled or relocated. The time of completion for continuous lighting installations shall be agreed upon by the parties at the time the City orders the installation.

The above dates specified in Paragraph c are subject to extension in case of unusual circumstances or conditions beyond the reasonable control of the Company, such as Acts of God, major catastrophes, strikes, riots, hostilities foreign or domestic, unavailability of material, abnormal weather, City constructions schedules, or any other happenings not entirely within the Company's control. In the event the time period cannot be met, the City will be notified via e-mail prior to expiration of said time period giving reason for delay and anticipated day of completion of the installation.

#### 4. LAMPS AND ACCESSORIES:

Except as otherwise noted, lighting shall be by means of high pressure sodium, or such other type of lamp as may be mutually selected and approved by the City and Company. Such lamps shall be placed on, supported on or suspended from poles or standards with suitable brackets or mast arms, and the wires supplying electrical energy thereto shall be placed either overhead or underground.

The lamps to be furnished shall be of standard types, mutually selected and approved by the City and Company, and, when operated at the amperage, voltage and wattage specified by the manufacturer, the light output of each lamp shall not be less than the amount specified and guaranteed by the manufacturer.

The lamps, globes, reflectors, housing and other accessories shall be of utility grade of the respective types. The parties further agree to investigate new lighting technologies as they become available and to agree to use these new technologies when the parties mutually agree that the use of those technologies is both reasonable and desirable.

#### 5. CONTROL OF LIGHTING:

All lamps installed under and pursuant to the terms and conditions of the contract shall be lighted on an average of approximately four thousand, one hundred (4,100) hours per year, i.e., during the hours of darkness, from approximately fifteen (15) minutes after sunset to approximately fifteen (15) minutes before sunrise, it being understood, however that the control of such lighting may, at the Company's option, be by manual operation or by an approved mechanical or electrical device selected by the Company.

#### 6. CHANGES IN LOCATION OF LIGHTS AND SIZE OF LAMPS:

Upon written order of the City, the Company shall change the size of lamps in any standards or overhead pendants, and will also, upon written order of the City, relocate any lights, including equipment pertaining thereto, located in the streets, avenues, alleys or other public places; provided, however, that for all such changes of lamps and relocation of lights or other

equipment, the Company shall be reimbursed by the City for the total cost of labor, material and other costs necessary to accomplish such changes and relocations, plus a percentage of the labor, material and other costs for engineering and overhead; provided further, that the Company, upon written order of the City, shall relocate and/or remove fifty (50) light structures each year during the term of this contract without expense to the City. Such relocates and/or removal shall not exceed One Hundred Thousand Dollars (\$100,000.00) as adjusted per annum for inflation. Prior to the city's written order for such installations and changes, the City may require a detailed estimate of the costs and expenses therefore, and, when completed, the City may require a sworn statement from a duly authorized representative of the Company as to correctness of the costs and expenses set out in such statement.

## 7. MAINTENANCE AND OPERATION

Tariff prices for operating standard and overhead lights cover only normal operating and maintenance requirements, which are defined as follows:

Company will furnish necessary electrical energy for operating such standards and overhead lights; it will paint each light standard owned by the Company when deemed necessary by Company and City Representatives, except permanently finished standards such as aluminum and concrete; it will furnish lamp renewals whenever necessary; it will furnish labor and material for emergency repairs necessary to maintain service; it will replace or repair any of its defective facilities and equipment in accordance with the terms set out in Paragraph 8(a) of these Specifications; and it will restore lights and equipment owned by the Company to normal operating condition in case of trouble or accident.

The Company will clean globes and replace all lamps covered by this contract on an as needed basis.

The Company shall upon request submit maintenance records to the City showing the luminaries serviced. To accomplish the requirements of maintenance and operation and carry out all provisions of the contract, the Company will furnish a skilled operating organization to provide service in an adequate and reasonable manner.

## 8. OUTAGES:

(a) When the outage is due to failure of a lamp, said lamp will be replaced within two (2) working days after such fact has been reported to or discovered by the Company. When the failure or outage is due to other than the lamp, said repair will be completed within seven (7) working days after such fact has been reported to or discovered by the Company. These time periods are barring natural disasters, acts of God or the inability of Company to gain safe access. If the Company cannot perform these repairs within the designated time frames, Company shall give City a report explaining the delay and giving the estimated date of repair.

(b) The employees of both the Company and City-County Government will report to the Company as soon as practicable, all outages observed or known. The Company



shall maintain a record of all such outages, stating the number and locations of any lights extinguished or not burning, the time when each light was reported extinguished or not burning and the time the light was relighted. Said record shall also state the cause, if known, of each said light being extinguished or failing to burn.

(c) When by reason of any order or requirement of federal or state governments, the use of electric energy for street lighting is limited or prohibited, or street lighting is prohibited in toto or for any given number of lamps, then no payment for electrical energy shall be made by the City for such lamps as are not burning during the period of the order. If the order of any governmental, or other authority, limits and restricts lighting during certain hours of the night, the payment under the contract shall be adjusted upon a basis to be agreed upon by the City and the Company, or determined by the IURC.

#### 9. JOINT USE OF POLES AND CONDUITS:

The Company, in order to avoid multiplicity of poles and conduits in the streets, avenues, alleys and other public places, so far as it is safe and practicable and not in conflict with any restriction of the City-County Council or any Act of the General Assembly of the State of Indiana or order of the IURC, shall, upon written request of the City, permit joint use of all or any of its poles and conduits, in any street, avenue, alley or other public place, by the City for street signs and traffic signal control circuits, or by other public utility companies, upon terms mutually agreeable to those affected.

The City shall have the right to place and remove street signs on any standard or pole at any time during the life of the contract. The placing and removal of said signs shall be done at the City's expense. Certain poles and structures are incompatible with certain sign mounting. The City shall not mount on these poles.

Such attachments to the poles, standards and fixtures of the Company placed thereon by or at the direction of the City, shall be made and maintained by the City, at its own expense, in accordance with standard specifications of the Company for doing such work, and such attachments shall be made in such manner as will neither conflict with the use of said poles, standards and fixtures by the Company nor interfere with the working or use of its wires thereon and/from time to time placed thereon. The City shall, at its own expense, upon not less than thirty (30) days advance written notice from the Company, change, alter, improve, repair, renew or remove said attachments in such manner as the Company may direct.

In conjunction with special events of general public interest or as a part of a general street decorative plan, the City or an approved non public entity may install banners or other decorative elements on Company-owned facilities at the expense of City or its approved entity, so long as said installation is done in compliance with all applicable manufacturer's standards, IPL guidelines, and with written consent from the Company.

The City shall indemnify and save harmless against any and all damage or loss that may result to the equipment and/or property owned or used by the Company and from and against any and all legal and other expense, claims, costs, losses, suits or judgments for damages or injuries resulting to persons or property by reason of the use or maintenance of the City's attachments to

the poles, standards or fixtures of the Company, or by reason of negligent acts or omissions of the agents or employees of the City, while engaged in the work of placing, maintaining or renewing attachments on or removing attachments on or removing attachments from said poles, standards or fixtures.

In the event it is necessary to replace a pole or poles upon which the City has made attachments under the contract, because of street improvement, or because the pole is deteriorated, or because the load on said pole or poles has become greater than is safe for the pole to support, the City shall, at its own expense, transfer the attachments from the old to the new pole or poles within ten (10) days after being requested, in writing, to do so by the Company.

Use of Company's conduits by the City, as hereinabove set out, shall conform to the standard specifications of the Company for such use, and the use thereof by the City shall not interfere with the use of said conduits by the Company.

The installation and maintenance of any and all traffic signal control circuits in Company's conduits shall be at City's expense.

In the event it is necessary or desirable, in the opinion of the Company, for the City to remove, replace repair or relocate any equipment installed by the City in Company's conduits, said equipment shall be so removed, replaced, repaired or relocated by the City, at its own expense, within thirty (30) days after being requested, in writing, to do so by the Company.

#### 10. IMPROVEMENTS IN SERVICE:

The City and shall have the right to require the Company to make use of any apparatus, appliances or devices, that are an advancement or improvement in the art or service of lighting over the facilities now existing or newly installed according to the Contract and in use during the term thereof in the City, whether such improvement be in the interest of economy, increased illumination, safety, improved appearance or otherwise. The Company shall, at the City's request or as the Company becomes informed thereof, furnish the Board with detailed information concerning any such apparatus, appliances or devices, including cost of installation, operation and maintenance, operating characteristics and any other data requested.

In the event that the City wishes to install new facilities that are not then addressed in Company's Tariff, Company will work with the IURC to establish a Tariff rate to address the City's chosen facilities. The IURC approved Tariff for the chosen facilities shall apply. The amount to be paid by the City to the Company shall be due and payable within thirty (30) days from the date the Company presents a bill therefore to the City.

#### 11. ELECTROLYSIS:

Reasonable provision shall be made and maintained by the Company to protect the pipes, conduits and other property in the streets or other public places, belonging to the City or to any other public utility or to any abutting property owners or occupants, from electrolysis caused by current or currents of electricity of the Company.

12. STANDARDS OF PERFORMANCE, TESTS AND PENALTIES:

The voltage and amperage supplied to each lamp shall be such as to maintain the lamps according to the standard requirements of the manufacturers.

For City-owned facilities, the City may at any time request the Company to make tests as to the voltage and/or current supplied to any lamp or group of lamps and appurtenances thereto, in the presence of a representative of the City; and the next following working day after the making of such tests, the Company shall report to the City the results of such tests.

In the case of a dispute between the City and the Company as to the accuracy of any meter or other instrument used in making test or measurements of the Company's service, said instrument may be tested either in the City's laboratory, in the presence of a representative of the Company, or in the Company's laboratory, in the presence of a representative of the City, at the option of the City, or the City and the Company may agree to have such instruments tested by an outside laboratory of recognized standing.

The City shall indemnify and hold the Company harmless from all injuries and damages to persons or property by reason of said inspections or tests, except such injuries or damages as may be caused by the negligence of the Company.

13. VOLTAGE AND CHARACTER OF SERVICE:

The Company shall specify the voltage and character of the electric service to be supplied, and it may, at any time thereafter, change the characteristics of the service if it deems such change necessary to safeguard a regular and uninterrupted supply of electricity or to better the conduct of its business. It is agreed, however, that when apparatus owned, operated, and maintained by the City is affected, the Company will give the City reasonable notice of such contemplated change, and the City will adapt its apparatus accordingly.

14. RATE ADJUSTMENT CLAUSE:

Any extra expense incurred by the Company due to the imposition of any new, additional or increased tax or permit fees by the federal, state or any municipal government, the result of which directly or indirectly increases the cost of service supplied under the Contract, shall be assumed by the City, unless such assumption is contrary to law; any reduction in expense due to any of the aforesaid conditions which results in reducing the cost of service supplied under the Contract shall be credited to the City.

In the event of any extra expense or credit of the nature specified in the preceding paragraph, the Company shall adjust the charges to the extent that such extra expense or credit is attributable to any increase or decrease in the cost of service provided under the Contract, and the City shall be obligated to pay such adjusted charges as though they were made a part of said rates.

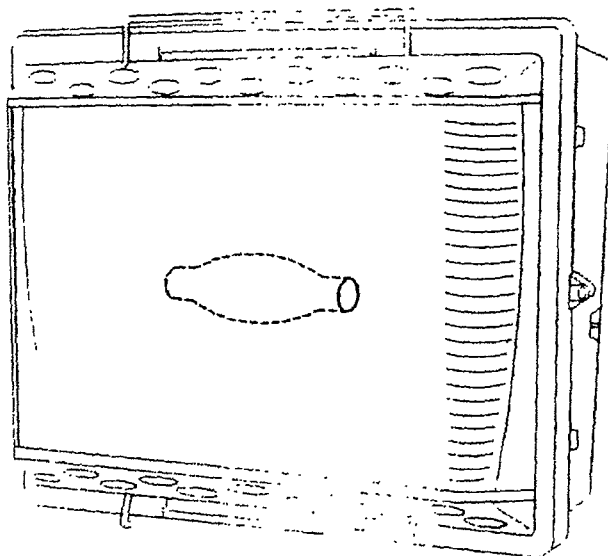


**EXHIBIT 'C'**  
**COMPANY STOCK ITEMS**

DRAWING NAME	PAGE #
WALL-MOUNT UNDERPASS FIXTURE _____	1
18 FT. FIBERGLASS COLUMN WITH TRADITIONARE FIXTURE _____	2
18" FIBERGLASS WASHINGTON STYLE COLUMN WITH SHROUD AND ACHORN FIXTURE _____	3
20" BRONZE FIBERGLASS COLUMN WITH BALL FIXTURE _____	4
38" FIBERGLASS COLUMN WITH ARM _____	5
41" FIBERGLASS COLUMN WITH ARM _____	6
38" SQUARE FIBERGLASS COLUMN WITH SHOEBOX FIXTURE _____	7
30" ROUND ALUMINUM COLUMN WITH ARM _____	8
40" ROUND ALUMINUM COLUMN WITH ARM _____	9
PHOTO CONTROL MOUNTING _____	10
M-400 FIXTURE _____	11
M-250A2 FIXTURE _____	12
PROPOSED - TWIN 150 W. HPS WASHINGTON STYLE _____	13

INDEX

009618



Type Light	Annual Cost	Rate
175 watt MV - - - - ● - -	\$163.56 (4100 hrs.)	44
175 watt MV - - - - ● - -	\$302.08 (8760 hrs.)	49
150 watt HPS - - - - ● - -	\$187.88 (4100 hrs.)	48
150 watt HPS - - - - ● - -	\$213.72 (8760 hrs.)	51
400 watt HPS - - - - ● - -	\$349.32 (8760 hrs.)	50

**WALL-MOUNTED UNDERPASS FIXTURE**

PAGE 1

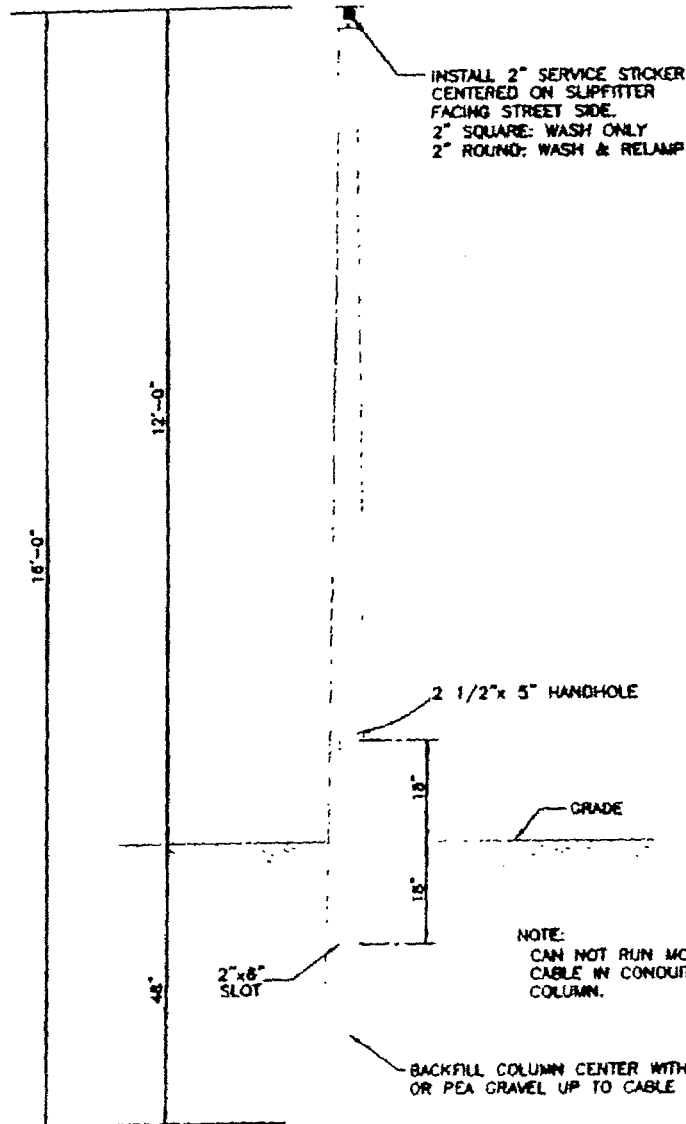
009619



Standard

Standard

Type Light	Annual Cost	Rate
100 watt HPS TRADITIONAIRE - 0 -	\$183.12	24
175 watt MV TRADITIONAIRE - 0 -	\$186.12	10



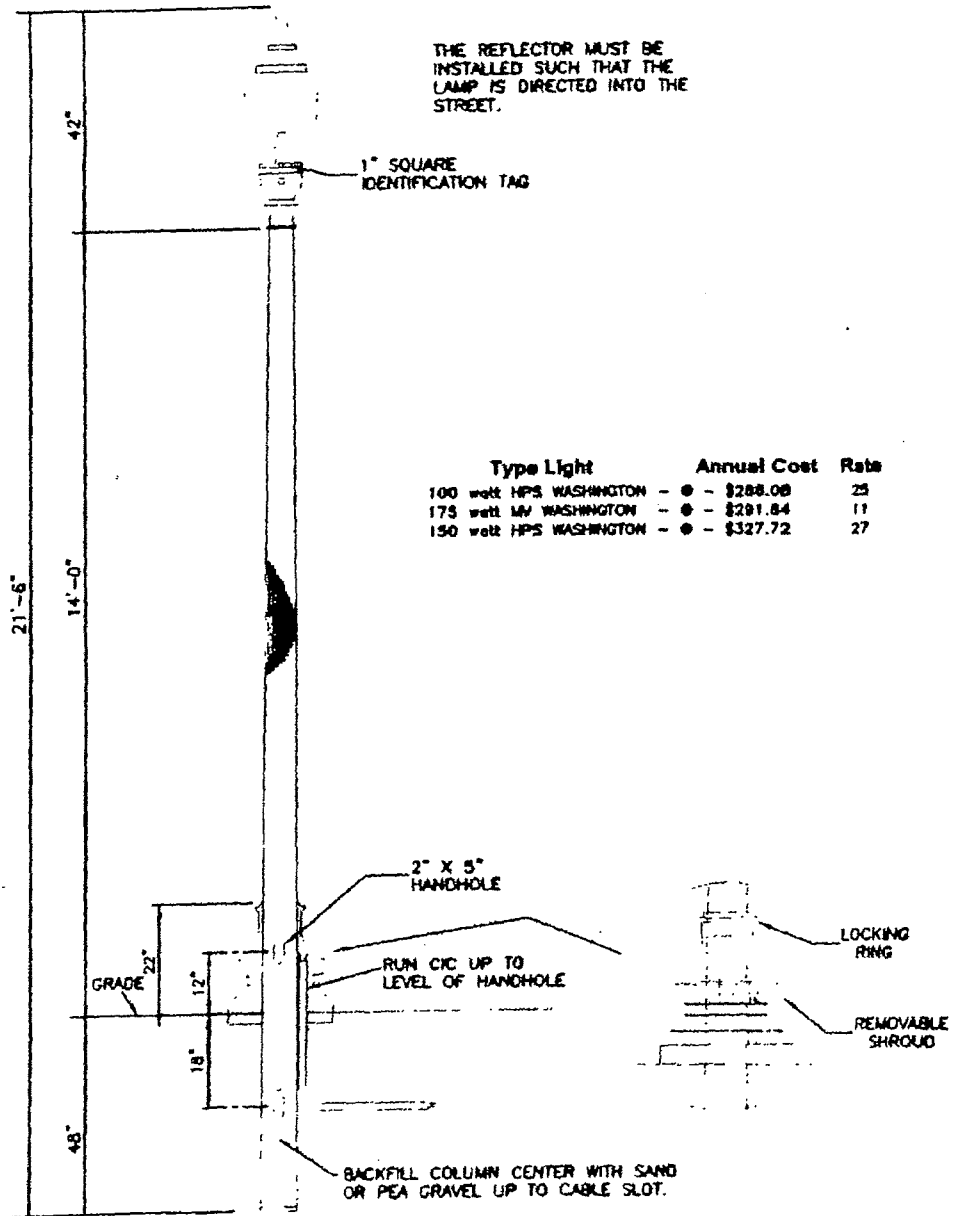
16 FT. FIBERGLASS COLUMN  
WITH TRADITIONAIRE FIXTURE



THE REFLECTOR MUST BE  
INSTALLED SUCH THAT THE  
LAMP IS DIRECTED INTO THE  
STREET.

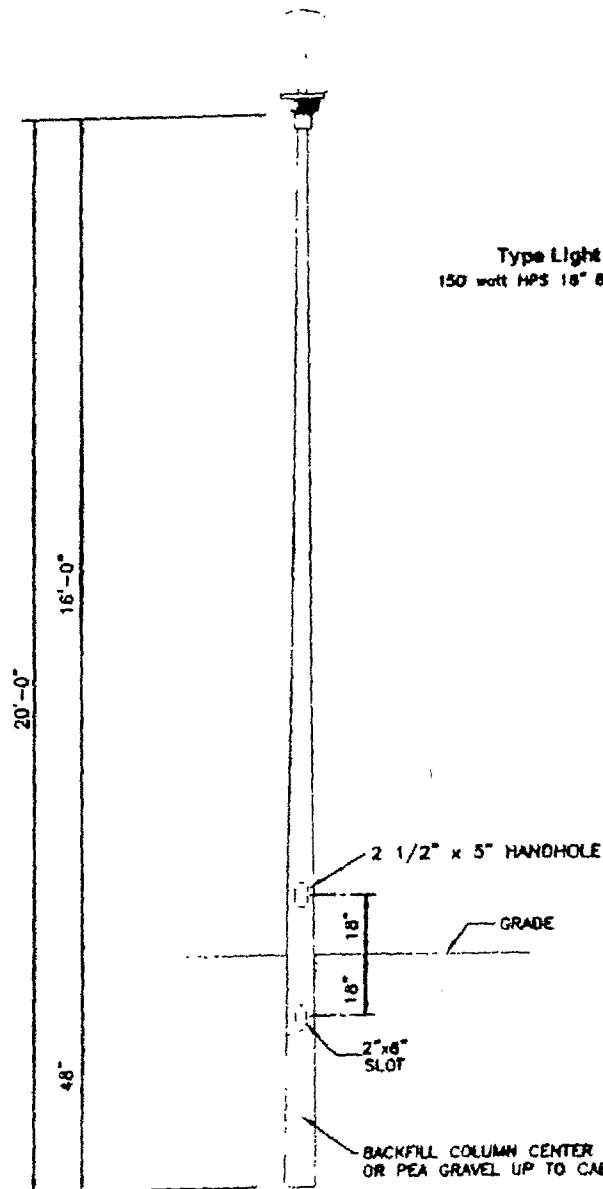
1" SQUARE  
IDENTIFICATION TAG

Type Light	Annual Cost	Rate
100 watt HPS WASHINGTON -	\$288.08	23
175 watt MV WASHINGTON -	\$291.84	11
150 watt HPS WASHINGTON -	\$327.72	27



**18' FIBERGLASS WASHINGTON  
STYLE COLUMN WITH SHROUD  
AND ACHORN FIXTURE**





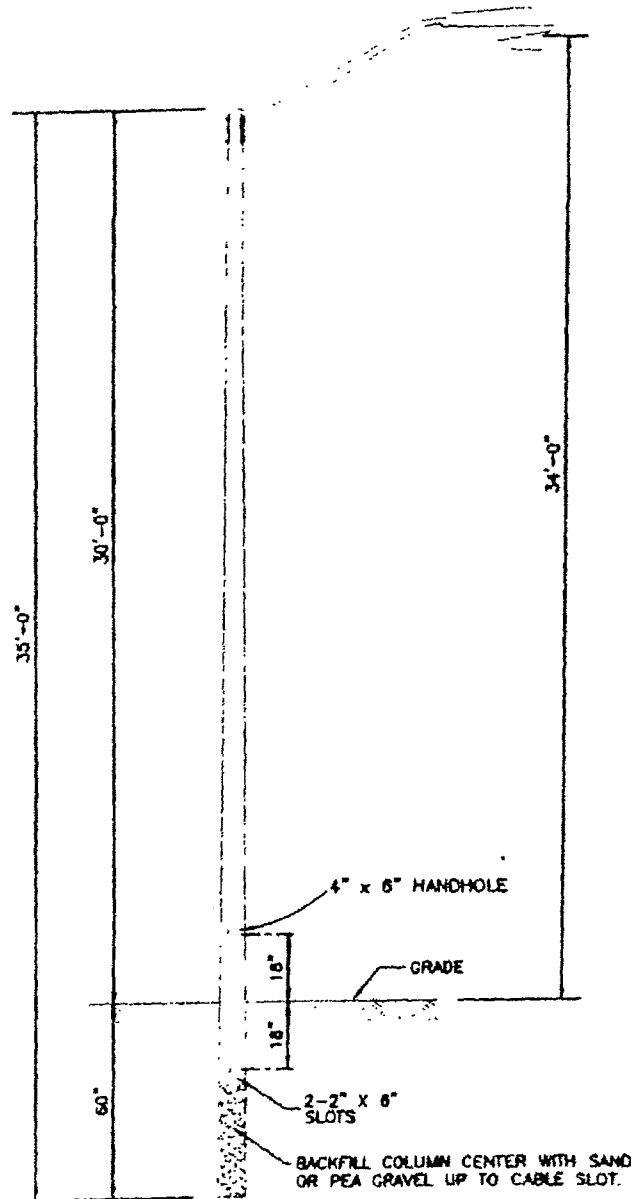
Type Light	Annual Cost	Rate
150 watt HPS 18" BALL - @ - -	\$220.44	28

NOTE:  
CAN NOT RUN MORE THAN ONE  
CABLE IN CONDUIT INTO THIS  
COLUMN.

**20' BRONZE  
FIBERGLASS COLUMN  
WITH BALL FIXTURE**

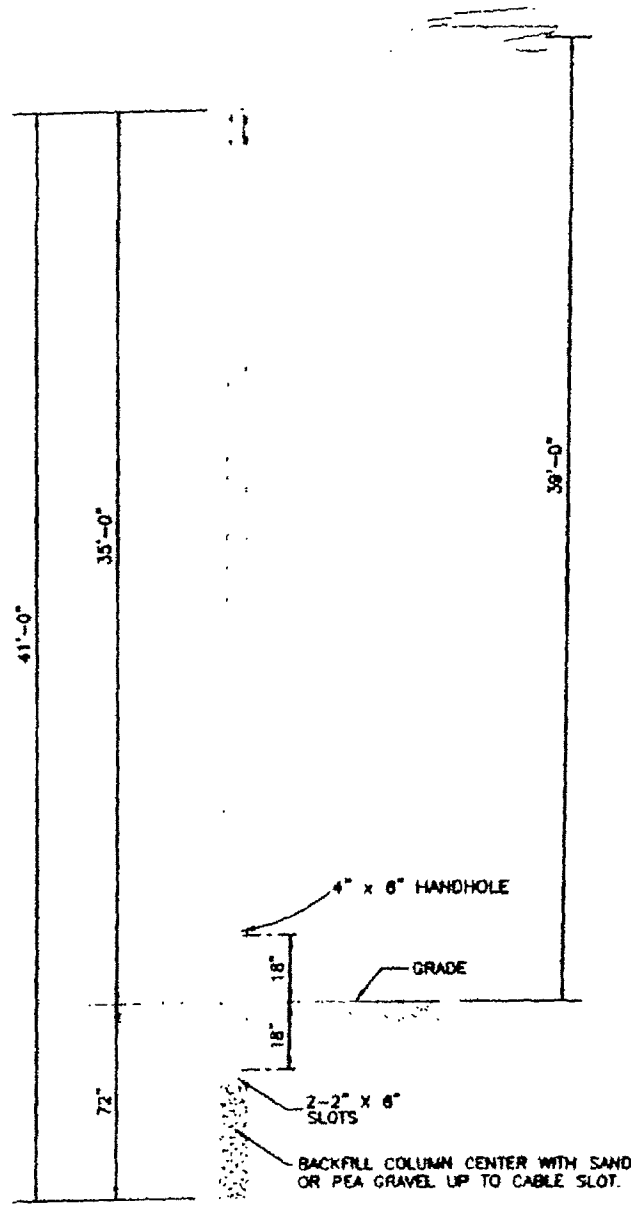
PAGE 4

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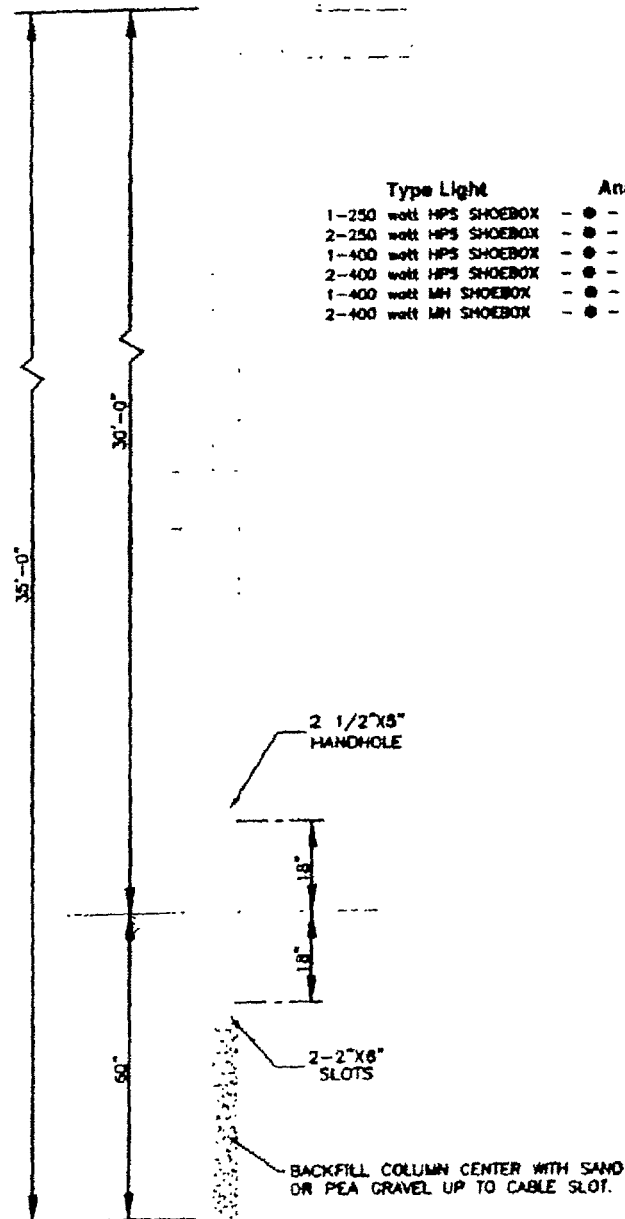
Type Light	Annual Cost	Rate
175 watt MV FIBERGLASS - ● -	\$181.82	37
100 watt MPS FIBERGLASS - ● -	\$174.00	38
150 watt MPS FIBERGLASS - ● -	\$189.84	39

**35 FT.  
FIBERGLASS COLUMN  
WITH ARM**



Type Light	Annual Cost	Rate
175 watt MW FIBERGLASS - • - -	\$181.82	37
100 watt HPS FIBERGLASS - • - -	\$174.60	38
150 watt HPS FIBERGLASS - • - -	\$189.84	39

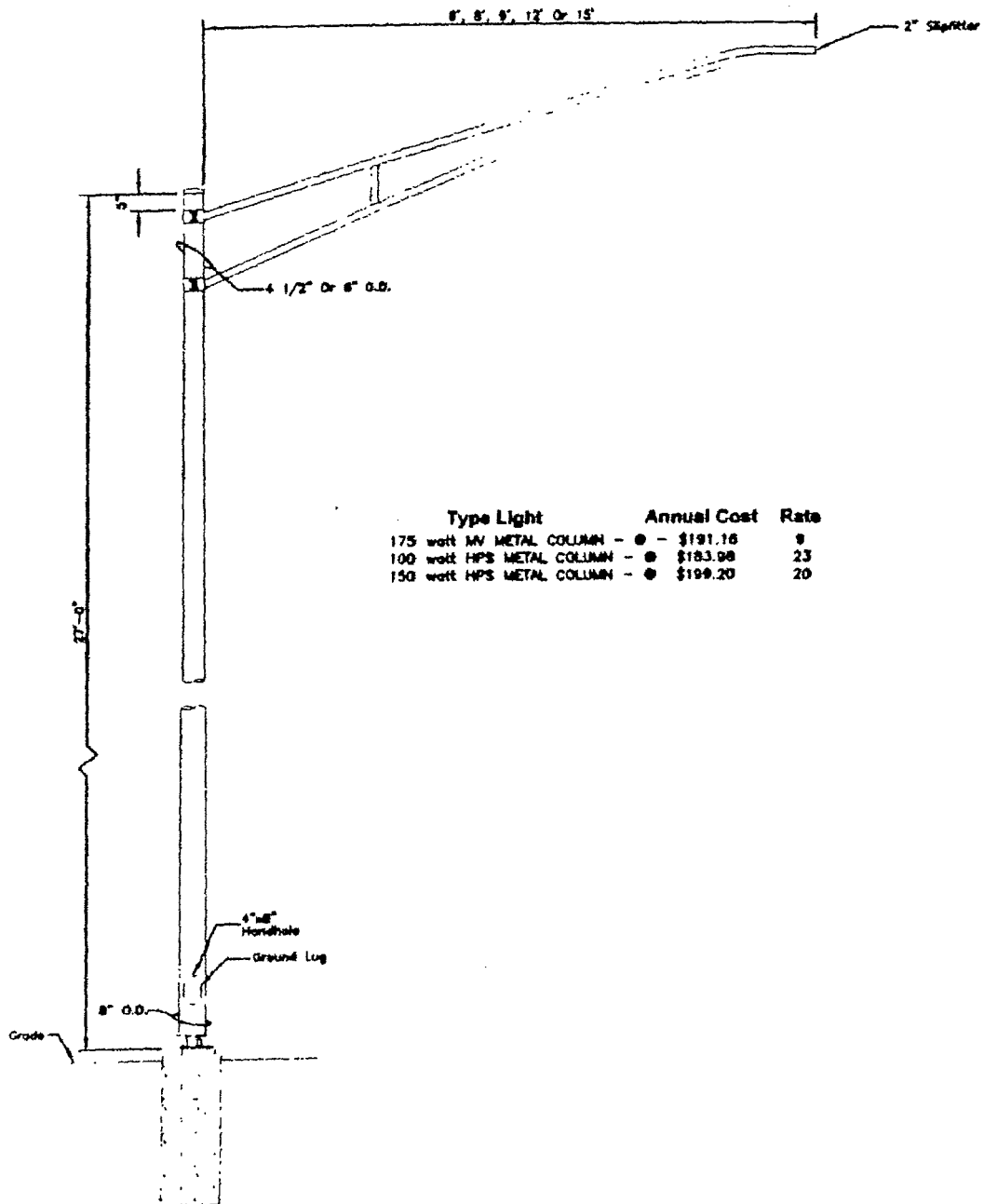
**41 FT.  
FIBERGLASS COLUMN  
WITH ARM**



Type Light	Annual Cost	Rate
1-250 watt HPS SHOEBOX	- ● - \$231.24	48
2-250 watt HPS SHOEBOX	- ● - \$307.56	48
1-400 watt HPS SHOEBOX	- ● - \$281.88	65
2-400 watt HPS SHOEBOX	- ● - \$378.24	66
1-400 watt MH SHOEBOX	- ● - \$288.72	42
2-400 watt MH SHOEBOX	- ● - \$381.80	43

35' SQUARE FIBERGLASS COLUMN  
WITH SHOEBOX FIXTURE

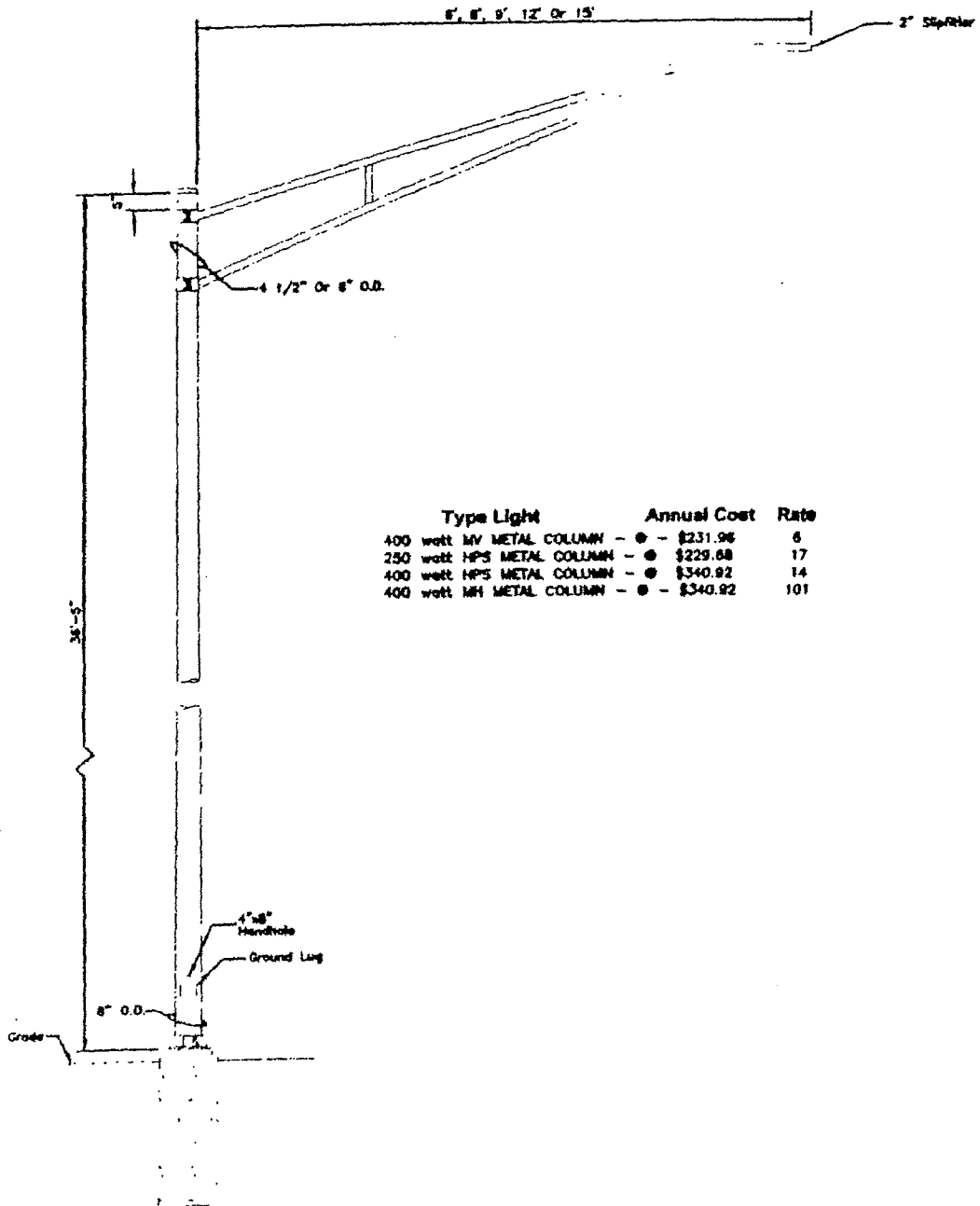
009625



Type Light	Annual Cost	Rate
175 watt MV METAL COLUMN - ● -	\$191.16	9
100 watt HPS METAL COLUMN - ● -	\$183.98	23
150 watt HPS METAL COLUMN - ● -	\$199.20	20

30 FT. ROUND ALUMINUM  
COLUMN WITH ARM

009626



Type Light	Annual Cost	Rate
400 watt MV METAL COLUMN - ● -	\$231.96	6
250 watt HPS METAL COLUMN - ● -	\$229.68	17
400 watt HPS METAL COLUMN - ● -	\$340.92	14
400 watt MH METAL COLUMN - ● -	\$340.92	101

40 FT. ROUND ALUMINUM  
COLUMN WITH ARM

009627

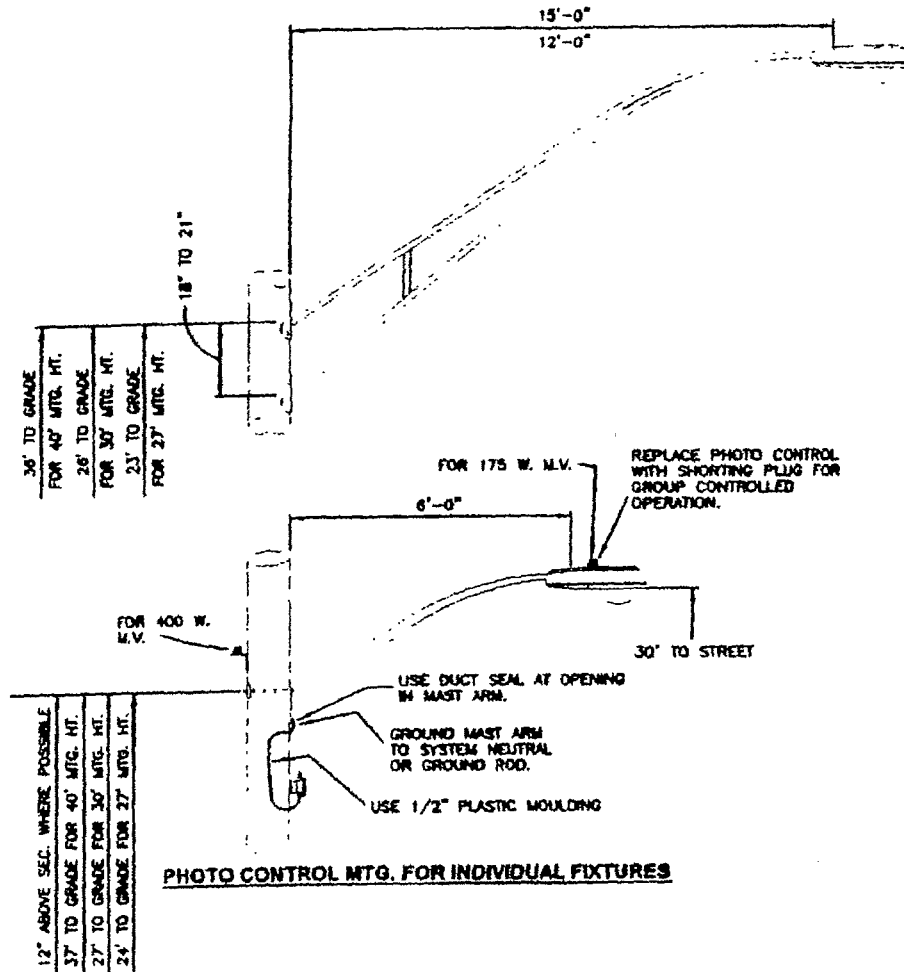
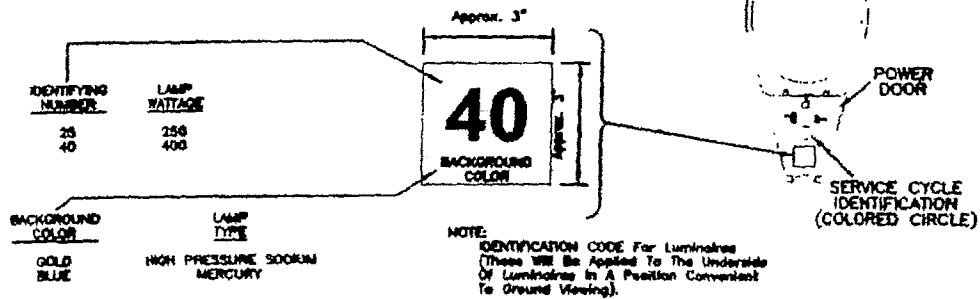
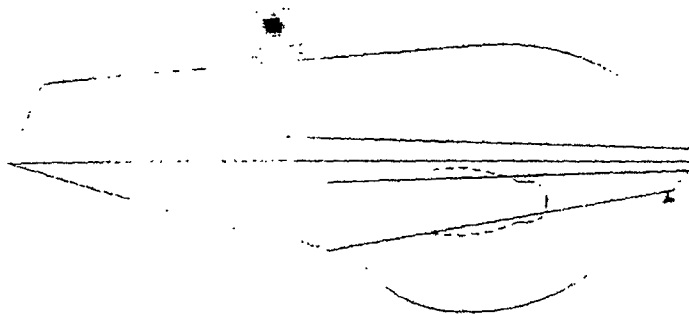


PHOTO CONTROL MTG. FOR INDIVIDUAL FIXTURES

Wood Poles		
Type Light	Annual Cost	Rate
100 watt HPS	\$109.08	21
150 watt HPS	\$127.20	18
250 watt HPS	\$159.88	15
400 watt HPS	\$194.78	12
175 watt MV	\$116.28	7
400 watt MV	\$183.58	4
1000 watt MV	\$294.38	1
400 watt MH	\$194.78	100

## PHOTO CONTROL MOUNTING

009628

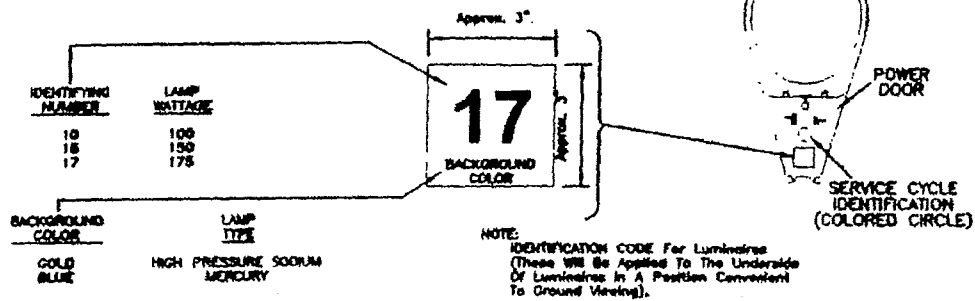
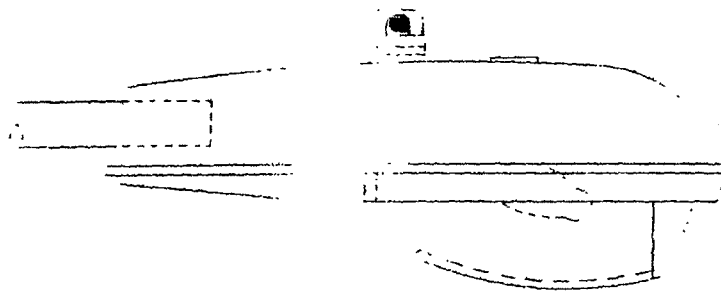


M-400 FIXTURE

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009629

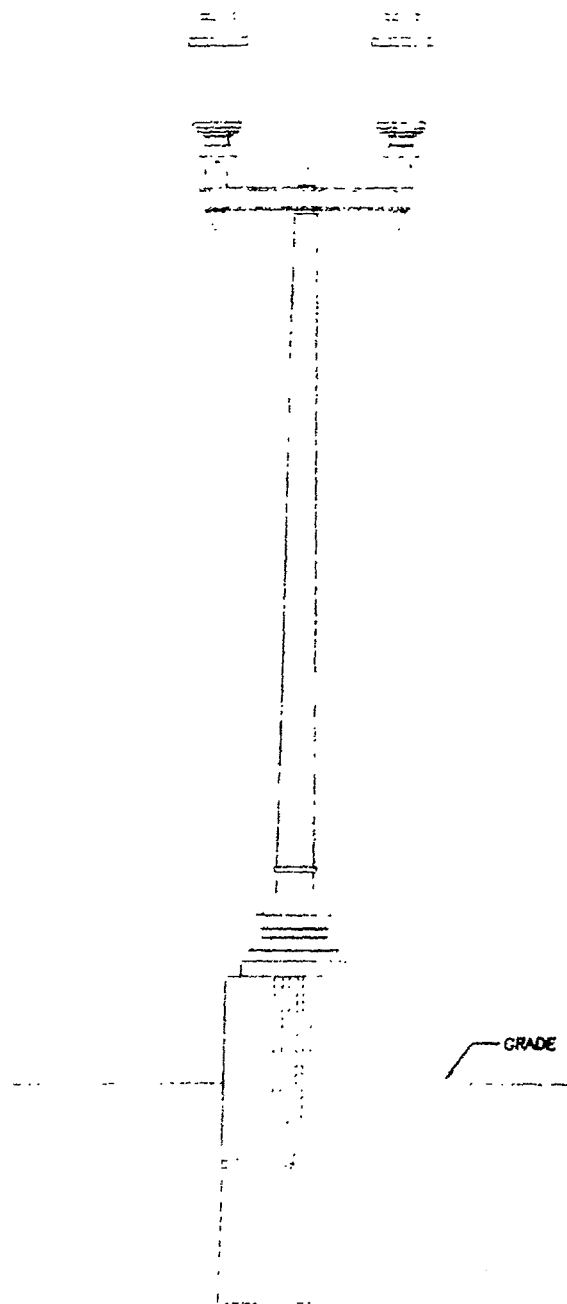




M-250A2 FIXTURE

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009630



**PROPOSED  
TWIN 150 W. HPS WASHINGTON STYLE**

009631