# Memorandum



Date:

May 9, 2019

To:

Gary Hartfield, Division Director

Internal Services Department, Small Business Development

From:

Milton L. Collins, Associate Director

Miami-Dade Aviation Department, Minority Affairs Division

Subject:

Contract Measures Request:

Baggage Handling System Operation and Maintenance

Project Number: RFP No.01258

# **RECOMMENDATION:**

This is a request for Small Business Development (SBD) to approve the subject project in order for the Aviation Department to proceed in obtaining an SBD Project Worksheet for the Baggage Handling System Operation and Maintenance, Project No. RFP No. 01258. The Minority Affairs Division and the User Division staff have reviewed the subject project and recommend a SBE/Construction Project Goal of 26%. The User Division has advised that they do not foresee any A & E work at this time. Breakdown of services to be performed are attached.

The Estimated Contract amount will be \$150,000,000.00. The Term of this agreement will be for Seven (7) years.

# **BACKGROUND:**

Miami-Dade County (County), as represented by the Miami-Dade Aviation Department (MDAD), requires the services of one qualified firm to operate, maintain and repair all inbound and outbound automated and manual sortation Baggage Handling Systems (BHS), and their related equipment at Miami International Airport (MIA). These services shall ensure and provide for the sustained performance and safe operation of the subject BHS equipment during the term of the Contract. The Selected Proposer shall operate the BHSs and provide preventive maintenance, corrective maintenance, repair, and system modification, when required; and shall maintain spare parts inventories as well. The Selected Proposer shall support all automated sortation and manual-sortation baggage handling systems 24-hours a day, seven days a week. Preventive maintenance and repairs shall be done in a manner and at a time as to not interfere with the standard operation of the BHSs.

The work to be performed by the Selected Proposer is as follows; operation, maintenance and repair of all specified inbound and outbound automated sortation and manual-sortation BHSs, and their related equipment. This covers all MIA inbound BHSs at Concourses D, E, F, G, H and J; as well as, all outbound BHSs with the exception of American Airlines' system, located in Concourse D. Further, the Selected Proposer shall perform other services, including construction, related to the operation and maintenance of the BHSs, to include system modifications, enhancements and repairs, as determined by MDAD, to maintain their efficient operations. Part of the requirements for the Selected Proposer shall include obtaining any and all permits required for the operation, maintenance, modifications, enhancements and repairs of the BHSs.

Airline Companies specifically identified within this section or throughout any portion of this document, along with their implied location of operation within the terminal, are subject to change. Any airline may be either temporarily or permanently relocated within the terminal facility. Airline hours, peaks, and bag characteristics are subject to change at any time.

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# MINIMUM QUALIFICATION REQUIREMENT:

The minimum qualification requirement for this Solicitation is the Selected Proposer or the Selected Proposer's subcontractor must possess a State of Florida Certified General Contractor License.

# MDAD CURRENT ENVIRONMENT:

Under current conditions, MIA handles approximately 19,000 bags peaking to 31,000 bags per day in South and Central BHS. The baggage handling system in South Terminal is automated and the Central Terminal is manual utilizing stand-alone CTX machines for screening. The profile of the bags for both South/Central contains more large and oversized bags than the traditional domestic profile due to the concentration of flights to the Caribbean, South and Central America along with a robust charter schedule, mainly to Cuba and Venezuela. A high percentage of these bags are shrink-wrapped by MIA passengers. The Selected Proposer shall be responsible for monitoring the airlines' baggage handling process, and shall enforce MDAD's bag hygiene policies. Currently, airline staff is responsible for placing bags that are irregular, soft sided or undersized into tubs prior to induction in accordance with MDAD bag hygiene policies, except for South Terminal where airline staff must place every bag into tubs prior to induction. In addition, airline staff must manually transport all oversized baggage to their designated oversized induction belts.

# OPERATION AND MAINTENANCE REQUIREMENTS OF CURRENT BHS SYSTEM:

The Selected Proposer shall be responsible for the overall performance of automated sortation and manual-sortation BHSs, and provide services for the baggage systems, at minimum, per the following:

- A. Manage, supervise, and provide all required staffing for all direct, non-direct, and support functions required to operate, maintain, and repair the specified BHSs 24 hours/day, 7 days a week on a 12-hour shift schedule.
- B. Provide and maintain all furniture, office supplies to include telephones, copiers, printers, fax machines, toner and paper, etc., for Selected Proposer's offices and Baggage Control Centers.
- C. Perform preventive maintenance such as inspections and tests to identify and correct any unusual or abnormal equipment condition and to meet the required systems service availability.
- D. Perform preventive maintenance as required to keep the BHSs operating safe, efficient, and reliable, on a regular basis as defined by the equipment manufacturer's operation and maintenance manuals, or consistent with industry standards.
- E. Perform corrective measures or repair to BHSs as required due to ordinary wear and tear.
- F. Clear all baggage jams and resolves all system malfunctions.
- G. Be responsible for clearing and assisting TSA with clearance of baggage jams at the entrance and exit of the EDS machines.
- H. Assist TSA in the CBRA room with by removing bags (as necessary) from the conveyor line and prioritizing each bag by departure time.

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- I. Operate Programmable Logic Controller (PLC) systems such as: Allen Bradley, Modicon, Quantum, Square-D, as well as other PLC Systems.
- J. Recognize, diagnose and correct electrical-mechanical and PLC system/software malfunctions.
- K. Develop, direct, and manage contingency plans that allow systems or parts of systems to function under different failure modes, including supervising airline and skycaps personnel at the ticket counters during contingency operations.
- L. Monitor implementation and completion of Preventive Maintenance (PM) program, and recommend enhancements to the program. Selected Proposer shall utilize a Computerized Maintenance Management System (CMMS) to track all maintenance work orders for PMs, CMs, jams, and inventory of parts. Computerized data shall be capable of downloading into spreadsheet software.
- M. Prepare and submit reports (daily/weekly/monthly) on the status of the system and confer on a daily basis with MDAD Project Manager and the airlines.
- N. Prepare and submit monthly maintenance summary reports consisting of repair maintenance, and baggage jam clearance that has been completed the previous month.
- O. Maintain all manufacturers' manuals and as-built or other drawings with upgrades, changes and current information on all baggage systems.
- P. Perform housekeeping around conveyor belt systems by ensuring that BHSs areas are well-organized and free of trash and debris.
- Q. Maintain and modify if and when necessary the computer systems for programming of the sortation systems with proper approvals. Particularly provide operation, maintenance, and repair of the entire BHSs networks, software, and hardware including but not limited to upgrading and patching of operating systems and software applications for all portions of systems and subsystems that are related to the BHSs, <u>utilizing the systems providers</u> (e.g., Webb for South Terminal and Vic Roberts for F System or approved alternates) and Sick Laser Scanners and Eaton for UPS Power Supplies. The Selected Proposer shall provide services, at a minimum for the following:
  - 1. System network Gateways
  - 2. Replacement and Installation of parts
  - 3. License upkeep and renewal
  - 4. Software upgrades
  - 5. Software functionality of hardware
  - 6. Systems interfaces (i.e., TSA, MDAD Security, Fire Alarms, AOIS, etc.)
  - 7. Computer power supply and associated UPS
  - 8. Surge suppression
  - 9. Modems
  - 10. Connectors, cables, and cords
  - 11. Drivers
  - 12. Documentation

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- 13. Troubleshooting maintenance
- 14. Re-programming
- 15. Loading new programs
- 16. Systems back-up restoring data
- 17. Security and anti-virus protection
- 18. System audits
- 19. Optimization and improvement
- 20. TSA Configuration Management and Code Change Request Documentation
- 21. BHS sub-system monitoring for international in-bound for CCD and the E sub-system for out-bound baggage; at the ticket counters to the east of the E Check point are house in the South Terminal BHS Control room and must be maintained.
- 22. Any and all software and hardware not listed above that is component of the systems necessary for the BHSs operation.
- R. Perform at a minimum monthly Preventative Maintenance on servers, UPS(s), and workstations in order to keep the systems optimized.
- S. Maintain secure on-site custody of all BHSs related software, firm names, back-ups, and licenses.
- T. Prepare for and perform full system backups immediately before and after such changes to codes/software. Maintain copies of system source codes and backups off site of MIA, and in a secure and fireproof environment.
- U. Perform Preventive Maintenance on the Control Systems' Uninterruptible Power Supplies UPS(s), including fire door UPS(s) in accordance to manufacturer and industry's standards.
- V. Provide manpower in the South Terminal CBRA room to clear baggage on the suspect belt (SB) conveyor lines and assist the TSA.
- W. Monitor systems and system computers for jam detections and malfunctions, and provide jam clearance employees for 24-hour coverage. MIA strives to support the airlines' bag loading policies prior to departure times which are half-hour for domestic flights, and one (1) hour for international flights. As a result, response time for clearing of bag jams shall be immediate for automated sortation, and shall not exceed ten (10) minutes for manual sortation BHS.
- X. Manage distribution of baggage tubs to airlines counters for the transport of regular bags on the induction belts; for Concourse H and J, this is over 10,000 tubs daily. In addition, the Selected Proposer shall be responsible for the purchase, maintenance, and replacement of tubs, which must be MDAD approved.
- Y. Provide adequate staff and equipment to deliver all bags arriving at default piers. Currently over 1,000 bags at Concourse H and J, an average of 1,200 bags at Concourse F.
- Z. Maintain all BHS related fire and/or security doors, including all related components, such as light and air curtains, and all interface control systems/software.
- AA. Inspect, service, and clean as required all encoding consoles, laser readers, hand scanners and other scanning devices.

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- BB. Inspect and clean Automatic Tag Readers and Bag Measuring Arrays at a minimum twice a day (at system start-up in the morning and prior to the peak period).
- CC. Provide manpower to staff Concourses F and J's transfer points, induction belts, and all baggage transfers.
- DD. Provide manpower to deliver baggage from the oversize belts, Concourse F and J transfer points, induction belts, and all other baggage transfers. At Concourse J, currently 600 bags daily.
- EE. Coordinate with MDAD all airlines flight schedules and allocations of pier/carousel space as needed and communicate same to Airlines and strive to maintain same assignment locations for airlines.
- FF. Assume responsibility for BHS operations, maintenance, and repairs with Airlines and the MDAD Maintenance and Operating divisions in order to avoid interruption and delays. This includes adjustment of BHSs operations and pier assignments, when necessary.
- GG. Maintain and repair of all CCTV cameras and monitors related to the BHSs in accordance to manufacturers and/or industry's standards.
- HH. Staff the three (3) Manual Encode (ME) Stations as follows One (1) ME position at Concourse F and two (2) ME positions at Concourse J.
  - II. Maintain K1 doors in operating condition.
- JJ. The Selected Proposer shall support all automated sortation and manual-sortation baggage handling systems 24-hour a day, seven days a week. Preventive maintenance and repairs shall be done in a manner and at a time as to not interfere with the standard operation of the BHSs. Services for late departures or charters operating during other than standard operating hours are required, and are included as part of the scope of work herein.
- KK. The Selected Proposer shall provide operation and maintenance services inclusive of all replacement parts, electronics and electrical, welding and metal fabrication for all aspects of the BHS's inclusive of in accordance with a) Operations and Maintenance Manuals; b) manufacturer's recommendations; and c) industry standards of the specific systems, along with their associated subsystems and components.
- LL. As incident to the above, the Selected Proposer shall pull all necessary permits, and provide all necessary services necessary for issuance of permits, including but not limited to generation of or provision of permittable design or drawings, and provide all necessary construction services and activities to affect such the above services in compliance with all applicable laws, rules, and regulations.

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- MM. The Selected Proposer shall be required to provide a Safety Plan for review and approval by MDAD. The Safety Plan shall, as a minimum, include but not be limited to policies and procedures that address the following:
  - 1. Enforcement of OSHA standards:
  - 2. Safety and health inspections;
  - Employee safety meetings;
  - 4. Education;
  - 5. Training;
  - 6. Noise monitoring;
  - 7. Emergency preparedness to include police and fire response/evacuation;
  - 8. Walking-working surfaces;
  - 9. Confined space entry;
  - 10. Electrical safety, lockout/tagout;
  - 11. Personal protective equipment;
  - 12. Fall protection;
  - 13. Hot work:
  - 14. Hurricane waste management/housekeeping;
  - 15. Smoking policy;
  - 16. Accident/incident reporting/investigation;
  - 17. Emergency medical procedures;
  - 18. Hazard mitigation;
  - 19. Employee reporting of hazards;
  - 20. Violence in the workplace;
  - 21. Employee slips and falls and sprains/strains;
  - 22. Air quality and security procedures; and
  - 23. Any other pertinent safety policies and procedures that may be required for the safe operation and maintenance of the BHSs referenced in this solicitation.
- NN: The Selected Proposer shall be required to provide a Quality Control (QC) Plan for review and approval by MDAD. The Selected Proposer's QC Plan shall, as a minimum, include but not be limited to policies and procedures that address the following:
  - 1. Schedule and criteria for quality inspections:
  - 2. Systematic inspection and testing of installed equipment as defined in the contract documents:
  - 3. Supervision and inspection of equipment with respect to hazardous materials including actions required for their removal, treatment and disposal;
  - 4. Inspection and monitoring of processed bags. Methods of inspection and monitoring shall be corrected wherever they are found to be unsuitable;
  - 5. System for final inspection and testing of equipment installations and repairs;
  - 6. Instructions for handling, storage, preservation, packaging and shipping of equipment to protect the quality of products and prevent damage, loss, deterioration or degradation of products;
  - 7. Substitution of equipment and/or products;
  - 8. Any other pertinent requirements related to the operation and maintenance of the BHS, as required.

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# MAJOR MODIFICATIONS/ENHANCEMENTS/REPAIRS OF BHS

Any modifications/enhancements and/or repairs requested by MDAD and outside the normal maintenance of the BHS system shall be treated as work orders.

When such requests occur, MDAD shall provide in writing such request and the Selected Proposer shall submit a price quote to MDAD for their review, within twenty-one (21) calendar days of receipt of such written request. The Selected Proposer shall maintain the price quoted, for acceptance by MDAD, for a minimum of 90 calendar days after submittal. All prices quoted by the Selected Proposer shall be inclusive of all Direct and Indirect Costs including Overhead and Profit, remobilization and demobilization associated with the change, means and methods of execution, engineering and any associated work necessary. If MDAD accepts the Selected Proposer's quote, MDAD shall issue a work order with negotiated tasks/deliverables/payment schedule. Such work orders shall be paid under the corresponding allowance account. The Selected Proposer shall not be compensated for any effort expanded in preparing and submitting price quotes. The Selected Proposer shall provide Architect/Engineering services as needed to effectuate the work order, but shall procure a licensed architect or engineer utilizing the process spelled out in MDAD's then current TAC-R process.

Please advise if additional information is needed to complete this process.

#### Attachments

- c: L. Johnson, SBD
  - S. Johnson, MDAD
  - B. Jimenez, MDAD
  - S. Novela, MDAD
  - R. Cutie, MDAD
  - J. Sariego, MDAD
  - M. Clark-Vincent, MDAD
  - C. Corrales, MDAD

File

# % OF ESTIMATED CONSTRUCTION

| SERVICE                             | PRIME CONTRACT  | PRIME CONTRACT SUB-CONTRACTOR % | VALUE                | JE    |
|-------------------------------------|-----------------|---------------------------------|----------------------|-------|
| Management and Operations           | \$59,340,000.00 | \$9,660,000.00 14%              | \$69,000,000.00      | 46%   |
| Electrical Preventative Maintenance | \$25,110,000.00 | \$1,890,000.00 7.0%             | \$27,000,000.00      | 18.0% |
| Corrective Maintenance              | \$24,700,000.00 | \$1,300,000.00 5.0%             | \$26,000,000.00      | 17.3% |
| System Parts                        | \$13,000,000.00 | 0                               | \$13,000,000.00      | 8.7%  |
| General Allowance Account           | \$15,000,000.00 |                                 | \$15,000,000.00      | 10.0% |
|                                     |                 | 79%                             | 26% \$150,000,000.00 | 100%  |

\$150,000,000.00

**Estimated Total Amount** 

# MDAD'S CONTRACT MEASURES AND ANALYSIS WORKSHEET

To:

Gary Hartfield, Division Director

Internal Services Department, Small Business Development

From:

Milton L. Collins, Associate Director

Miami-Dade Aviation Department

Minority Affairs Division

PROJECT/CONTRACT TITLE:

Baggage Handling System Operation and

Maintenance

PROJECT/CONTRACT NUMBER:

Project No. RFP No. 01258

**DEPARTMENT**:

**Miami Dade Aviation Department** 

PROJECT ESTIMATED COST:

\$150,000,000.00

**FUNDING SOURCE:** 

**MDAD Operating Funds** 

#### **DESCRIPTION OF PROJECT/BID:**

The work to be performed by the Selected Proposer is as follows; operation, maintenance and repair of all specified inbound and outbound automated sortation and manual-sortation BHSs, and their related equipment. This covers all MIA inbound BHSs at Concourses D, E, F, G, H and J; as well as, all outbound BHSs with the exception of American Airlines' system, located in Concourse D. Further, the Selected Proposer shall perform other services, including construction, related to the operation and maintenance of the BHSs, to include system modifications, enhancements and repairs, as determined by MDAD, to maintain their efficient operations. Part of the requirements for the Selected Proposer shall include obtaining any and all permits required for the operation, maintenance, modifications, enhancements and repairs of the BHSs.

# CONTRACT MEASURES RECOMMENDATION:

Measures: SBE-Construction 26%

# **REASONS FOR RECOMMENDATION:**

Analysis of the factors contained in Implementing Order #3-22 indicates that an SBE-Construction Program Goal is applicable for this contract.