



## Georgia Avenue NW Dedicated Bus Lane from Barry Place to Florida Ave NW

### SOLICITATION QUESTIONS AND RESPONSES

AMENDMENT 4

Solicitation No.: DCKA-2014-B-0062

Federal Aid Project No. NH-1405 (021)

1. **Document: Bid Forms and Proposal; Page number: 7; Section: Schedule of Items; Questions:** Line No. 0600: has two different items, Raised Pavement Markers (616030) and Thermoplastic Pavement Symbols (616057). There are no RPM's shown on plans and cannot determine what type of symbol item is referencing. There are items in the bid for arrows, bicycle symbols and letters. There are no other symbols shown on the plans.

*Consider only the Pay Item 616 057 - Thermoplastic Pavement Symbol. Disregard the "Pay Item 616 030 – Single-Faced White Raised Reflective Pavement Markers".*

2. **Document: Bid Forms and Proposal; Page number: 7; Section: Schedule of Items; Questions:** Line No. 0610: has two different items, Raised Pavement Markers (616030) and Removable Preformed Arrows (616073).

*Consider only the Special Pay Item 616073 – Removable preformed Pavement Marking Arrow. Disregard the "Pay Item 616 030 – Single-Faced White Raised Reflective Pavement Markers".*

3. **Document: Bid Forms and Proposal; Page number: 7; Section: Schedule of Items; Questions:** Line No. 0650: has two different items, Thermoplastic Pavement Markings, 8 inch (616048) and Thermoplastic Pavement Markings, 24 Inch (616053). There is no 8 inch thermoplastic on plans.

*Consider only Special Item 616053 – Thermoplastic Pavement Marking, 24 Inch White. Disregard the "Pay Item 616 030 – Thermoplastic Pavement Marking, 8 inch".*

4. **Document: Bid Forms and Proposal; Page number: 7; Section: Schedule of Items; Questions:** Line No. 0690: 15,200 lf 4 inch temporary paint seems out of proportion for the size of project.

*There will be a need to mark the pavement twice. Before and after the red bus pavement installation. Those two pavement marking phases explain the increase in quantity observed in the Bid form and Proposal. See specification # 67 - page 74 for explanation of phasing.*



5. **Document: Special Provisions; Page number: 34; Specification 53. Removal of Existing Parking Meters; Questions:** Measure & Payment states that the removal of existing parking meters shall be incidental to contract unit price for common excavation, but there is a specific item (0390) for the removal of existing parking meter. Please confirm that this work will be measure and paid separate from common excavation.

*Specification 53. Removal of Existing Parking Meters – Measure & Payment should be modified to read as follow:*

**MEASURE AND PAYMENT-** *The unit of measure will be per Each. Payment will be made at the contract unit price per Each. Payment will include all labor, materials, tools, equipment, and all incidentals necessary to complete the work.*

6. **Document: Drawings; Page number: 35; Section: MT-3; Questions:** All MOT/Construction Phases with the exception of Phase 1, Stage 2 & 3 call for the adjacent travel lane to be utilized as temp. sidewalk. This pedestrian detour may not be feasible as the contractor would need a minimum work zone of 9ft for equipment (Dump Trucks, Stake body, etc.) and concrete delivery trucks. Please advise if the MOT sequence in Phase 1, Stage 2 & 3 are suitable for all other phases of construction.

*Phases 1, stage 2 and 3 are not suitable for all other phases of construction. Construction activities including excavation and removal and delivery of materials shall be accommodated while conforming to the MOT requirements for pedestrians and vehicles. At a minimum, 3 traffic lanes and pedestrian walkways shall be maintained at all times during construction as depicted on MOT plans.*

7. **Document: Special Provisions; Page number: 74; Specification 67. High Friction Surface Treatment (Red Bus Lane); Questions:** The proposed schedule to be followed has a time period of 32 weeks. Please advise if this is inclusive of 300 Calendar Days stated in SP 17. Construction Completion Time. As 32 weeks would be 224 Calendars and would leave all remaining work prior to the completed regular bus lane installation to 76 Calendar Days.

*The project shall be completed within the 300 calendar days. The specification # 67 page 74 proposes a schedule for red bus lane pavement installation. After the initial completion of the regular bus lane installation, there is six weeks period to monitor the operation. After this time, the contractor will have two weeks to install the HFST. These days are included in 300 calendar day. The Contractor may disregard activities noted in weeks 18, 24 and 32.*

8. **Document: Special Provisions; Page number: Section: Asphalt Cement Index adjustment; Questions:** Is there a provision for asphalt cement index adjustment in the contract or are contractors required to include the risk? Please advise.



*The Asphalt Cement Index adjustment is described in the DDOT Standards Specifications 2009. Please refer to section 401.18.*

9. **Document: Bid Forms and Proposal; Page number: Section: Schedule of Items; Questions:** Line Item 0250, Pay Item 402 012 – Superrpave Surface Course 12.5 mm which has a quantity of 2250 TONS. If we are only overlaying 2” of Georgia from Sta 11+ 25 to Sta. 29 + 75, the bid quantity is 1000 tons overstated. Please advise.

*The quantity for item 402012 reflects the volume of work to be done. The quantity of 2250 TONS should be maintained.*

10. **Document: Bid Forms and Proposal; Page number 1: Section: Schedule of Items; Questions:** Line 0020 Pay item Number 000 110. Please advise/provide location of the red Bus Lane Pavement Overlay. Is it delineated clearly on the plans? Please confirm.

*The red bus Lane Pavement overlay starts where marked “Bus only Lane”. Not specifically mentioned on the drawings. Refer to drawings sheets 29 to 33. From Sta 12+00 to Sta 26+75 outer southbound and northbound lanes where marked “BUS ONLY LANE” should be considered limits for red bus lane Pavement surface installation.*

11. **Document: Bid Forms and Proposal; Page number: Section: Schedule of Items; Questions:** Please confirm the radius for granite curb.

*The Georgia Avenue NW project is a streetscape Job. Therefore no change in existing granite curb radius. Please, refer to project drawings and Pay item description.*

12. **Document: Bid Forms and Proposal; Page number: Section: Schedule of Items; Questions:** Reference to bid Item # 0250 – Superrpave Surface Course , 12.5 mm . this is vague and there does not seem to be a better material description in the specification documents. Please advise whether this is a DC 70-22, 64-22, 76-22 or some other mix.

*Bid Form line # 0250 – Pay Item 402012 – TON - Superrpave Surface Course, 12.5 mm is DDOT Standard Pay Item . The full Item description is included in Summary of Quantities. For material and mix design, refer to DDOT Standards Specifications for Highways and Structures 2009. Please check section 402.01, 402.02 and 402.03.*

13. **Document: Bid Forms and Proposal; Page number: 8; Section: Schedule of Items; Questions:** Item No. 0740, Pay Item 616 150 – Repair of Damaged Major Traffic Control Devices. The measure and payment underneath the specifications referenced in the contract documents state that "The District will insert an estimate for this work in the Bid Forms and Proposal. No action is required of the bidder." Please provide the estimated cost for this item.



*The pay item 616 150 – Repair of Damaged Major Traffic Control Devices - Lump Sum - will be a lump sum with the unit price of \$5,400.*

**14. Document: Bid Forms and Proposal; Section: Schedule of Items.**

*Change in quantity: Pay Item 609 200 – PCC Wheelchair/Bicycle ramp – New construction - Each: replace quantity of 27 by quantity of 31.*

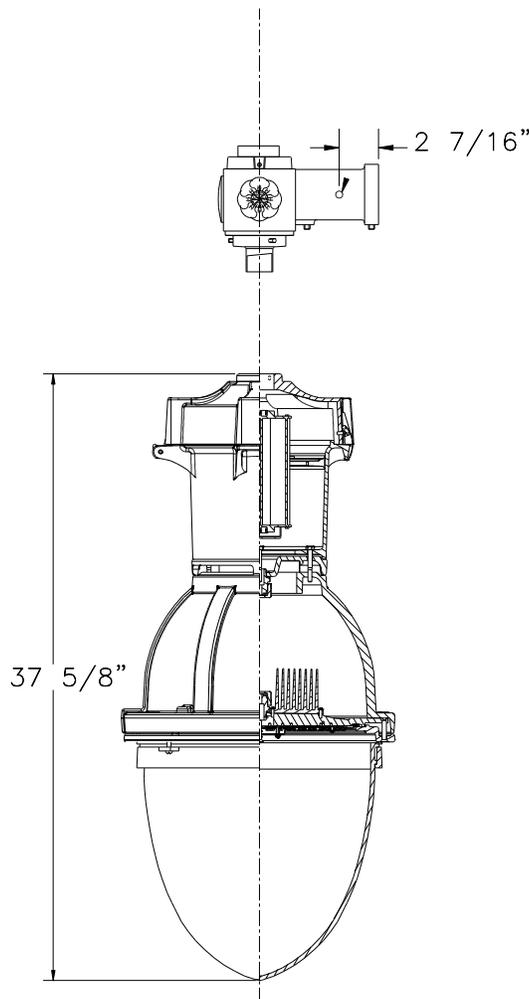


**15. Document: Special Provisions. Replace Section of Specification**

*Replace Specification 57 – page 51 – section 12 with the following specifications for 150 W LED Tear Drop.*

**K804 FARAD PENDANT FIXTURE**

**Written Specification**



**LIGHT SOURCE**

Light engine shall include an array of Cree X-Series high power LED's (light emitting diodes). The emitters shall be mounted to a metal core circuit board using SMT technology. The LED's and circuit boards shall then be mounted to a high performance heat sink which is vented to the outside ambient air to provide dynamic airflow for cooling the system. The emitters shall be so constructed to provide a minimum system efficacy of 70 lumens per watt and continue to provide at least 70% of their initial light output after a minimum of 50,000 hours continuous use. The fixture will be available in 100, 120, 150 and 200 watt.

**OPTICS**

External light control shall consist of high precision refractive lenses mounted above the LED emitter arrays in such a way to achieve optimum uplight control. The optical lenses shall also control horizontal light distribution so that Type II, III or V IESNA distribution patterns are achieved.

**LENS**

The K804 pendant will include a rippled acrylic deep dish lens. The deep dish globe shall be moulded of rippled acrylic, Acrylite Plus Acrylic Polymer, or equiv., having a minimum thickness of 0.090". The lens is secured by means of a cast A319 aluminium

holding ring that is sealed to provide an IP66 Ingress rating. Additionally, a continuous circular gasket rated for 270 degree Fahrenheit and must hold the lens into place within the cast ring assembly and assist in sealing the fixture. The deep dish globe will be designed in such a way that the fixture achieves less than 2% uplight, which will be verified by a photometric test.



## **HOUSE SIDE SHIELD**

Fixture will have the option to include a house side shield that will provide shielding at 0 – 360 degrees.

## **CAST HOUSING**

The luminaire shall consist of a heavy Grade A319 cast aluminum housing that acts as the enclosure for the LED light engine and is of adequate thickness to give structural rigidity. The LED light engine must be permanently affixed to the inside of the housing.

## **FINISH**

Housing is finished with a 13 step Kingcoat™ SuperDurable polyester TGIC powder coat finish in textured black.

## **DRIVER**

The LED universal dimmable driver will be class 2 and capable 120 - 277 input voltage, greater than .9 power factor, less than 20% total harmonic distortion and feature ambient temperature range of -35 °C up to 65°C. Each LED system comes with a standard surge protection designed to withstand up to 20KA/10Kv of transient line surge. The driver assembly will be mounted on a heavy duty fabricated galvanized steel mounting bracket to allow complete tool-less maintenance.

## **WIRING**

All internal wiring and connections shall be completed so that it will be necessary only to attach the incoming supply connectors to Mate-N-Lock connectors or to a terminal block. Terminal blocks shall be certified to 250V, 70A and consist of three sets of terminals. They shall be rated to 250V and meet NEMA Specifications for Wiring Terminals. Mate-N-Lock shall be certified for 600V operation. Internal wire connectors shall be crimp connector only and rated at 1000V and 150°C. All wiring to be CSA certified and/or UL listed, type SFF-2, SEWF-2, or SEW-2 No. 14 gauge, 150°C, 600V, and color coded for the required voltage.

## **PLUMBIZER (KPL30)**

The plumbizer allows for plumbing of the fixture and must be comprised of 2 components. The outer housing is a fully machined 6061-T6 aluminum enclosure and houses the internal plumbing nipple. The plumbing nipple must be a fully machined aluminum alloy 6061-T6 component with a yield strength minimum of 35000 lb/sq. in. with a minimum cross sectional area of 1.3 in. sq and a tensile strength of 45,000. Additionally, the horizontal level device must be cast from A319 and work to allow vertical adjustment of the fixture. The level device must be fastened to the horizontal arm by means of a 7/16" thru bolt. A NEMA approved twistlock photo receptacle must also be positioned in the top and be sealed to avoid water or bug entry.

## **PHOTOMETRICS**

Fixtures are tested to IESNA LM79 specifications. These reports are made available.



## **THERMALS**

Fixtures tested to DOE sanctioned standards to determine the maximum in-situ solder-point or junction-point temperatures of the LED emitters. This report will be made available.

## **LUMEN MAINTENANCE**

Reported (TM21) and Calculated (L70) reports are available upon request with a minimum calculated value of 50,000hrs.

## **CHROMATICITY**

High output LED's come standard at 4500K (+/- 250K) with a minimum nominal 70 CRI. Additional CCT emitters are available upon request.

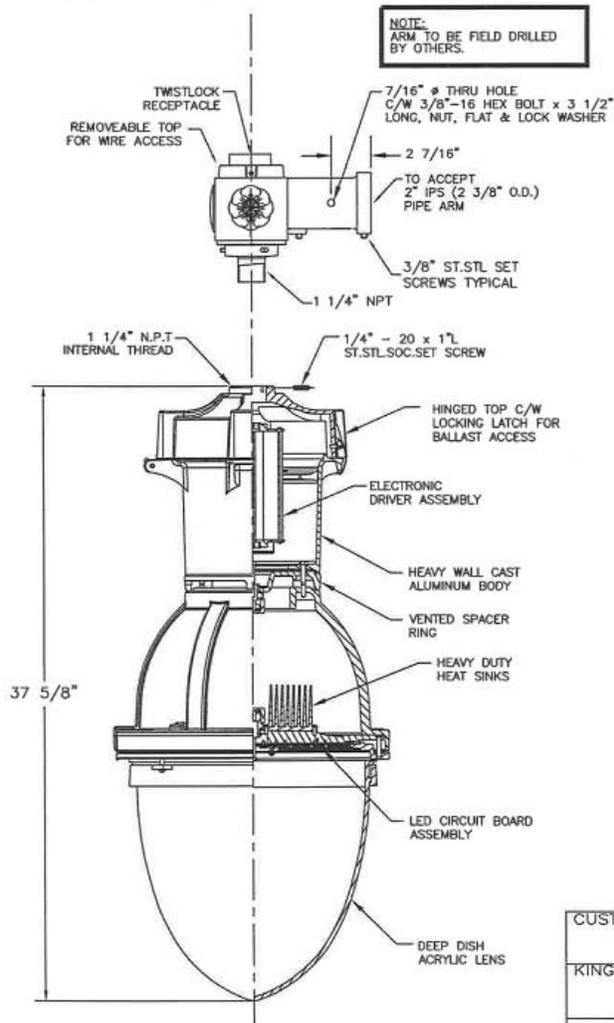
## **MISCELLANEOUS**

All exterior hardware and fasteners, wholly or partly exposed, shall be stainless-steel alloy. All internal fasteners shall be stainless-steel or zinc coated steel. All remaining internal hardware shall be stainless steel, aluminium alloy, or zinc coated steel.

**The fixture manufacturer must be ISO 9001:2000 certified and have been in the business of manufacturing outdoor lighting products for a minimum of ten (10) years. Equal proposals to this specification must be submitted to the electrical engineer 10 days prior to bid for mechanical and photometric review.**

## **150 W LED Tear Drop Light Details**

*Please see the 150W LED Tear Drop Light Details in the following Figure.*



**NOTE:**  
1) PIPE SEALER TO BE USED ON ALL N.P.T. THREADED COMPONENTS

CUSTOMER ORDER No:	-
KING U.S. ORDER No:	-

REV.	ALTERATION	DATE	BY

**SPECIFICATIONS**

CATALOGUE NO.: K804-FARAD-II-150(SSL)  
-16000-120V-KPL30-PR

QUANTITY: 150W

OPTICAL SYSTEM: FLAT ARRAY ACRYLIC DEEP DISH

IES LTG. CLASS.: TYPE II

INPUT WATTAGE: 150W

SOLID STATE LIGHTING

SERIES: 16000

CCT: 4500K

LINE VOLTAGE: 120V

PAINT: TEXTURED BLACK

OPTIONS: KPL-30 LEVELING DEVICE  
C/W TWISTLOCK RECEPTACLE  
(PHOTO-EYE BY OTHERS)

**BALLAST TO BE SUPPLIED:**

BALLAST TYPE: ELECTRONIC

BALLAST MANU.: -

CATALOG NUMBER: -

**OPTIONS:**

QUICK DISCONNECT

TERMINAL BLOCK

OTHER: 540 JOULE @ 2ms 20kA-8/20uS SURGE PROTECTION

CUSTOMER APPROVAL & DATE:

 King Luminaire • StressCrete • Est. 1953	<i>Manufacturing Locations:</i> Burlington, Ontario 1-800-268-7809 Northport, Alabama 1-800-435-6563 Atchison, Kansas 1-800-837-1024 Jefferson, Ohio 1-800-268-7809		
	<b>STRESSCRETE GROUP</b>		
PROJECT/CUSTOMER: WASHINGTON DOT			
DRAWN BY: A. ALVELA	AT: SC1	CHECKED BY:	DATE: 03/23/13
DRAWING TYPE: CONCEPT DWG.		DRAWING NUMBER: 206A7306-1	

**Figure: 150W LED Tear Drop Light Details**



**16. Bid Forms and Proposal. Replace Pay Item**

*Replace Pay Item 618 760 with Pay Item 000 506 Unassigned Special Item - EACH- Furnish & Install 150 Watt LED Tear Drop.*

*Line 1280 – Replace Pay Item 618 760 - Furnish and Install 250W HPS Tear Drop Luminaire with 000 506 Unassigned Special Item - EACH- Furnish & Install 150 Watt LED Tear Drop.*

**17. Document: Special Provisions. Replace Specification**

*Replace Specification # 60 – Engineer’s Field Facilities, Item 624 002 - page 63 with specification # 60 below.*

**60. ENGINEER’S FIELD FACILITIES, Item 624 002**

This S.P. supplements the requirements of 624.01:

**A. GENERAL**

The Contractor shall provide and maintain a suitable field office for the sole use of the Engineer and his or her representatives which shall contain not less than 600 square feet in gross area, with electricity, heat, adequate air conditioning during months of May through October, telephone service, running water, acceptable sanitary facilities; and daily janitor service, water connections and water meter cost to be charged to the Contractor. The Contractor shall provide acceptable access to the office. The field office shall include one or more office trailers with minimum of two separate rooms with a minimum area of 120 square feet each and one conference room with a minimum area of 300 square feet.

The trailers mentioned above may be replaced with an apartment or office space acceptable to the Engineer. Such alternative space shall satisfy the room numbers and area specified for the trailers.

Furniture and equipment for the office shall include two (2) fireproof, locking 4 drawer legal file cabinets, four (4) desks with locking drawers, four (4) swivel chairs, ten (10) folding chairs, one (1) hanging file for full-size drawings, one (1) 36 inch X72 inch drawings table per trailer, four (4) Nextel radio/telephone communications systems with carrying cases and one (1) FAX machine with dedicated phone line.

The Engineer’s field facilities shall include two (2) personal computer systems, complete with printers, all-in-one (printer, copier, scanner and fax) machine, and software, configured as follows, or approved equal:

Two tablet PC’s, each tablet shall be provided with Intel® Core™ i5 processor, 4 GB DDR3 memory, 128 GB hard drive, Intel® HD Graphics 4000 graphics card, LED Full HD display, Intel® Centrino® Advanced-N 6235 2X2 LAN (802-11 a/b/g/n), Bluetooth 4.0, WiDi, built-in cell modem 4G LTE, an AC Adapter, an S



Pen, a detachable keyboard, a slim external DVD (Optical Disk Drive), and a wireless Bluetooth mouse.

Two Wireless HP Laser Printers or equivalent, 10-15 pages per minutes, 2-3 Input Trays – 750 pages, monthly volume of 50,000 pages. Support legal, A4, letter, and 11x17 prints. Remote management and configuration, built-in network card, support laser technology, cables, toner cartridges, developer and fuser kits, as needed.

One Canon image CLASS MF7280 Laser Flatbed All-in-One or equivalent.

The Scanner must be single pass, USB and Parallel Port Capable, 600 dpi to 2400 dpi optical resolution. Capacity at least 100 sheets. Support letter (8-1/2x11), legal and 11 x 17 paper.

The FAX Machine shall hold at least 250-500 sheets of plain paper. Memory buffer for minimum of 100 sheets. Provide confirmation page, 14.4-33.6 Data/FAX mode, Print/Copy in multitude, i.e., fine, superfine. ,

Both tablet PCs shall be loaded with the following software (new and unopened, latest available -version unless a specific version is shown below) with full documentation:

Microsoft windows 8 64 or 32 bit OS

Microsoft Office Professional

McAfee Virus Scan

Microsoft Outlook e-mail/calendar

ADOBE ACROBAT Professional

Norton Utilities

WinZip

dBase

Microsoft Fax

The two HP printers and the Canon all-in-one machine shall be connected as network hardware and will be accessible from both tablets

One (1) new digital camera with a minimum of five (5) mega pixel resolution and a minimum of 5X optical zoom and the camera shall have a memory card with a minimum of two (2) Giga byte capacity and shall be capable of displaying the date.



Miscellaneous items including all necessary cables, power strip, surge protector and security enclosure with lock for the computer, monitor and printer.

The equipment shall be maintained in such a condition that it is always available for immediate use. An adequate supply of batteries, copier paper and spring water shall be made available.

Adequate bathroom facilities with running water and drainage shall be maintained in each trailer.

Telephone service shall be supplied to each trailer including two separate phone lines and one fax line with a minimum of four (4) telephone instruments per trailer.

The Contractor shall be responsible for District equipment placed in Engineers Facilities and shall promptly replace in kind or acceptably repair such equipment removed without permission or damaged.

The field office shall be set up in an acceptable location, equipped and made ready for use three (3) work days prior to start of any work and shall remain until field records printed to the project have been completed, not to exceed thirty (30) consecutive calendar days after acceptable completion of all work and project close-out. The field office, including facilities and furnishings supplied by the Contractor, shall be removed by the Contractor when designated.

In addition, the Contractor shall furnish, maintain, obtain necessary calibrations, and replace as necessary during the duration of the contract for the following equipment for the exclusive use of the Engineer

2 Asphalt thermometers

2 Concrete thermometers

1 Set of sighting tees

1 Slump mold and tamping rod meeting requirements of AASHTO T119

1 Chase indicator meeting requirements

1 Pressure type air meter shall be properly calibrated by an independent laboratory with certification furnished to the Engineer.

1 10' rolling straight edge

1 10' static straight edge

2 Calibrated measuring wheels



Contractor shall furnish, construct and maintain walkways, platforms, ladders, stairways and other facilities of suitable character and adequate strength as necessary for all operations of construction inspection, and provide six (6) parking spaces at Field Office for the Engineer and his or her representatives.

The Contractor shall pay all and any rent expenses for the duration of the project. The Contractor shall also pay all initial connection fees and cost for all utilities including phone, water, sewer, electricity, gas, telephone (land lines and cellular) and internet access, for the duration of the project.

At the conclusion of the project, all trailers, furniture, inspection facilities and equipment except two tablets PCs with accessories furnished under this item shall remain property of the Contractor.

The Engineer's Field Facilities provided to satisfy the requirements shown above will be used for the entire project. The location of the Engineer's Field Facilities shall be within two **blocks of the project site.**

#### **MEASURE**

The unit of measure will be the job, with no actual measure taken.

#### **B. PAYMENT**

Payment for ENGINEER'S FIELD FACILITIES shall be made at the contract lump sum price bid, which price will include specified requirements stated above and in the contract documents. The first partial payment will not be made until all field facilities and associated utilities are complete and operating.

Two tablet PCs with accessories (two AC Adapters, two S pen, two detachable keyboards, two slim external DVD Optical Disk Drives, and two wireless Bluetooth mice) shall become DDOT property and be delivered to DDOT at the end of the project.



18. **Document: Special Provisions. Delete reference**

*Page 20 – Specification # 37- sections (J) delete reference to (K).*