

#### AMENDMENT NO. 1

TO: ALL VENDORS

FROM: Damon Hightower

- SUBJECT: USC-IFB-1599-DH Furnish and Deliver New Light Emitting Diode (LED) Fluorescent Light Tubes
- DATE: December 4, 2009

This Amendment No. 1 modifies the Invitation for Bid only in the manner and to the extent as stated herein.

ITEM ONE: QUESTIONS RECEIVED WERE CONSIDERED BY THE UNIVERSITY. A DECISION WAS MADE TO ANSWER THE QUESTIONS BASED UPON THEIR VALUE TO THE SUCCESS OF THE SOLICITATION. SEE PAGE TWO FOR QUESTIONS AND ANSWERS.

ITEM TWO: DELETE TECHNICAL SPECIFICATIONS Page 11- REPLACE WITH REVISED TECHNICAL SPECIFICATIONS THAT ARE ATTACHED.

BIDDER SHALL ACKNOWLEDGE RECEIPT OF AMENDMENT NO. 1 IN THE SPACE PROVIDED BELOW AND RETURN IT **WITH THEIR BID RESPONSE**. FAILURE TO DO SO MAY SUBJECT BID TO REJECTION.

Authorized Signature

Firm

Date

# PAGE TWO

### ITEM ONE: THE FOLLOWING QUESTIONS WERE RECEIVED FROM VENDORS:

- Question #1 The specifications call for a minimum LED count. We would like to bid on this project but we don't meet the required LED count. We use a more powerful SMD LED chip that does not require the use of as many LED's. Could we still bid on this project?
- Answer #1 USC Salkehatchie will amend the IFB to exclude an LED count for both the 8' and 4' tubes. However, the ''lumens'' minimum requirement must be met by both lengths of tubes.
- Question #2 Could you please specify if there is any approved manufacturer for the LED lamps?

Answer #2 Almost all manufacturers are overseas. Most US firms are distributers only. One distributer is Creative Lightings <u>www.Creativelightings.com</u>

- Question #3 The 8' tube calls for a total of 1,576 LEDs and the 4' calls for a minimum of 300 LEDs per tube. I am assuming the information for the 8' is a miss-print and am concerned that the minimum number of LEDs for the 4' is based on older 5mm LEDs and the quantity needed for a given luminosity. Newer LEDs are much more efficient and I would like to see the specification changed to lumen output, beam angle etc. The specifications also state that the single/double pin configurations be surrounded by an aluminum housing. Our products are listed and classified by Underwriters Laboratories and bear the UL Seal. However, UL specifically required that our metal end caps be replaced with a non-conducting end cap due to the risk of shock via the extruded aluminum back plate, in a fixture with a damaged connector (tomb stone). (Note: our lamps are also equipped with a patented safety switch to further reduce the risk of shock.) I would like to see the end cap material specification removed.
- Answer #3 The 8' LED tube is no misprint. There are only about 2 manufactures that make them. Minimum lumen outputs and beam angles are provided in the original specs. We will amend the IFB so that LED count will not be required but the minimum lumens spec and beam angle are required. We will also remove the aluminum housing spec....and we will also be amending the IFB so that both 8' and 4' tubes must possess one of the following approvals/certifications: UL Approval, MET or ETL Certification and the construction must be a heat sink design that supports 24 hour operation.
- Question #4 The 8 foot LED tubes you spec is not a common item in the LED type and we are having a difficult time trying to locate that item. There are cost effective solutions that we could suggest to you in place of the 8'. Please also advise if we can bid on just the 4 foot tubes. Also, advise when delivery on the tubes would be needed
- Answer #4 8' tubes are only made by a few manufacturers. USC Salk is not seeking substitutions or partial bids, the 8' tubes are retrofits for existing lamp fixtures. USC Salk seeks a bidder who can supply both the 8' and 4' tubes under one bid to maximize savings. Delivery on tubes would need to be January-February 2010 timeframe.

### Answer #5 Yes, indirectly. The South Carolina Energy Office is managing the funding.

- Question #6 Do you have an approved manufacturer or a list of approved manufacturer? Is this item proprietary?
- Answer #6 There is no approved manufacturer's list. No, most of the manufacturers are overseas and some manufacturers are cropping up in the US.
- Question #7 Do the lamps require a separate driver? If not, how does the lamp operate?
- Answer #7 No separate driver required...it is a retrofit which bypasses the existing ballast. Would require a long explanation, but the lamp is simply a large number of light emitting diodes (LEDs) which can handle a range of voltages. A significant reduction in energy is achieved since no ballast is required.
- Question #8 Can the lamps use existing ballast?
- Answer #8 No ballast required. You bypass the existing ballast in any conventional fluorescent fixture...this is where the energy savings comes from...approx 60% energy savings from conventional T12 bulb.
- Question #9 What is the process for approved equals?
- Answer #9 There is no process since there is no comparable substitute
- Question #10 Do the lamps have a rated life?
- Answer #10 50,000 hours
- Question #11 What are the manufacturer's tolerance on specifications for equals: i.e.; min/max levels?
- Answer #11 The specifications are minimum requirements. However, we will amend the IFB for minimum LED count, but specs will still require minimum "lumens" specifications.

## ITEM TWO: REVISED TECHNICAL SPECIFICATIONS

### <u>Invitation For Bid (IFB)</u> <u>Light Emitting Diode (LED) Fluorescent Replacement Tubes</u>

<u>General Description</u> – The University of South Carolina (USC) Salkehatchie Campus is accepting bids for the procurement of 254 eight-foot length and 462 four-foot length LED fluorescent light tube retrofits for its Walterboro campus. The specifications are listed below:

### 8-foot Light Emitting Diode (LED) Fluorescent Light Tube -

Minimum Lumens Output: 2,900 (Daylight White) Color Temperature: Daylight White Power Consumption: 36 watts Input Voltage: 90V-277V Lens Type: Clear Pin Ends: Single Pin – 5/16" centered pin Beam Angle: 120 degrees Construction: Appropriate heat sink design required to support 24 hour operation Requires UL Approval, MET or ETL certification

(Sample 8-foot LED Light Tube with single pin shown below)



# 4-foot Light Emitting Diode (LED) Fluorescent Light Tube -

Minimum Lumens Output: 1,500 (Daylight White) Color Temperature: Daylight White Power Consumption: 15 watts Input Voltage: 90V-277V Lens Type: Clear Pin Ends: T8 2-pin configuration Beam Angle: 120 degrees Construction: Appropriate heat sink design required to support 24 hour operation Requires UL Approval, MET or ETL certification



Quote Special Instructions:

1) Quote must include all shipping costs to the USC Walterboro campus and any and all taxes.