

# **REQUEST FOR PROPOSALS**

Data Center Network, Storage and Computing

# Bid Number: 1134

# **REVISED SEPTEMBER 26, 2022**

DUE DATE: September 29 October 6, 2022

DUE TIME: 2:00 pm (local)

# **INTRODUCTION**

The Gerald R. Ford International Airport Authority (GFIAA) is requesting proposals firms to assist in the upgrade of Data Center Network infrastructure. The primary goal of this project is to upgrade the network, storage, and computing for our data centers as we move towards a more active/active data center environment.

# SOLICITATION AND PROJECT SCHEDULE

ACTIVITY	DATE
RFP Issue Date	September 8, 2022
Question Deadline	September 21, 2022
Submission Due Date	October 6th at 2 pm
Contract Start Date	Late October

GFIAA reserves the right to modify the deadline set forth in the above table in its sole discretion. Any such modifications will be stated in an addendum.

# SITE INSPECTION

Respondents may request an on-site inspection by appointment only. Discussions between the Respondent and airport staff during the on-site inspection do not override any written specification or correspondence provided in this solicitation.

Contact for an appointment:

Contact Name	Pat Howe
Contact Phone Number	616.233.6062
Contact Email	phowe@grr.org

Respondents shall not communicate with the above contact for any reason other than for on-site inspection purpose. Any Respondent requesting a modification to the written specification should contact the Purchasing Department as instructed within this request.

## WORK SCOPE

#### Project Goals:

The primary goal of this project is to upgrade the network, storage, and computing for our data centers as we move towards a more active/active data center environment.

The authority is seeking hardware and software that will be easy to use and maintain for the limited on-site I.T. staff. The proposed solution should provide a stable storage platform for five years. The Network and Computing systems should also have at least a five-year life expectancy. The proposed solution must also be scalable. Should there be a need to upgrade an individual component to provide more capacity in the future, additional capacity needs to be added without requiring significant infrastructure upgrades.

#### **Performance Goals:**

- Performance to meet Airport Authority's needs.
  - Example: SQL servers, file storage, and backups –
  - Authority functions with performance/capacity needs such as Engineering, Marketing, Data Analysis, the general use of 135 users.
- Storage Deduplication
- Decreased I.T. maintenance costs for virtual server environment and storage.

- The vendor's ability to support hardware and software following the project will be a consideration for the award.
- An easily upgradable and scalable environment with growing needs.
- Industry-standard storage, compute, and backup solution for enterprise environments of this size and data growth potential.

#### **Locations and Equipment:**

#### Locations:

GFIAA has two data centers at two physical buildings in Kent County, Michigan. The primary data center is in the terminal facility, and the alternate data center is in another building on the property. There is available single-mode Fiber between the data centers. The Fiber has a distance of approximately ten thousand feet.

#### Equipment:

#### Core Switch:

Each data center contains a Cisco C6880-X-LE core switch.

#### Datacenter Switch:

Our Current Primary Datacenter has two Cisco N3K-C3548P-10GX.

#### HCI:

We have a four-node Nutanix NX-1065-G5

- Intel(R) Xeon(R) CPU E5-2620 v4 @ 2.10GHz
- 128 GB of Ram for each Node
- 22.25 TiB of Hybrid Storage 14.33 TiB Inuse
- VMware ESXi, 6.7.0
- 46 VMS

#### Licencing:

- Windows Server Suite Datacenter 2 Proc Effective Quantity 4
- Windows Server Suite Datacenter Core Unresolved Quantity 64
- VMware vSphere 7 Standard 12 CPUs 8 Inuse
- VMware vCenter Server 7 Standard 1 Instances
- All Windows Server and Vmware Licences are managed through a third party. We will need to know what additional licensing is required, and we will quote and purchase that from our incumbent vendor.

#### Voice:

- Two BE6H-M4-K9= one in each datacenter
- VMware vSphere 6 Embedded Essentials 6.7.0
- One Server handles all publisher servers, the other all subscribers
- Call Manager 12.5 Pub and Sub
- IMP 12.5 Pub and Sub
- Unity 12.5 Pub and Sub
- CER 12.5 Pub and Sub

#### Backups:

GFIAA uses Veeam Backup and Replication. It will be the responsibility of GFIAA to adjust any licenses needed to continue to use this product.

#### **HCI Performance**

Performance Summary	Hardware Alerts		Hardware Events
Cluster-wide CPU Usage			Peak: 29.14% Current: 19.12% of 134.4 GHz
08:00 AM	09:00 AM	10:00 AM	
Cluster-wide Memory Usage			Peak: 69.44% Current: 69.42% of 511.56 GiB
08:00 AM	09:00 AM	10:00 AM	
Cluster-wide Disk IOPS			Peak: 870 IOPS Current: 104 IOPS
man		M	
OB:00 AM	09:00 AM	10:00 AM	
Cluster-wide Disk IO Bandwidth			Peak: 39.34 MBps Current: 9.37 MBps
00:00 AM	MA 00:00	10:00 AM	
Cluster-wide Disk Avg IO Latency			Peak: 2.2 ms Current: 1.67 ms
him	hunn	mh	
08:00 AM	09:00 AM	10:00 AM	

#### System Requirements:

Due to the complexity of the components, all compute, storage, and networking components will have to be verified for the solution and compatibility by the vendor before any purchases are made.

Systems Requirements

- Manufacturer(s) Validated design
- The system needs to support the Airport's systems for five years
- 36 Months of Manafacture support options for 24x7xNBD and 24x7x4 Hour support agreements for hardware and software support.
- Network
  - o Redundant switching one switch in each data center
  - o Uplinks to both core switches from each data center switch
  - Upgradable with no downtime to the whole stack
  - o 10, 25, 40 G.E. support
  - o Redundant Power Supplies
  - Back to Front Airflow
  - LR Trancievers for 10KM support
  - o Twinax supported connections inside the same data center
  - Hosted cloud management and reporting are requested however not required
- Storage
  - o Sharing of windows files natively without the need of a windows file server
  - Replicated file shares from both Primary and Secondary data centers
  - Snapshots of storage based on a schedule
  - o Deduplication on files and servers
  - The storage array can be a hybrid of NVMe and Standard S.S.D. drives. If not, in a hybrid array, all drives need to be NVMe. This type of storage is desired state. We are open to seeing other options as well
  - o 25 Gigabit connectivity or better
  - o Storage replication between primary and secondary data centers
  - Restore from a snapshot for both files and VMWare storage is a preferred option. We are open to seeing other options
- Computing
  - VMware 7.0 U2 or newer
  - o Intel Xeon Silver 2.5 GHz or better 10 Cores or better
  - 25 Gigabit connectivity or better

- VMotion of servers between nodes and datacenters without a reboot or downtime
- Voice
  - Migrate Cisco Voice Servers onto New System. H.A. rules will need to keep some servers in each data center
  - An option may be submitted to replace the existing BE6H-M4-K9= with a new dedicated BE6H-M5-K9 or newer, reducing the processor requirements on the primary system
- Backups
  - All Hypervisors and Storage should be able to be backed up with Veeam Backup and Replication
- <mark>Tim</mark>eline
  - GFIAA current environment is the end of life starting in July 2023. We are requesting a project install deadline of May 31<sup>st</sup> 2023. There are options for a hybrid deployment depending on what hardware is backordered.
- Installation
  - Installation services are requested as part of the installation. GFIAA staff will assist with fiber connectivity between the data centers and to the core switch.

Primary Data Center's additional requirements

- Computing
  - $\circ$  Four Server Nodes
  - $\circ$  192GB+ of RAM for each node

Secondary Data Center additional requirements

- Computing
  - o Two Server Nodes
  - o 384GB of RAM for each node

#### **REQUESTS FOR INFORMATION**

Questions regarding this solicitation are to be submitted in writing to *purchasing@grr.org* prior to 5 p.m. on September 21, 2022.

GFIAA reserves the right to publish and respond to an inquiry, respond directly to the inquirer without publishing or not respond to the inquiry at its sole discretion.

It is the firm's responsibility to become familiar with and fully informed regarding the terms, conditions, and specifications of this solicitation. Lack of understanding or misinterpretation of any portions of this solicitation shall not be cause for withdrawal after opening or for subsequent protest of award.

Addendums will only be published by the GFIAA Purchasing Department and available for review at <u>www.flyford.org</u>.

## SUBMISSION FORMAT AND EVALUATION CRITERIA

Submissions should include and will be evaluated on the elements outlined below:

#### Executive Summary – One (1) page maximum

Summarize the Respondent's strong points and how experience, particularly with similar responsibilities, will benefit the stakeholders.

#### Business Organization - One (1) page maximum

State the full name and address of the organization and, if applicable, the branch office, consultants, or other subordinate elements that will provide or assist in providing the service. Include phone number(s), email address(s) and Respondent's website address.

#### Problem Statement & Recommendation – Twelve (12) pages maximum

State in succinct terms the Respondent's understanding of the major issues of this request. Describe specifically the Respondent's intended process and responsibilities. Identify important steps that will be taken to meet the GFIAA's expectations and identify deliverables.

#### Project Staffing – Four (4) pages maximum

Provide a chart with the staff you are committing to the solicitation. Show lines of authority and communication, and provide a brief role description with responsibilities for each person as they relate to the solicitation as well as each staff member's key credentials

#### References – One (1) page maximum

Provide a minimum of three (3) relevant references, preferably for projects of similar scope and complexity. Include the names of the projects, location, completion date, project cost, and specific challenges; identify project team members and references for each project including telephone numbers and email addresses.

#### Fee Proposal – Two (2) pages maximum

Describe your proposed form of compensation (i.e., commission, annual retainer, fee-for service). Be specific about arrangements that may involve contingency commission, overrides based on total book of business, loss ratios, etc. Failure to disclose compensation will be considered unresponsive.

## **REQUEST FOR PROPOSAL SUBMISSION**

Responses may be delivered physically or electronically. To be considered, complete submissions must be received prior to the due date and time specified (local time).

• Hard copy responses can be mailed or otherwise delivered to the address below.

Submission address: Attn: AJ Nye, Procurement Specialist Gerald R Ford International Airport Authority 5500 44<sup>th</sup> St SE Grand Rapids, MI 49512

 Electronic responses can be securely uploaded as a single pdf document to: https://www.dropbox.com/request/7UJC5ZtETkh9YLRg6N1j

Electronic submissions shall be named with a form or portion of the firm's name as part of the document name.

The firm certifies the response submitted has not been made or prepared in collusion with any other respondent and the prices, terms or conditions thereof have not been communicated by or on behalf of the respondent to any other respondent prior to the official opening of this request. This certification may be treated for all purposes as if it were a sworn statement made under oath, subject to the penalties for perjury. Moreover, it is made subject to the provisions of 18 U.S.C. Section 1001, relating to the making of false statements.

Submissions may be withdrawn by written request only if the request is received on or before the opening date and time.

Submissions not meeting these criterions may be deemed non-responsive.

GFIAA is not liable for any costs incurred by any prospective firm prior to the awarding of a contract, including any costs incurred in addressing this solicitation.

# **TERMS AND CONDITIONS**

GFIAA reserves the right to require that its standard terms and conditions apply to any actual order placed in response to a firm's submission. No attempt to modify GFIAA's Standard Terms and Conditions shall be binding, absent agreement on such modification in writing and signed by GFIAA.

No payment shall be made to the Respondent for any extra material or services, or of any greater amount of money than stipulated to be paid in the contract, unless changes in or additions to the contract requiring additional outlay by the Respondent shall first have been expressly authorized and ordered in writing by contract amendment or otherwise furnished by the GFIAA.

The intent of these specifications is to solicit a properly designed and all-inclusive response. Any requirements not in the specifications, but which are needed for such a response, are to be included in the submission.

The Gerald R Ford International Airport Authority, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that for any contract entered into pursuant to this advertisement, disadvantaged business enterprises and airport concession disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

The Respondent shall not discriminate against an employee or applicant for employment with respect to hire, tenure, terms, conditions or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, religion, national origin, age, sex, height, weight, marital status, or disability that is unrelated to the individual's ability to perform the duties of a particular job or position.

The Respondent shall observe and comply with all applicable federal, state, and local laws, ordinances, rules and regulations at all times during the completion of any contract with the GFIAA.

The terms of this request shall be interpreted, construed and enforced pursuant to the laws of the State of Michigan, and the Parties irrevocably consent to the jurisdiction of the federal and state courts presiding in Michigan.

The GFIAA is tax-exempt and a regional airport authority organized under 2015 P.A. 95, being MCL 259.137 et. seq.

Vendor Representation and Warranty Regarding Federal Excluded Parties List: The Respondent acknowledges that the GFIAA may be receiving funds from or through the Federal Government; such funds may not be used to pay any Respondent on the Federal Excluded Parties List (EPLS). The Respondent represents and warrants to the GFIAA that it is not on the Federal EPLS. If the Respondent is in non-compliance at any time during execution or term of this agreement (including any extensions thereof), the Respondent shall be in breach and the GFIAA shall be entitled to all remedies available to it at law or equity, specifically including but not limited to recovery of all moneys paid to the Respondent, all consequential damages (including the loss of grant funding or the requirement that grant funding be returned), and attorney fees (including the costs of in-house counsel) sustained as a result of the Respondent's non-compliance with this warranty and representation.

Pursuant to the Michigan Iran Economic Sanctions Act, 2012 P.A. 517, by submitting a bid, proposal or response, Respondent certifies, under civil penalty for false certification, that it is fully eligible to do so under law and that it is not an "Iran linked business," as that term is defined in the Act.

Insurance requirements are posted on the Documents and Forms page of the GFIAA website within the Purchasing Terms and Conditions document.

Termination For Cause: Should the firm fail to perform the Work as required by and in accordance with the schedule or time requirements, or otherwise violate any of the terms set forth in the Solicitation Request, it shall constitute breach of the Contract. Other than in force majeure situations, Respondent shall have five (5) calendar days to cure a

breach of the Contract (the "Cure Period") following issuance of GFIAA written notice. Failure to cure a breach of the Contract within said Cure Period shall allow the GFIAA to, without further notice to the Respondent, declare the Contract terminated and proceed with the replacement of the Respondent and the GFIAA shall be entitled to all remedies available to it at law or in equity including a claim against any required payment/performance bonds. Termination Without Cause: Notwithstanding any other provision, at any time and without cause, GFIAA shall have the right, in its sole discretion, to terminate the contract by giving sixty (60) days written notice.

Although it is the intent to contract with one provider, the GFIAA reserves the right to contract with alternate sources if the Respondent is unable or unwilling to service its obligation, or it is deemed by GFIAA to be in its best interest to use alternate sources.

Assignment: Neither party shall assign or delegate any of its rights or obligations under this Agreement without the prior written consent of the other party.

Respondent warrants that they are an authorized provider of products or services of his/her submission.

# MICHIGAN FREEDOM OF INFORMATION ACT

Information submitted in this solicitation is subject to the Michigan Freedom of Information Act and may not be held in confidence after the Respondent's submission is opened. A submission will be available for review after the project has been awarded.

GFIAA cannot assure that all of the information submitted as part of or peripheral to the Respondent's submission will be kept confidential. Any Respondent submission language designated as confidential is considered automatically invalid and void. GFIAA is subject to the Michigan Freedom of Information Act, which prohibits it from concealing information on or associated with responses, successful or unsuccessful, once they are opened.

# **EVALUATION, STATUS UPDATES/AWARD NOTIFICATION**

The authority reserves the right to request additional information it may deem necessary after the submissions are received.

As part of the evaluation process, Respondents may be requested to make an oral presentation, at the Respondent's expense, to an evaluation committee. Key staff to be assigned to this project must participate in this presentation unless otherwise waived by the authority. The presentation may be followed by a question-and-answer session.

The authority reserves the right at its discretion to waive irregularities of this solicitation process.

In the event of extension errors, the unit price shall prevail and the Respondent's total offer will be corrected accordingly. In the event of addition errors, the extended totals will prevail and the Respondent's total will be corrected accordingly. Respondent must check their submission where applicable. Failure to do so will be at the Respondent's risk. Submissions having erasures or corrections must be initialed in ink by the Respondent. Respondents are cautioned to recheck their submissions for possible errors.

The Respondent shall not be allowed to take advantage of error, omissions or discrepancies in the specifications.

The authority, at its sole discretion, reserves the right to award to the Respondent whose response is deemed most advantageous to the authority. The authority, at its sole discretion, shall select the most responsive and responsible Respondent and evaluate all responses based on the requirements and criterion set forth in this solicitation while reserving the right to weigh specifications and other factors in the award. The authority reserves the right to reject any and all submissions as a result of this solicitation.

The authority reserves the right to award by line item when applicable and to accept or reject any or all parts of a submission.

Accelerated discounts should be so stated at the time of submission. If quick-pay discounts are offered, The Authority reserves the right to include that discount as part of the award criterion. Prices must, however, be based upon payment in thirty (30) days after receipt, inspection, and acceptance. In all cases, quick-pay discounts will be calculated from the date of the invoice or the date of acceptance, whichever is later.

Award notifications are posted on the Authority website. It is the Respondent's responsibility to monitor the website for status updates.