UNIVERSITY OF THE DISTRICT OF COLUMBIA
1851

Office of Contracting and Procurement

INTENT TO AWARD SOLE SOURCE CONTRACT

Title	Hydroponics system and Flowvex Aeration
Notice Date	August 17, 2017
Response Due Date	August 26, 2017
Reference Number	R0011076
Contract Description	(Patented) Flo-Vex Integrated Hydroponics System – The design accommodates the requirements of the urban environment including dissolving oxygen without pure oxygen gas or air compressors, fully recycles system water, and uses UV sterilization. The growing systems uses patented aerated Flo-Vex technology integrated in the hydroponics systems and meet the following requirements for urban agriculture: Growing beds for high-intensity produce production;Water use efficiency and appropriate waste generation through closed-loop systems. Noise pollution level not to exceed 77 decibels. No mechanical compressor and no liquid oxygen on the premises;No liquids other than water to operate the aquaponics systems and their aeration device(s); Standard power requirements for pumps; Appropriate oxygen levels to be maintained; Sufficient air injection capacity to feed the digester for plant fertilization; Integrated aerobic and anaerobic microbial system; Closed loop systems capable of ebb and flow or clear flow; No chemicals utilized to maintain water quality and sustainable agricultural practice
Vendor Name	Kakovitch Industries
Point of Contact	Anthony Berry, anthony.berry@udc.edu 202-274-6914

DETERMINATION AND FINDINGS
FOR A
SOLE SOURCE PROCUREMENT

Agency: University of the District of Columbia
Contract No.: R0011076
Caption: Hydroponics system and Flowvex Aeration
Contractor: Kakovitch Industries

FINDINGS

1. **Authorization:**

   D.C. Official Code §2-303.05(a)(1) and 8 DCMR Section 3019

2. **Minimum Need:**

   The University of the District of Columbia College of Agriculture Urban Sustainability and Environmental Sciences has need to:

   a) Labor, Materials, and supervision of (1) Flo-Vex-Integrated Hydroponics System at Firebird Farm in Beltsville Maryland
   b) Ensure the constructed systems minimize human disturbance and interference with the urban neighborhood environments of the District.
   c) Fulfill need for training and research as outlined by USDA NIFA. Additionally, through the Anacostia Economic Development (AEDC) Food Security grant, CAUSES has installed the advanced systems at food hub's in the District. Firebird Farm is used as the training and research spine of the food hub. A matching system with integrated flowvex technology is needed to fulfill this need.
   d) Turn-key System Including:
      a. 4' x 10' stand-alone propagation table, plumbing, pump, automated timer
      b. 12' x 40' NFT Channel System
      c. 40" galvanized table frame, finishing channels, nursery channels, feeder manifolds and covered collectors, plumbing.
      d. 2,448 planting sites (1224 finishing, 1224 nursery) for producing between 300- 600 plants per week depending on species.
      e. Recirculating pumps and filters, UV sterilization, scrub brushes for channels
      f. Crating and shipping
      g. 5' x 40' Bato Bucket System
      h. 56 buckets (112 planting sites), plumbing, smart pots, pre-fabricated parts
      i. 16 table galvanized metal table frames
      j. Recirculating pumps and filters, UV sterilization
      k. Crating and shipping

l. - Flo-Vex Integration
m. (2) Flo-Vex aeration systems with recirculating pumps
n. (2) 300 gallon water reservoirs
o. Onsite Expert supervision of customer installation
p. Manufacturer's Technical and Growing support for 1 year

3. **Estimated Reasonable Cost:**

The contractor services have an estimated total cost that will not exceed $59,000.00

4. **Facts Which Justify Sole Source Procurement:**

(Patented) Flo-Vex Integrated Hydroponics System – The design accommodates the requirements of the urban environment including dissolving oxygen without pure oxygen gas or air compressors, fully recycles system water, and uses UV sterilization. The growing systems uses patented aerated Flo-Vex technology integrated in the hydroponics systems and meet the following requirements for urban agriculture:

- Growing beds for high-intensity produce production;
- Water use efficiency and appropriate waste generation through closed-loop systems;
- Noise pollution level not to exceed 77 decibels;
- No mechanical compressor and no liquid oxygen on the premises;
- No liquids other than water to operate the aquaponics systems and their aeration device(s);
- Standard power requirements for pumps;
- Appropriate oxygen levels to be maintained;
- Sufficient air injection capacity to feed the digester for plant fertilization;
- Integrated aerobic and anaerobic microbial system;
- Closed loop systems capable of ebb and flow or clear flow;
- No chemicals utilized to maintain water quality and sustainable agricultural practice

The use of advanced aeration technology will increase food production in hydroponics systems.

5. **Certification by the Contract Specialist:**

I hereby certify that the above findings are correct and complete, as presented by Mr. Trobman, Green Infrastructure Specialist, CAUSES, Dean's Office.

8-16-17
Date

Anthony Berry
Contract Specialist
Capital Procurement Division

DETERMINATION

Based on the above findings and in accordance with D.C. Official Code §2-303.05(a)(1) and 8 DCMR Section 3019, I hereby determine that the subject procurement action may be procured using the sole source method of procurement and that the award is in the best interest of the University of the Columbia.

8-17-17
Date

Eddie Whitaker
Contracting Officer (CO)