

June 20, 2019

# Request for Proposal

## Virtual Infrastructure Storage Area Network

For

**Fraser Public Schools**  
33466 Garfield Road  
Fraser, Michigan 48026

Prepared by

**Convergent Technology Partners, LLC**  
6197 Miller Rd., Suite 4  
Swartz Creek, MI 48473  
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## INSTRUCTIONS TO BIDDERS

### 1. PROPOSAL SUBMISSION DUE DATE AND REQUIREMENTS

#### A. PROJECT

Request for Proposal for Virtual Infrastructure and Storage Area Network (SAN) (“RFP”). Bidders shall provide, install, configure and commission a fully operational Virtual Infrastructure and SAN serving all School District buildings. Documents may be obtained from the District website at <https://www.fraser.k12.mi.us/domain/75>.

#### B. DUE DATE

On or before **12:30 p.m.** (local time) on **Friday, July 16, 2019** (“Due Date”), the Owner will receive Bid Proposals for the Project. The School District will not consider or accept a Bid Proposal received after the Due Date for Bid Proposal submission. All Bid Proposals received after the Due Date will be returned by making them available to the respective Bidder, unopened, for said Bidder to pick-up at their sole cost and expense. Bid Proposals shall be submitted to:

Ms. Laurie Videtta, Business Manager  
Fraser Public Schools  
33466 Garfield Road  
Fraser, Michigan 48026

#### C. PROPOSALS

Three (3) HARD copies and One (1) digital copy of the proposals are to be submitted in sealed envelopes, clearly marked: “**Virtual Infrastructure and Storage Area Network**” for Fraser Public Schools and shall be identified with the Bidder’s name and address and the date and time of the Bid Proposal opening. The School District is not responsible for any postal or delivery delays. No email, facsimile or other electronic Bid Proposals will be accepted.

#### D. OPENING

Proposals will be opened publicly immediately following the Due Date of the Proposals.

#### E. SECURITY

Each Bid Proposal must be accompanied by Bid Security in the form of a certified check or Bid Bond in the amount not less than 5% of the Bid Proposal amount, made payable to Fraser Public Schools or naming Fraser Public Schools as the obligee. Bid Bonds shall be issued by a company licensed to do business in the State of Michigan.

F. FAMILIAL DISCLOSURE AFFIDAVIT

Each Bid Proposal must be accompanied by a sworn and notarized statement disclosing any familial relationship that exists between the owner or any employee of the Bidder and any member of the Board of Education or the Superintendent of Fraser Public Schools. The Board of Education will not accept a Bid Proposal that does not include this sworn and notarized disclosure statement.

G. RESERVATION OF RIGHTS

The School District reserves the right, in its sole and absolute discretion (for this provision and all other provisions contained in this RFP), to accept or reject, in whole or in part, any or all Bid Proposals with or without cause, to waive any irregularities or informalities in this RFP process or any Bid Proposal, and to award the Contract to other than the low bidder, when in the opinion of the School District, such action will best serve the School District's interests.

H. WITHDRAWAL OF BID PROPOSALS

All Bid Proposals submitted shall not be withdrawn and shall be irrevocable for a minimum period of ninety (90) calendar days following the Due Date for receipt of Bid Proposals set forth above.

I. REQUESTS FOR CLARIFICATION

Bidders may request that the School District clarify information contained in this RFP. All such requests must be made in writing via email to Mr. Rich Kuehnle, Convergent Technology Partners, at [rkuehnle@ctpartners.net](mailto:rkuehnle@ctpartners.net). Requests for Clarifications and inquiries may only be made via email.

J. RESTRICTIONS ON COMMUNICATION

From the issue date of this RFP until a Contractor is selected and the Contract is awarded a prospective Contractor shall not communicate about the subject of this RFP or a Contractor's Bid Proposal with the School District, its Board of Education, or any individual member, administrators, faculty, staff, students, or employees, except for additional requests for clarification in accordance with the paragraph above.

K. RELEASE OF CLAIMS

Each Bidder by submitting its Proposal releases the School District from any and all claims arising out of, and related to, this RFP process and selection of a Contractor.

L. PROPOSAL COSTS

A recipient of this RFP is responsible for any and all costs incurred by it or others acting on its behalf in preparing or submitting a Bid Proposal, or otherwise responding to this RFP, or any negotiations incidental to its Bid Proposal or this RFP.

## M. COLLUSIVE BIDDING

All Bidders certify that its Bid Proposal is made without any previous understanding, agreement or connection with any person, firm or corporation making a Bid Proposal for the same Project and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

## 2. DEFINITIONS

- A. Bid Documents are defined as the Advertisement To Bid, Instructions to Bidders, Schedule of Events, this RFP, including all Appendices, Specification, Drawings and Addenda and the Contract.
- B. Addenda are written or graphic instruments issued prior to the Due Date of Bid Proposals which modify or interpret the Bid Documents by additions, deletions, clarifications or corrections. All Addenda issued to Bidders prior to the Due Date of Bid Proposals shall become part of the Bid Documents and all Bid Proposals are to include the Project/Work therein described. Each Bid Proposal submitted shall list all Addenda that have been received prior to the Due Date of Bid Proposals.
- C. As used in these Instructions to Bidders, the term "Bid Proposal" means a bid proposal prepared and submitted in response to this RFP.
- D. As used in these Instructions to Bidders, the term "PSC" refers to the Professional Service Contractor and means Convergent Technology Partners and its assigned representative.
- E. Throughout this RFP and Contract, the "Owner" or "School District" will be used to refer to Fraser Public Schools and bidders submitting Bid Proposals will be referred to as "Bidders" or "Vendors" and a successful Bidder or Vendor will be referred to as a "Contractor".

## 3. BIDDER'S REPRESENTATION

- A. Each Bidder, by submitting a Bid Proposal, represents that the Bidder has read and understands the Bid Documents and is familiar with the local conditions under which the Project is to be performed. Bidders will be held to have compared the Sites with Bid Documents and have satisfied themselves to all conditions affecting the execution of the Work/Project.

## 4. EXAMINATION OF BID DOCUMENTS AND SITE OF WORK - ALL AREAS

- A. An optional Bidder's conference will be held on July 1, 2019 at 1:00 p.m. for the purpose of answering any questions from the Vendors and visiting the Sites. The location of the Bidder's conference is:

Fraser Public Schools  
Administration Building – Board Room  
33466 Garfield Road  
Fraser, Michigan 48026

- B. Before submitting a Bid Proposal, each Bidder shall examine the Drawings carefully and shall read the Specifications and the Bid Documents. Each Bidder shall gather complete information prior to bidding as to existing conditions and limitations under which the Work/Project is to be performed, and shall include in its Bid Proposal a sum to cover the cost of items necessary to perform the Work/Project as set forth in the Bid Documents.
- C. No allowance or additional fees will be made to a Bidder because of lack of such examination or knowledge. The submission of a Bid Proposal will be considered as conclusive evidence that the Bidder has made such examination. An on-site-inspection of the Sites during the Bidder's Conference will be for all Bidders and their subcontractors, if any. Vendors may use subcontractors in connection with the Work/Project performed under this RFP provided the Owner has approved the subcontractors. In using subcontractors, the Vendor agrees to be responsible for all their acts and omissions to the same extent as if the subcontractors were employees of the Vendor.
- D. Bidders may make written request to the PSC for interpretation or correction of any ambiguity, inconsistency or error in the Bid Documents that are discovered. These questions shall be submitted to the PSC no later than five (5) business days prior to the Due Date of Bid Proposals. Only a written interpretation or correction by Addendum shall be binding on Bidders. No explanations or interpretations requested or made orally will be considered binding. All questions will be responded to in writing.

**5. SUBSTITUTIONS**

- A. Each Bid Proposal shall be based upon the materials and equipment described in the Bid Documents.
- B. In addition to the Base Bid, the submission of voluntary alternates is acceptable. If a voluntary alternate is submitted for consideration, it shall be expressed on the Bid Form as an add or deduct amount from the Base Bid. If a voluntary alternate is submitted, the Bidder shall also submit sufficient information in the form of drawings, specifications, a complete description of the proposed substitute, the cost savings or advantages, the name of the material or equipment for which it is substituted, drawings, cuts, performance and test data and any other data or information necessary for a complete evaluation, sufficient for analysis of the alternate. The Owner reserves the right to unilaterally accept or reject, in whole or in part, any voluntary alternates.

## 6. BIDDING PROCEDURES

- A. All Bid Proposals must be submitted, in triplicate, on the Bid Proposal Forms provided as part of the Bid Documents and in accordance with the Advertisement To Bid and Instructions to Bidders. Bidders must provide a complete list of proposed subcontractors (one per discipline) as indicated on the Bid Forms. Listing two or more subcontractors per discipline will be grounds for disqualification.
- B. Prior to the Due Date for Bid Proposals, any Addenda will be mailed or delivered to each person or firm recorded by the Owner as having received the Bid Documents and will be available for inspection wherever the Bid Documents are kept available for that purpose. No Addendum will be issued later than three (3) days prior to the Due Date for Bid Proposals. Each Bidder shall ascertain prior to submitting a Bid Proposal that he/she has received all Addenda issued and shall acknowledge their receipt in their Bid Proposal Form.
- C. All Bids must be signed as follows:
  - 1. Corporations: Signature of an officer of the firm who is authorized to bind the corporation.
  - 2. Partnerships: Signature of one partner who is authorized to bind the firm and all of its Partners.
  - 3. Bids submitted by Joint Ventures shall be signed by one of the Joint Ventures and shall be accompanied by a certified copy of the Power of Attorney authorizing the individual signing to bind all the Joint Ventures. If a certified copy of the Joint Venture's certificate submitted with the Bid Proposal indicates that all Joint Ventures have signed, no authorization is required.
  - 4. Individuals signing on own behalf: No authorization is required.
  - 5. Individual signing on behalf of another: Power of Attorney or comparable evidence of authority shall accompany Bid.
- D. Bid Proposals shall be prepared on unaltered Bid Forms which are a part of this RFP. Bidders shall make no additional stipulations on the Bid Form nor qualify the Bid Proposal in any other manner. Unauthorized conditions, limitations, or provisions attached to the Bid Proposal will be cause for rejection of the Bid Proposal. If alterations by erasure or interlineations are made for any reason, explain over such erasure or interlineations with a signed statement from the Bidder. No additional charges, other than those listed on the Bid Proposal Form and Bid Supplemental Forms, shall be made. Prices quoted will include verification/coordination of order, all costs for shipping, delivery to all Sites, insurance, payment and performance bonds, unpacking, setup, installation, operation, testing, cleanup, training and all other requirements contained in the Bid Documents.

- E. Bids shall be submitted in a sealed envelope. Identified on the face of the envelope:
1. Project name
  2. Name and address of Bidder
  3. Date and time of Bid Proposal opening
  4. Notation **“Virtual Infrastructure and Storage Area Network”**
- F. No responsibility shall attach to the PSC, the Owner, or the authorized representatives of either one, for the premature opening of any Bid Proposal which is not properly addressed, delivered and/or identified. In such event, that Bid Proposal will not be considered, and the Bidder will be automatically disqualified from consideration.
- G. Negligence in preparation, improper preparation, errors in and/or omissions in the Bid Proposal shall not relieve the Bidder from fulfillment of any and all applicable obligations and requirements of contained in the Bid Documents.
- H. The Owner or PSC in making copies available of the Bid Documents to Bidders do so only for the purpose of obtaining Bid Proposals on the Project and do not confer a license or grant of use to a Bidder for any other purpose.
- I. All Bidders must complete, sign and return the attached “FAMILIAL DISCLOSURE AFFIDAVIT” as well as the “IRAN SANCTION AFFIDAVIT” with their Bid Proposal.
- J. The Owner considers this RFP legally binding and will require that this Request For Proposal and the Bid Proposal be incorporated by reference into any subsequent Contract between the Contractor and the Owner. It should be understood by the Bidder that this means that the Owner expects the Bidder to satisfy all of the requirements and specifications contained in the RFP. Any exceptions to the RFP must be explicitly noted in the Bid Proposal. Lack of listing all exceptions will be considered acceptance of all of the specifications as presented in this RFP.



## **7. CONSIDERATION OF BIDS**

- A. The Bidder acknowledges the right of the Owner to accept or reject any or all Bid proposals, in whole or in part, with or without cause, to waive any irregularities or informalities in this RFP process or any Bid Proposal, and to award the Contract to other than the low bidder. In addition, the Bidder recognizes the right of the Owner to reject a Bid Proposal:
1. If the Bidder fails to furnish any required Bid Security, or to submit the data required by the Bid Documents; or
  2. If the Bid Proposal is in any way incomplete or irregular; or
  3. If the Bidder's performance was unsatisfactory under a prior contract for the installation, repair, modification, or demolition of a system with the Owner, or a contractor in privity of contract with the Owner, which was funded, directly or indirectly, by the Owner;
  4. If the Bidder was an employer of construction mechanics working on the construction of facilities funded, directly or indirectly, by the Owner through contracts under 1984 PA 431, MCL 18.1101 et seq; MSA 3.516 (101) et seq, and was determined by the Michigan Department of Labor to have failed to comply with a contractual provision requiring the payment of Department of Labor's prevailing wage or the maintenance of Department of Labor's prevailing wage or the maintenance of Department of Labor's apprentice-journeyperson ratio determinations for construction mechanics for that facility.
- B. The Owner shall have the right to accept Alternates in any order or combination and to determine the lowest responsible Bidder on the basis of the sum of the Base Bid and the Alternates accepted.
- C. Once the Contract is awarded to the Contractor, the Contract is contingent upon School District Board of Education approval and the Contractor providing the PSC with any and all documents required by the RFP prior to commencement of the Work/Project (i.e. insurance Certificates, Labor and Material Payment Bond and Performance Bond, etc.). Further, the School District reserves the unrestricted right to reduce the Contract amount by reducing the scope of Work/project and/or components in order to meet Bond budget requirements. Any such action will be taken before specific work on a building or on a project component has commenced. Contract amount shall be reduced or increased based on the unit pricing values.
- D. Bidders to whom an award of a Contract is under consideration shall submit to the Owner upon his/her request a properly executed Contractor's Qualification Statement, AIA Document A305 or other information format specified by the PSC.

## **8. BID SECURITY**

- A. The Bid Proposal shall be accompanied by a Bid Security of a certified check or cashier's check payable to the Owner or by a satisfactory Bid Bond naming the Owner

as the obligee and executed by the Bidder and a surety company authorized to do business in the State of Michigan, in an amount identified in the Instructions To Bidders. The check or amount of Bid Bond shall be forfeited to the Owner upon failure of the Contractor to enter into the Contract. The Contractor's Bid security will be retained until the Contractor has signed the Contract and has furnished the required Certificates of Insurance and other required Bonds and documents required by the RFP. Bonds signed by an Attorney-In-Fact must be accompanied by a certified and effectively dated copy of their Power of Attorney.

- B. The Owner reserves the right to retain the Bid security of all Bidders until the Contractor enters into the Contract or until ninety (90) days after bid opening, whichever is later. If the Contractor refuses to enter into the Contract, the Owner may retain their Bid Security as liquidated damages but not as a penalty.

**9. PERFORMANCE AND LABOR AND MATERIAL PAYMENT BONDS**

- A. At or prior to delivery of the signed Contract, the Owner will require the Contractor to secure and post a Labor and Material Payment Bond and a Performance Bond including bonding for all subcontractors, each in the amount of 100% of the Contract Sum including bonding for all subcontractors. Surety shall be a company incorporated in the United States and must appear on the U.S. Treasury Departments approved surety list and be adaptable to the Owner. The Contractor shall obtain such bonds in a manner consistent with Michigan law.

**10. TAXES**

- A. Installation services for the tangible personal property purchased by the Owner is not subject to sales taxation. Moreover, the Owner is exempt from taxation on all tangible personal property purchased by the Owner for its use and consumption; however this exemption would not apply to any materials required under the Bid Documents that are deemed to be a component of a construction/improvement project to the Owner's Sites/Facilities. All prices submitted on the Bid proposal Form shall be inclusive of any and all applicable taxes.

**12. WITHDRAWAL OF BIDS**

- A. A Bidder may withdraw its Bid Proposal by written request from an authorized Bidder representative, at any time prior to the Due Date of Bid Proposals.
- B. No Bidder may withdraw a Bid Proposal for a period of ninety (90) calendar days, following the Due Date for receipt of Bid Proposals, and all Bid Proposals shall be subject to acceptance by the Owner during this ninety (90) day period.

**13. EXECUTION OF CONTRACT**

- A. The Contractor to whom the Contract is awarded shall, within ten (10) calendar days after Notice of Award and receipt of the Contract from the Owner, execute and deliver required copies to the Owner.

- B. At or prior to delivery of the executed Contract, the Contractor to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Bid Documents and such Labor and Materials Payment Bonds and Performance Bond as are required by Owner and any other documents required by this RFP.
- C. The Owner shall approve the provided Bonds and Certificates of Insurance before the Contractor may proceed with the Work/Project. Failure or refusal to provide Bonds, Certificates of Insurance or any other documents required by this RFP in a form(s) satisfactory to the Owner shall subject the Contractor to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

**14. POST BID INFORMATION**

- A. Bid Form(s) shall be submitted as indicated in the Bid Documents. The Bid Form(s) requires all proposed subcontractors for the Project to be named; no more than one per discipline.

**15. TIME OF COMPLETION**

- A. The Bidder agrees to complete the Work within the timeframes listed in the Schedule of Events.

**15. EQUAL OPPORTUNITY**

- A. The Contractor and all of its subcontractors shall not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin.

## SCHEDULE OF EVENTS

The following is a projected schedule of events for this Project. The schedule may change depending upon the results of the responses and a final schedule will be established prior to contracting with the Contractor.

EVENT	DATE
Release of RFP to Bidders	June 20, 2019
Bidder's Conference @ 1:00 p.m.	July 1, 2019
Due Date for Bid Proposals from Bidders @ 12:30 p.m.	July 16, 2019
Short List Interviews	July 24, 2019
Contract Award	September 23, 2019
Hardware and Installation Services Complete	December 2, 2019
OS Upgrades Services Complete	February 28, 2020
Training Complete	February 28, 2020

**BID PROPOSAL FORM**

**OWNER:** Fraser Public Schools  
33466 Garfield Road  
Fraser, Michigan 48026

**PROJECT:** Virtual Infrastructure and Storage Area Network

**BID OF:** \$ \_\_\_\_\_  
\_\_\_\_\_ (Dollars)

The Bid Proposal amount shall be shown in both words and figures. In the case of discrepancy, the amount shown in words shall govern.

**BASE BID:** The undersigned, having examined the Bid Documents and examined the conditions affecting the Work/Project, hereby proposes and agrees to furnish all of the labor, materials, and equipment and perform all work necessary to complete the Work/Project as required by the Bid Documents for the stipulated sum identified above and detailed in Bid Proposal Form **Supplement A** (Cost Analysis Worksheet). The Bid Documents set forth the terms and conditions upon which the Bidder will provide a "turnkey" solution for the installation and operation of the project for use by the Owner. The Bidder agrees that it will provide a "Turnkey Solution" to the Owner and represents and warrants that the design, operation and functionality of the Project are in accordance with the Bid Documents. All prices provided by the Bidder on this Bid Proposal Form must include all cables, connectors, equipment etc. that are necessary to make the Project fully operational for the intent and purpose stated in the Bid Documents

**BID SECURITY**

Enclosed herewith find (Certified Check)/ (Bid Bond) in the amount of \$\_\_\_\_\_ being five percent (5%) of the maximum Bid Proposal herein, made payable to Fraser Public Schools or naming Fraser Public Schools as obligee. The proceeds of which are to remain the property of Fraser Public Schools, if the Bidder does not, within ten (10) days after notice of the acceptance of Bid Proposal, enter into the Contract.

**TAXES**

Please identify the amount, if any, of this Bid Proposal that has been attributed to sales or use tax. If an amount has been attributed to such tax, please identify which components of the Bid to which the tax has been attributed.

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**SUBCONTRACTORS**

Bidders must provide attach complete list of proposed subcontractors (one per discipline), if any are proposed to be utilized on the Project. Listing two or more subcontractors per discipline will be grounds for disqualification.

**EXCEPTIONS**

Any Exceptions to the terms and conditions contained in the RFP or Contract are identified below:

\_\_\_\_\_  
\_\_\_\_\_

**ADDENDA**

This RFP incorporates the following Addenda:

Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_

Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_

Addendum No. \_\_\_\_ Dated \_\_\_\_\_ Addendum No. \_\_\_\_ Dated \_\_\_\_\_

**BID PROPOSAL FORM SUPPLEMENTS:**

The following Bid Form Proposal Supplements are attached hereto and are considered an integral part of this Bid Proposal Form:

- BID SUPPLEMENTAL A
- BID SUPPLEMENTAL B
- BID SUPPLEMENTAL C
- BID SUPPLEMENTAL D
- BID SUPPLEMENTAL E

BIDDER NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

DATE: \_\_\_\_\_

TELEPHONE: \_\_\_\_\_

EMAIL ADDRESS: \_\_\_\_\_

If award is made to our firm based upon our Bid Proposal, we agree to enter into the form of Contract with the School District in accordance with this Request For Proposal, the Contract and our Bid Proposal.

My signature certifies that the Bid Proposal as submitted complies with all terms and conditions as set forth in this Request For Proposal, unless specifically enumerated as an exception as part of this Bid Proposal Form.

I hereby certify that I am authorized to sign as a Representative for the Firm:

---

(Authorized Signature)

(Title)

**SUPPLEMENTAL A**  
**COST ANALYSIS WORKSHEET**

**OWNER:** Fraser Public Schools  
33466 Garfield Road  
Fraser, Michigan 48026

**BIDDER:** \_\_\_\_\_

**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**BASE BID BREAKDOWN**

Component	Cost
Physical Server	
Storage Area Network	
Backup Appliance	
Installation Services	
Migration Services	
Performance Bonds	
Total	



**SUPPLEMENTAL B**  
**BILL OF MATERIAL**

All Bid Proposals shall include a detailed Bill of Materials that notes each item, part number, and unit price.

Provide this Bill of Materials, attached to and submitted with the Bid Proposal. These unit costs, which shall be considered firm pricing during the Contract period and not subject to change, will be used to determine costs for additions and deletions during the Contract period. The Owner reserves the right to adjust any or all quantities at any time.

**SUPPLEMENTAL C  
MANDATORY ALTERNATES**

**THERE ARE NO MANDATORY ALTERNATES REQUIRED**

**SUPPLEMENTAL D  
VOLUNTARY ALTERNATES**

**VOLUNTARY ALTERNATE 1:**

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

**VOLUNTARY ALTERNATE 2:**

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

**VOLUNTARY ALTERNATE 3:**

Add/Deduct/No Change

\_\_\_\_\_ Dollars (\$\_\_\_\_\_)

**SUPPLEMENTAL E  
FAMILIAL DISCLOSURE AFFIDAVIT**

The undersigned, the owner or authorized officer of \_\_\_\_\_ (the "Bidder"), pursuant to the familial disclosure requirement provided in the Fraser Public Schools (the "School District") Request For Proposals, hereby represents and warrants that, except as provided below, no familial relationships exist between the owner or any employee of the Bidder, and any member of the Board of Education of the School District or the Superintendent of the School District. A list of the School District's Board of Education Members and its Superintendent may be found at [www.fraser.k12.mi.us](http://www.fraser.k12.mi.us).

List any Familial Relationships:

BIDDER:  
  
\_\_\_\_\_  
  
By:  
  
\_\_\_\_\_  
  
Its:  
  
\_\_\_\_\_

STATE OF MICHIGAN    )  
  )ss.  
COUNTY OF \_\_\_\_\_ )

This instrument was acknowledged before me on the \_\_\_\_ day of \_\_\_\_\_, 2011, by  
  
\_\_\_\_\_.

\_\_\_\_\_  
  , Notary Public  
  
\_\_\_\_\_ County, Michigan  
My Commission Expires: \_\_\_\_\_  
Acting in the County of: \_\_\_\_\_

**SUPPLEMENTAL F**

**AFFIDAVIT OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT**

The undersigned, the owner or authorized officer of the below named applicant (the “Applicant”), pursuant to the compliance certification requirement provided in the Fraser Public Schools (the “District”) Request For Proposals for Virtual Infrastructure and Storage Area Network (the “RFP”), hereby certifies, represents and warrants that the Applicant (including its officers, directors and employees) is not an “Iran linked business” within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the “Act”), and that in the event Applicant is awarded a contract as a result of the aforementioned RFP, the Applicant will not become an “Iran linked business” at any time during the course of performing the Work or any services under the contract.

The Applicant further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or 2 times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the School District’s investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date it is determined that the person has submitted the false certification.

APPLICANT:

Name of Applicant:

By:

Title:

Date:

STATE OF Michigan  
COUNTY OF \_\_\_\_\_ )

This instrument was acknowledged before me on the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_,  
by \_\_\_\_\_.

\_\_\_\_\_, Notary Public \_\_\_\_\_ County,  
\_\_\_\_\_

My Commission Expires: \_\_\_\_\_

Acting in the County of: \_\_\_\_\_

## **SECTION 2 – SPECIFICATIONS**

### **SITE SPECIFIC REQUIREMENTS**

#### **PART 1 GENERAL**

- A. The Owner Sites are both instructional and administrative facilities that provide year-round services to their students, staff and the community. As such, activities in all buildings are critical to the provisioning of services to the students, staff and the community and shall not be interrupted by the Contractor's Work activities without prior scheduling.

#### **PART 2 EXECUTION**

- A. The server and storage systems associated with this Work will not be taken off-line or removed from service at any time without coordination of the Owner's IT department and the staff of affected buildings. Arrangements must be made by the Contractor to coordinate any such activities.
- B. The Contractor will be required to work around all of the conditions listed above, as well as working with the Owner's staff to minimize disruptions to normal school district activities.
- C. Installation Guidelines
  - 1. All Work performed on this Project will be installed in accordance with the current edition of the National Electrical Code®, the current edition of the National Electrical Safety Code®, the current edition of the BICSI Telecommunications Distribution Methods Manual, the current edition of the BICSI Cabling Installation Manual, the latest issue of the ANSI/TIA/EIA Standards as published by Global Engineering Documents as TIA/EIA Commercial Building Telecommunications Standard, and all local codes and ordinances.

**END OF SECTION**

## PROJECT MANAGEMENT AND QUALITY ASSURANCE

### PART 1 GENERAL

- A. Project Manager
  - 1. The Contractor will provide a full-time Project Manager who will act as a single point of contact for all activities regarding this Project.
- B. Quality Assurance
  - 1. The Contractor is wholly responsible to meet or exceed all codes, standards, regulation, manufacturer installation standards and industry best practices.
- C. PSC
  - 1. When the Owner is referred to in this section of the RFP relative to inspections, the Owner has designated the PSC as the party to perform such inspections on behalf of the Owner. Notwithstanding the above, the Owner may also perform such inspections along with the PSC.

### PART 2 EXECUTION

- A. Project Manager
  - 1. The Project Manager is required to attend necessary technology configuration and installation meetings for coordination before Work is started and during the Work in progress.
  - 2. The Project Manager will be required to make on-site decisions regarding the scope of the Work and any changes required by the Work.
  - 3. The Project Manager will be totally responsible for all aspects of the Work and shall have the authority to make immediate decisions regarding implementation or changes to the Work.
  - 4. The Project Manager must be a management employee and will not be involved in personally performing craft installation Work.
- B. Compliance with Laws and Regulations
  - 1. The Contractor performance of the Work shall comply with all applicable federal, state, and local laws, rules, and regulations and School District policies, procedure, rules and regulations. The Contractor shall give required notices, shall procure necessary governmental licenses and inspections, and shall pay without burden to the Owner, all fees and charges in connection therewith unless specifically provided otherwise. In the event of violation, the Contractor shall pay all fines and penalties; including attorney's fees and other defense costs and expenses in connection therewith.

C. Codes, Standards, and Ordinances

1. All connectivity Work shall conform to the latest edition of the National Electrical Code®, the Building Code, and all local codes and ordinances, as applicable. ANSI/TIA/EIA-568-B and ANSI/TIA/EIA-569-A shall be adhered to during all installation activities. Methodologies outlined in the latest edition of the BICSI Telecommunications Distribution Methods Manual shall also be used during all installation activities. Should conflicts exist with the foregoing, the authority having jurisdiction for enforcement will have responsibility for making interpretation.

D. Safety

1. The Contractor shall take the necessary precautions and bear the sole responsibility for the safety of the methods employed in performing the Work. The Contractor shall at all times comply with the regulations set forth by federal, state, and local laws, rules, and regulations concerning "OSHA" and all applicable state labor laws, regulations, and standards. The Contractor shall indemnify and hold harmless the Owner from and against all liabilities, suits, damages, costs, and expenses (including attorney's fees and court costs) that may be imposed on the Owner because of the Contractor, or its subcontractor, or supplier's failure to comply with the regulations stated herein.

E. Inspection, Acceptance, and Title

1. Inspection and Acceptance will be upon successful installation unless otherwise provided. Title to/or risk of loss or damage to all items shall be the responsibility of the Contractor until acceptance by the Owner, unless loss or damage results from negligence by the Owner. If the materials or services supplied to the Owner are found to be defective or do not conform to the specifications, the Owner reserves the right to cancel the Contract upon written notice to and return products at the Contractor's expense, based upon the terms of the Contract.
2. The Owner shall at all times have access to the Work wherever it is in preparation or progress and shall provide proper facilities for such access and for inspection.

F. Status Reports, Meetings and Service Coordination.

1. It shall be the Contractor's responsibility to provide the Owner with written weekly project status reports while actively engaged in craft work and a summary report at the beginning of periods of inactivity between phases or construction delays noting status at that time and expected date of return to work in addition to the requirements listed below. These reports are required and shall include, but not be limited to:
  - a. Project completion percentage.
  - b. Any and all problems that were encountered.
  - c. Any foreseeable problems that may arise.



- d. General status of the Project
  - Resources that may be required from the Owner
- 2. The Owner reserves the right to hold additional status meetings on a regular basis with the Contractor's Project Manager.

**END OF SECTION**

## NETWORK OVERVIEW

### PART 1 GENERAL

- A. Fraser Public Schools is soliciting proposals to purchase servers, storage equipment, backup appliance, installation, service and support for a complete turnkey virtual environment with disaster recovery.
- B. The virtual environment will consist of virtual host servers at Fraser High School, and identically configured host servers at Fraser Middle School, a Storage Area Network at Fraser High School, an identically configured Storage Area Network at Fraser Middle School for disaster recovery, a single backup appliance at the High School. This configuration mirrors the existing environment including the DR site.
- C. The Owner has an existing Microsoft Windows Server 2008R2, 2012R2, and Linux environment running on Server 2008R2 Hyper-V Servers. It shall be the Contractor's responsibility to migrate the existing virtual machines to the new virtual environment on Windows Server 2019 and migrate all virtual machines and software running on them to the latest version.
- D. The Contractor shall provide all equipment specified in the bid requirements including any wire management, cables, miscellaneous parts and labor for a complete and operational network.
- E. Physical Server/SAN configuration and virtual environment configuration shall follow equipment manufacturer's best practices, the requirements of the Specifications, and all current edition or revisions of all applicable codes and standards as previously listed.
- F. Owner provided asset tags must be placed in a visible area on all equipment.
- G. Awarded Contractor will provide a detailed testing methodology used to ensure the system/Project is functioning to manufacture specifications with its response. Other tests, specific to installed equipment, may be required to ensure functionality.
- H. Bidders must include a Bill of Material (BOM), along with line item pricing for all components proposed, including, but not limited to, access points, electronics, peripherals, maintenance and support with the total listed where indicated in the Bid Proposal Forms. Failure to provide the BOM with line item pricing will result in disqualification of the Bid proposal.
- I. All Bidders must provide a proposal for the Base Bid that meets or exceeds the specifications set forth in this RFP. However, all Bidders may suggest Alternates if it is felt that the alternate proposal better suits the intent of this RFP. Any Alternate must be listed as such with separate pricing sheets. Any variance of the feature/functionality of the Base Bid must be identified in any Alternates proposed.

J. Bidder Qualifications

1. A Contract to provide the storage area network and virtual infrastructure will only be entered with a Contractor qualified by experience and financial stability.
2. The Contractor doing this Work shall be a reputable firm regularly doing this type of work with skilled, fully trained technicians and equipment capable of performing a first-class installation in accordance with standard industry practices. All Contractor's technicians shall be factory certified for the Data Systems that they are to install and/or maintain.
3. The Contractor shall be a company that has installed medium to large virtual infrastructures for at least five years. All Bidders shall submit verifiable references including names and phone numbers of projects of a similar nature.

K. Manufacturer Affiliation

1. Bidder shall either be the manufacturer of the equipment proposed or a factory authorized distributor/contractor.
2. If not the manufacturer, the Bidders shall have a proven close and long-standing relationship with the manufacturer in order to demonstrate the Bidder's commitment to supporting the products proposed. Proof shall be supplied with the Bid Proposal in the form of a written guarantee from the manufacturer, stipulating that the manufacturer will provide support for the system if the Bidder is either unwilling or unable to do so at any time within 10 years of the installation of the LAN. This may also include documentation as to the number of years supplying the product, size of inventory, test and training center support, and etc.

**PART 2 SUMMARY OF WORK**

A. The intent of the RFP is to provide the following:

1. A storage area network with 100% SSD drives at both Fraser High School and Middle School that will provide Tier 0 storage to various virtual servers that will be running in a Microsoft Hyper-V environment.
2. A storage area network at Fraser Middle School that will be configured identically to that of Fraser High School. The intention of this SAN being a disaster recovery replica.
3. A backup appliance for the purpose of agent level backups of mission critical district services.
4. Hyper-V host servers at Fraser High School and Fraser Middle School to run the virtual environment.
5. Migration of current Microsoft Windows Environment from Server 2008R2/2012R2 to Server 2019.

### **PART 3 PRODUCTS**

- A. The Owner will accept Bid Proposals from the following manufacturers:
  - 1. Dell EMC, IBM, and Hewlett Packard
- B. Vendors proposing products other than these listed must contact the PSC for approval.
- C. Notwithstanding the above, the School District expects all supplies, materials equipment or products proposed by a Bidder to meet or exceed the Specifications set forth in this RFP. Further, it is the School District's intent that this RFP permit competition. Accordingly, the use of any patent, proprietary name or manufacturer's name is for demonstrative purposes only and is not intended to curtail competition. Whenever any supplies, material, equipment or products requested in this RFP are specified by patent, proprietary name or by the name of the manufacturer, unless stated differently, such specification shall be considered as if followed by the words "or comparable equivalent," whether or not such words appear. The School District, in its sole and absolute discretion, shall have the right to determine if the proposed equivalent products/brands submitted by Bidder meet the Specifications of this RFP and possess equivalent and/or better qualities. It shall be the Bidder's responsibility to notify the School District in writing if any Specifications or suggested comparable equivalent products/brands require clarification by the School District prior to the Due Date for Bid Proposals.

### **PART 4 EXECUTION**

- A. Provide all equipment, materials, labor, and services, not specifically mentioned or shown, which may be necessary to complete or perfect all parts of the installation. Ensure that they are in compliance with requirements stated or reasonably inferred by the Bid Documents.

**END OF SECTION**

## NETWORK EQUIPMENT AND SERVICES

### PART 1 GENERAL

- A. Provide and install all equipment for a complete and operational network.
- B. Attachments are for reference only, please include your own BoM/SoW as appropriate.

### PART 2 PRODUCTS

- A. Virtual Infrastructure
  - 1. Host Servers must consist of the following:
    - a) Six (6) identical Host Servers (3 in the High School Data Center and 3 in the Middle School Disaster Recovery site) running a Microsoft Hyper-V environment.
    - b) All components of the Microsoft Hyper-V infrastructure must mount into nineteen-inch racks. The rack space will be provided by the district.
    - c) Manufacturer support and maintenance must include at a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.
    - d) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.
  - 2. The Host servers Basis of Design is the Dell PowerEdge and shall have the following minimum hardware configurations, found in attachment 1 – Server Hardware Configuration.
- B. Storage Area Network
  - 1. Storage Area Network must provide the following features and functionality:
    - a) Online SAN to SAN replication.
    - b) The SAN infrastructure will include a SAN at Fraser High School that will provide storage for the district’s virtual infrastructure and a SAN at Fraser Middle School that will house a full replica for disaster recovery purposes.
    - c) The High School and Middle School SAN must be identical.
    - d) The SAN must utilize 10Gb iSCSI connectivity, the manufacturer must specify the count and type of 10Gb ports to be provided by the district.

- e) Individual hardware components of the SAN must be hot swappable.
  - f) All components of the SAN infrastructure must mount into nineteen-inch racks. The rack space will be provided by the district.
  - g) Manufacturer support and maintenance must include at a minimum 24x7 phone support and 4-hour mission critical on-site support for a minimum of 5 years.
  - h) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.
2. Specifications for the Storage Area Network are as follows. The “Basis of Design” is Dell EMC Unity, found in Attachment 1 – SAN Hardware Configuration.

### C. Backup Appliance

1. Backup Appliance must provide the following features and functionality:
- a) System must provide Active Directory Agent backups of all domain controllers.
  - b) Vendor must configure file system backups of all domain controllers.
  - c) Vendor must configure SharePoint Agent backups of all SharePoint Servers listed in this bid.
  - d) Vendor must configure SQL Agent Backups of all Microsoft SQL Servers listed in this bid.
  - e) Vendor must work with Owner’s technical staff to configure alerts for backup jobs.
  - f) Manufacturer support and maintenance must include at a minimum 24x7 phone support and mission critical on-site support for a minimum of 5 years.
  - g) Manufacturer or reseller must provide at a minimum on-site “over the shoulder” training/knowledge transfer.
2. Specifications for the Backup Appliance are as follows. The “Basis of Design” is Dell EMC IDPA, in Attachment 1 – Backup Appliance Configuration.

**PART 3 EXECUTION**

- A. The hardware and initial software installation should follow Attachment 2 example statement of work. The vendor is to create their own SoW to be included with their proposal.
- B. Provide and install new patch cables for all required connections for the new equipment.
- C. Provide configuration and setup on all equipment to integrate into the existing network.

**END OF SECTION**

## OPERATING SYSTEM UPGRADE SERVICES

### **PART 1 GENERAL**

- A. Provide OS upgrade services for existing Microsoft Windows 2008R2 and 2012R2 virtual machines.

### **PART 2 PRODUCTS**

- A. Attachment 3 includes a listing of the current servers running in the Hyper-V environment.
  - 1. All Microsoft Windows machines are to be upgraded or migrated to Microsoft Windows 2019 Server.
  - 2. All Linux / Non-Microsoft OS virtual machines are not to be part of the scope of work of OS Upgrade Services.

### **PART 3 Execution**

- A. Attachment 3 “OS upgrades – Scope of Work” is for reference only, please include your own SoW for these services.



## **INSTALLATION, TESTING AND ACCEPTANCE**

### **A. GENERAL**

- a. This Section covers the installation, testing and acceptance required for the new equipment.
- b. Awarded Contractor will provide all materials, equipment and labor necessary to install, test, and cut-over the system/Project and ancillary equipment. This includes, but is not limited to, delivery, unloading, storage, installation, inspection and testing of the system and components, and management of all Awarded Contractor and any subcontractor personnel.
- c. Any equipment proposed in response to this RFP must be installed and tested at least five working (business) days prior to the scheduled cut-over date.
- d. If any proposed equipment must interface to existing installed equipment, the Awarded Contractor must agree to be responsible for providing any necessary interface requirements to the installed equipment.
- e. Notwithstanding the written certification by the Awarded Contractor that the equipment has been installed and ready for use, the equipment will not be deemed installed within the terms of the Contract until such installation is confirmed by the Owner through successful performance.
- f. Awarded Contractor must make arrangements for access to the Owner's facilities outside of the normal business hours, or on days when the Owner's offices are closed, by contacting the Information Services Office or the Owner's designated Project Manager or PSC. Operations that disrupt service must be performed outside of normal working hours ONLY.

### **B. VENDOR RESPONSIBILITIES DURING INSTALLATION**

- a. Make all reasonable efforts to minimize disruption to normal Owner activities. The Owner reserves the right to determine if the Awarded Contractor's Work is causing undue disruption to the Owner's normal business operations, and, if so, arrange with the Awarded Contractor alternate times and/or methods for completing the Work causing the disruption.
- b. Awarded Contractor will provide weekly (or as requested) Project status reports to the Owner as to the progress and performance of all portions of the Work. Awarded Contractor will cooperate fully to ensure that the Owner's identified critical facilities and services are maintained through the installation and minimal disruption is incurred when cut-over to the new system.
- c. Awarded Contractor will designate a Project Manager for the Contract, who will submit and coordinate a schedule of installation activities with the Owner's designated Project Manager. The Project Manager will be the prime point of contact with the Owner and will provide regular status update reports and attend coordination meetings with the Owner.

## C. TESTING AND ACCEPTANCE

- a. All Bidders will provide in the narrative section a complete detailed acceptance test procedure covering the offered equipment, services and any peripherals in their response to this RFP.
  - i. Installation Tests
    1. During the installation, the Awarded Contractor will perform all tests necessary to insure that the portions of the system/Project being installed are ready.
  - ii. Acceptance Tests
    1. After cut-over of any portion of the system/Project, the Awarded Contractor will conduct acceptance tests consistent with factory system performance specifications to be supplied with the system prior to installation.
    2. Performance and reliability tests will be conducted, demonstrating acceptable performance over a full fourteen (14) day period after cut-over.
    3. Acceptance of the system/project will be granted after all equipment has passed the tests set forth by this RFP or the Contract, as well as all manufacturer recommended testing, and has been in operation fourteen (14) consecutive days without a major failure. The Owner and/or PSC shall be the sole judge of whether all conditions for final system/Project criteria have been met.
    4. Due to the critical nature of the service being affected by this cut-over, the Awarded Contractor will be required to validate that the system/Project is performing at the levels required to support quality services. This includes the performance of all services and applications migrated and running on the new environment.

**D. DOCUMENTATION**

- a. Prior to final system/Project acceptance, the awarded Contractor will provide complete documentation formatted per the direction of the Owner, inventorying all hardware, to include but not limited to Model, location, MAC address, IP address. The exact format must receive sign off from the Owner. The Documentation package must provide the Owner with a comprehensive guide(s) for all operation, warranty, maintenance procedures for the “As-Built” system/Project.

**END OF SECTION**

## **TRAINING**

### **A. GENERAL**

- a. Awarded Contractor will provide, prior to cut-over, initial training in the use of the equipment for the network administrative staff. The cost of this initial training must be included in the Bid Proposal price.
- b. Training will be provided as part of the testing of the new system installation and configuration.
- c. Training will be required for approximately two of the Owner's employees on the operation and configuration of the equipment.
  1. Training provided outside of the new installation and configuration shall be no less than 4 hours.

**END OF SECTION**

## **WARRANTY AND SUPPORT**

### **PART 1 GENERAL**

- A. All manufacturer warranty information for each system shall be provided to the Owner upon job completion.
- B. Provide support and pricing as described herein.
- C. The Owner desires high quality maintenance services, parts, materials and workmanship so as to sustain peak operating service.
- D. The goal of the Owner is prompt resolution of problems, not merely prompt response to calls for service. This RFP does not specify response times to service calls as measurements because time limits for problem resolution are difficult to prescribe. The Contractor must strive for resolution of problems as promptly as possible under all conditions.

### **PART 2 GENERAL WARRANTY REQUIREMENTS**

- A. The Contractor must warrant at a minimum that on the cut-over date the equipment shall be in good working order and installed in a workmanlike manner, shall be free of defects, shall be installed and conform to manufacturer's official published specifications, and shall be installed and operate in full compliance with this RFP.
- B. The Contractor shall provide system technicians/personnel who have been fully trained and qualified on the equipment to be serviced and/or certified by the equipment manufacturer.
- C. The Contractor must warrant at a minimum that the equipment shall be free of all defects in material and workmanship for a minimum period of five (5) years from the Cut-over Date (the Warranty Period). Vendor must identify any warranty periods in excess of one year.
  - 1. Any costs for Warranty service must be included in the Bid Proposal price.
- D. During the Warranty and Maintenance Periods, the Contractor shall provide the necessary labor, parts, material, and transportation to maintain all equipment in good working order and in compliance with the equipment manufacturer's specifications.
  - 1. The Contractor shall not be held responsible for repairs or replacements made necessary by misuse, negligence, accident, theft or unexpected loss, abuse, connection to foreign electrical current, fire, water, flood, wind storms, lightning, and any acts of God or public enemy, failure to provide and maintain a suitable operating environment, unauthorized attachments or modification, or improper software changes, wiring, installation, repair or alteration by anyone other than the Contractor. If the Owner requests the Contractor to perform repairs necessitated by any of the above causes, the Contractor will perform said repairs at the Contractor's then prevailing rates for similar services and material.

### **PART 3 GENERAL MAINTENANCE REQUIREMENTS**

- A. The Contractor must provide full maintenance logistical support, including performance of all tests, system documentation, spare parts inventory, special tools, and test equipment required to promptly and properly perform the work.
- B. During the Warranty and Maintenance Periods, the Contractor shall provide the necessary labor, parts, material, and transportation to maintain all equipment bid in good working order and in compliance with the equipment manufacturer's specifications.
- C. The Contractor shall not be held responsible for repairs or replacements made necessary by misuse, negligence, accident, theft or unexpected loss, abuse, connection to foreign electrical current, fire, water, flood, wind storms, lightning, and any acts of God or public enemy, failure to provide and maintain a suitable operating environment, unauthorized attachments or modification, or improper software changes, wiring, installation, repair or alteration by anyone other than the Contractor. If the Owner requests the Contractor to perform repairs necessitated by any of the above causes, the Contractor will perform said repairs at the Contractor's then prevailing rates for similar services and material.
- D. Each Bidder shall provide, with their Bid Proposal, a complete escalation plan for maintenance situations that includes names, addresses, titles, and phone numbers of the people to be contacted, in ascending order, in the event of a maintenance crisis. This plan shall also include descriptions of the circumstances and procedures to be used under various maintenance scenarios including, but not limited to, catastrophic failure, major failures, and major and minor failures that regular maintenance personnel are unable to resolve in a timely manner.
  - 1. The Contractor shall provide personnel who have been fully trained and qualified on the equipment to be serviced and/or certified by the equipment manufacturer. The Owner desires that the Contractor directly employ such personnel. Contractor must state whether any installation personnel or maintenance technicians that are to be used to perform the Contract are employed by subcontractors or other third party companies. Bidders must provide the number of Bidder-employed technicians in the area that are factory-certified to work on the proposed equipment. The Bidder must provide the name and a summary of qualifications of the lead maintenance technicians that will be responsible maintenance at the Owner's Sites.

### **PART 4 GENERAL SUPPORT REQUIREMENTS**

- A. After the cut-over date and as long as the Contractor is obliged to perform maintenance services, the Contractor shall make all additions, deletions, moves and other changes of equipment, materials or software as the Owner may reasonably request.
- B. The Contractor shall make changes only upon receipt of a change form signed by such person or persons as the Owner may from time to time designate in writing, or

upon oral requests from such person as the Owner may from time to time designate in writing.

**END OF SECTION**

**Attachment 1**  
**Server Hardware Configuration**

Description	Quantity
PowerEdge R440 Server	1
Motherboard	1
No Trusted Platform Module	1
3.5" Chassis with up to 4 Hot Plug Hard Drives	1
Internal PERC405	1
Intel Xeon Silver 4116 2.1G, 12C/24T, 9.6GT/s , 16.5M Cache, Turbo, HT (85W) DDR4-2400	1
Intel Xeon Silver 4116 2.1G, 12C/24T, 9.6GT/s , 16.5M Cache, Turbo, HT (85W) DDR4-2400	1
Standard Heat Sink	1
Standard Heat Sink for 2nd CPU	1
Riser Config 3, 2 x 16 LP	1
2666MT/s RDIMMs	1
Performance Optimized	1
RAID 1	1
PERC H740P RAID Controller, LP Adapter	1
Windows Server 2019 Datacenter,16CORE,Factory Installed, No Media,UnLTD VMs,NO CALs	1
Windows Server 2019 Datencenter,16CORE,Media Kit	1
iDRAC9,Enterprise	1
OME Server Configuration Management	1
iDRAC Group Manager, Enabled	1
iDRAC,Factory Generated Password	1
On-Board LOM	1
No Internal Optical Drive for x4 and x8 HDD Chassis	1
Dual, Hot Plug, Redundant Power Supply (1+1), 550W	1
Standard Bezel	1
Dell EMC Luggage Tag	1
Quick Sync 2 (At-the-box mgmt)	1
Performance BIOS Settings	1
UEFI BIOS Boot Mode with GPT Partition	1
ReadyRails Sliding Rails With Cable Management Arm	1
No Systems Documentation, No OpenManage DVD Kit	1
Hyper-V role enabled with pre-installed Standard or DataCenter Ed OS on incl Virtual HDD	1
iDRAC Service Module (ISM), Pre-Installed in OS	1
Global Portal English US Language System	1
Dell Hardware Limited Warranty Plus Onsite Service	1
ProSupport: Next Business Day Onsite Service After Problem Diagnosis, 5 Years	1
ProSupport: 7x24 HW/SW Technical Support and Assistance, 5 Years	1
32GB RDIMM 2666MT/s Dual Rank	12
240GB SSD SATA Read Intensive 6Gbps 512 2.5in Hot-plug AG Drive,3.5in HYB CARR, 1 DWPD,438 TBW	2
MS2019 DC Edition, Additional License,2CORE,NO MEDIA/KEY	4
Intel X520 Dual Port 10GbE SFP+ Adapter, PCIe Low Profile	1
SFP+, SR, Optical Transceiver, Intel, 10Gb	2
NEMA 5-15P to C13 Wall Plug, 125 Volt, 15 AMP, 10 Feet (3m), Power Cord, North America	2



**Attachment 1**  
**SAN Hardware Configuration**

Description	Quantity
Unity 25 Drive DPE AF FLD INSTALL KIT	1
UNITY 450F 2U DPE 25x2.5 DRIVE FLD RK	1
Unity 4x10Gb SFP iSCSI/Eth connection	1
Unity 2x2 Port 10Gb iSCSI/Eth TwinAX IO	1
Unity AFA 1.92TB SSD 25X2.5	17
3M Active TwinAX Cable	4
PROSUPPORT PLUS HARDWARE SUPPORT 60 Months	1
UNITY AFA BASE SOFTWARE+ D@RE	1
PROSUPPORT PLUS SOFTWARE SUPPORT 60 Month	1
Storage M&R for Unity	1
Storage M&R for Unity lic	1
PROSUPPORT W/MISSION CRITICAL-SOFTWARE 60 Months	1
APPSYNC BASIC FOR UNITY 400F/450F	1
APPSYNC BASIC FOR UNITY 400F/450F LIC	1
RP Basic for Unity 400/400F/450F	1
Dell EMC ProSupport with Mission Critical Option - Technical support - phone \$0.00 consulting - 24x7 - response time: 30 min	1

**Attachment 1**  
**Backup Appliance Configuration**

Description	Quantity
IDPA DP4400 24TB 8X10G SFP	1
ANCHOR DP APPLIANCE 4400	1
TRANSCEIVER 10GBE SFP+ DP4400 300M	4
10 M LC TO LC CABLE KIT	4
DP4400 12TB CAPACITY EXPANSION PACK	2
PROSUPPORT PLUS HARDWARE SUPPORT 60 Months	1
IDPA DDOS 6.2 VIRTUAL EDITION	1
DATA PROTECTION CENTRAL ENTRY	1
PROSUPPORT PLUS SOFTWARE SUPPORT 60 Months	1
IDPA DP4400 ENV CONFIG	1
IDPA BU APP ENABLER ENTRY	1
ANALYTICS ENABLER ENTRY	1
IDPA BU SEARCH ENABLER ENTRY	1
FEDERATED REPORTING SERVER ENTRY	1
IDPA BOOSTFS 1 TB RAW ENABLER ENTRY	48
IDPA TARGET PROTOCOL ENABLER ENTRY	1
VREALIZE ENABLER ENTRY	1
DP4400 CAPACITY ENABLER DDVE 12TB	4
PROSUPPORT PLUS SOFTWARE SUPPORT 60 Months	1
PDP FOR IDPA DP4X SERIES	1
1 TRAINING CREDIT VALID 1YR (PDP DP)	900
30dayPostDeployAssist IDPA	1
EMC GRANULAR RECOVERY MICROSOFT HIGH=CA	48
PROSUPPORT PLUS SOFTWARE SUPPORT for 60 mo(s)	1
RecoverPoint for VM Starter Packs	1
5VM STARTER PACK FOR DP4400	1
PROSUPPORT PLUS SOFTWARE SUPPORT for 60 mo(s)	1

**Attachment 2**  
**Implementation and Migration Services - Scope of Work**

<b>Planning and Discovery</b>	
	The Primary function of the System Engineering & Planning phase is to conduct design session between Contractor and Fraser Public Schools. During these design meetings, the following elements will be identified,
	Conduct data center floor locations / rack locations for equipment
	<ul style="list-style-type: none"> <li>• Power Requirements for proposed hardware</li> <li>• Rack and floor space requirements</li> </ul>
	Network Diagrams and Device Configurations
	Physical installation of data center hardware within both data center locations
	<ul style="list-style-type: none"> <li>• Physical Installation will include hardware racking, power connections and basic network and storage connections</li> </ul>
	Storage Area Network Design
	<ul style="list-style-type: none"> <li>• Host zoning and configuration</li> <li>• LUN Provisioning</li> <li>• Replication Settings and configuration</li> </ul>
	Server Design
	<ul style="list-style-type: none"> <li>• IP Addresses and necessary Hyper-V Configuration Information</li> </ul>
	Hyper-V Cluster Design
	<ul style="list-style-type: none"> <li>• Review configuration of existing Hyper-V Environment</li> </ul>
	Migration Strategies from current Storage Arrays to new Storage Arrays
<b>Implementation and Testing</b>	
	Contractor will configure and implement and test the following:
	<b>Storage Area Network</b>
	Rack and Stack the arrays at each location including:
	<ul style="list-style-type: none"> <li>• Verify order against BOM</li> <li>• Power on self-test and best practice hardware test</li> <li>• Upgrade firmware if required</li> </ul>
	Configure the arrays per the design document
	<ul style="list-style-type: none"> <li>• Zone up to six (6) hosts to arrays; three (3) at each data center</li> <li>• Configure storage volumes</li> <li>• Present storage volumes to hosts</li> </ul>
	Install and configure ESRS
	Install and configure storage monitoring and reporting
	Configure replication between the newly deployed arrays
	<b>Servers</b>
	Rack and Stack the servers at each location including:
	<ul style="list-style-type: none"> <li>• Verify order against BOM</li> <li>• Power on self-test and best practice hardware test</li> <li>• Upgrade firmware if required</li> </ul>
	Configure the servers per the design document

**Attachment 2**  
**Implementation and Migration Services - Scope of Work**

	<b>Hyper-V Clusters</b>
	Install Windows Server 2019 via best practices such as:
	<ul style="list-style-type: none"> <li>• Enable Hardware-based Virtualization</li> <li>• Disable C States (Power Management)</li> </ul>
	Preform Pre-Installation Checklist for Hyper-V
	<ul style="list-style-type: none"> <li>• Upgrade Device Drives</li> <li>• Configure Basic Networking</li> <li>• Update Windows Servers</li> <li>• Rename the Computer to the correct name</li> <li>• Join the domain</li> </ul>
	Install Hyper-V via Best Practices
	<ul style="list-style-type: none"> <li>• Configure Virtual Switches</li> <li>• Allow Migrations on Virtual Network</li> <li>• Configure Default Storage Locations</li> </ul>
	SCVMM Installation
	<ul style="list-style-type: none"> <li>• Two Virtual Machines are needed for SCVMM</li> <li>• Install and configure an ADDS Server and join the VMM Machines to the domain</li> <li>• Install MSSQL in the VMM Server</li> <li>• Install Windows ADK</li> <li>• Install VMM</li> <li>• Configure VMM to Best Practices</li> </ul>
	<b>Back-up Appliance</b>
	Rack and Stack the appliance:
	<ul style="list-style-type: none"> <li>• Verify order against BOM</li> <li>• Power on self-test and best practice hardware test</li> <li>• Upgrade firmware if required</li> </ul>
	Configure the device per the design document
<b>Training and Knowledge Transfer</b>	
	The Contractor will provide up to 4 hours of instruction to staff to explain the settings and day-to-day management for the solution covering:
	<ul style="list-style-type: none"> <li>• Unisphere Navigation</li> <li>• Hyper-V Changes from current environment to Server 2019</li> <li>• Any other topics customer may request in regards to the deployment and administration of the</li> </ul>
	<i>Fraser Public Schools is anticipating active participation by the it's technical staff. During this involvement, the Contractor will provide knowledge transfer on the configuration and maintenance of the equipment installed as part of the project.</i>
<b>Migration / Go Live / Cutover</b>	
	<ul style="list-style-type: none"> <li>• Migrate up to forty four (44) Virtual Machines from Existing Hyper-V Cluster to new Hyper-V Environment via Live Migration</li> </ul>

**Attachment 3**  
**OS Upgrades - Scope of Work**

Server Name	Operating System	Operation to perform
Airwave	CentOS release 6.2	No Change
Aruba-MM-01	Linux	No Change
Aspect Enterprise	Linux	No Change
Aspect Enterprise-64bit	Linux	No Change
75-sas-01	Server 2003	Migrate/reinstall w/Windows 2019
OpenManage	Server 2008 R2	Retire - new version should be installed with new cluster, if still needed
ADFS-001	Server 2008 R2	Migrate to 2019
ADFS-Proxy-01	Server 2008 R2	Migrate to 2019
Analyzer	Server 2008 R2	Migrate to 2019
FHS-DC-01	Server 2008 R2	Migrate to 2019
FS-01	Server 2008 R2	Migrate to 2019
Helpdesk	Server 2008 R2	Migrate to 2019
IIS-01	Server 2008 R2	Migrate to 2019
Print-01	Server 2008 R2	Migrate to 2019
SCCM-01	Server 2008 R2	Move to SCCM Current + Windows 2019
SCOM	Server 2008 R2	Move to SCOM Current + Windows 2019
SCVMM	Server 2008 R2	Retire - new version installed in new cluster
SMTP-01	Server 2008 R2	Migrate to 2019
SSO-01	Server 2008 R2	Migrate to 2019
SSO-02	Server 2008 R2	Migrate to 2019
RMS-DC-03	Server 2008 R2	Migrate to 2019
FHS-DC-02	Server 2008 R2	Currently physical - migrate to virtual 2019
SQL08-1	Server 2008 R2	Migrate to current SQL on windows 2019
ROOTCA	Server 2008 R2	Retire - this has been off for quite a while
iosProxy-01	Ubuntu 12-10	No Change
Pound Server	Ubuntu 14.04	No Change
Casper-DB	Server 2012 R2	Migrate to 2019
FHS-Journalism	Server 2012 R2	Migrate to 2019
Journalism-02	Server 2012 R2	Migrate to 2019
MealMagic-01	Server 2012 R2	Migrate to 2019
Papercut-01	Server 2012 R2	Migrate to 2019
Read-1	Server 2012 R2	Migrate to 2019
SCHOLASTIC-01	Server 2012 R2	Migrate to 2019
TOOLS	Server 2012 R2	Migrate to 2019
Management-2012	Server 2012 R2	Retire
TSM-01	Server 2012 R2	Migrate to 2019
TSM-02	Server 2012 R2	Migrate to 2019
TSM-WIDA	Server 2012 R2	Migrate to 2019
Casper-App01	Server 2012 R2	Migrate to 2019
Casper-App02	Server 2012 R2	Migrate to 2019