	EST FOR FATION				
No. 9706			TROY SCHOOL DISTRICT	•	
DUE DATE	NO LATER T	HAN	1140 RANKIN, TROY, MICHIGAN 4808	3	
3/30/11		3 p.m.	248-823-4052		
			FAX: 248-823-4077	DATI	E 3/15/11
			REQUEST FOR QUOTE – NOT AN ORDER		
		THIS FOR	M MUST BE UTILIZED WHEN RESPONDING TO THIS REQUEST BID ENVELOPE ENCLOSED		
THE F		R MUST APPEA	R ON ALL QUOTATIONS AND RELATED CORRESPONDENCI	E <mark>, THIS IS NOT AN</mark>	
Quantity			DESCRIPTION	UNIT PRICE	AMOUNT
		oply us with your b IZATION	id to furnish the Troy School District with SERVER		
		С	opies of the bid are available at:		
	ww	w.troy.k12.mi.us	/purchasing/items_out_for_bid.htm (left column)		
			Bid recaps will be available at:		
	www	purchasing/items_out_for_bid.htm (right column)			
	FACSIN	AILE BID IS	<u>NOT</u> ACCEPTABLE		
	bidders. The la	te submission of a bid m	ter the deadline specified (local time) in the advertisement to bid or in the information to akes the bid nonrepsonsive and is a material defect which shall not be waived by the vill not be considered. All Late bids in the mail will be returned to the bidder unopened.		
			res by vendors will be accepted and reviewed. However, if any substitution or departure be understood that the bid intends to exactly meet the specifications.		
be mailed or delivered to the Purchasing Michigan State Sales and Use Taxes and will be furnished when necessary. This n			e judge as to whether the proposed goods are "equal" or "approved". Quotations must g Office, 1140 Rankin, Troy, MI 48083 no later than 3 p.m. on the date shown above. Id Federal Excise Taxes do not apply unless otherwise indicated. Exemption certificates request imposes no obligations on the buyer. The Board of Education reserves the right plit awards by items or to accept bids, which will best serve the Board of Education.		
		THIS A	REA MUST BE FILLED IN		
DELIVERY TIM	E	PRICES FIRM FOR	NAME OF COMPANY	TELEPHONE NO.	
TERMS		<u> </u>	NO. & STREET	FAX #	
FOB DELIVERED	All Delivery Must Be included	(CHARGES	CITY, STATE & ZIP CODE	E-MAIL	
CONTACT PERSON (PLEASE PRINT)		RINT)	SIGNATURE	DATE	

Note: All bidders are specifically reminded that a completed Affidavit of Bidder (Familial Disclosure) MUST be completed and submitted with the bid response. Failure to include a completed copy will be grounds for disqualification of bid. The Affidavit of Bidder is required to be notarized for construction bids only. All others only require completion and signature.

AFFIDAVIT OF BIDDER

The undersigned, the owner or authorized officer of ______(the "Bidder), pursuant to the familial disclosure requirement provided in the ______(the "School District") advertisement for construction bids, hereby represent and warrant except as provided below, that no familial relationships exist between the over(s) or any employee of ______ and any member of the Board of Education of the School District or the Superintendent of the School District.

List any Familial Relationships:

,Notary Public

BIDDER:

____County, Michigan

My Commission Expires: _____

Acting in the County of: _____

Advertisement for Bids

Date:	March 15, 2011
Project:	Troy School District Server Virtualization TSD Bid #9706
Bids Received:	The District will accept sealed bids for the work as defined in the bid documents until 3:00 pm local time on March 30, 2011 at:
	Troy School District Purchasing Department 1140 Rankin Troy, MI 48083 Attn: Frank Lams, Purchasing Consultant

All bids will be publicly opened and read aloud promptly at 3:00 pm. A bid tabulation summary will be available.

The bid documents will be available on and after March 15, 2011 from the Troy School District Purchasing Department as indicated above or electronically at http://www.troy.k12.mi.us/purchasing/items_out_for_bid.htm

A recommended pre-bid conference is scheduled for March 22, 2011 at 10 am local time. All Bidders are responsible for complying with content presented at the pre-bid conference, to be held at the Troy School District Services Building, 4420 Livernois Rd Troy MI 48098.

Each bidder fully waives any claim it has or may have with Troy School District arising from or in connection with the administration, evaluation, or recommendation of any bid.

The District reserves the right to reject any or all Bids, either in whole or in part, to reject a bid not fully compliant with the bid documents or to reject a bid which is in any way incomplete or irregular and to waive informality or irregularity in bid responses and in bidding.

The District reserves the right to consider Alternates that may be proposed, in any combination or order, and to determine the low bidder based on base bid plus selected Alternates, if any, to award a bid that the District, in its sole discretion, determines to be in its best interest. Low bid may not be the sole determining factor in selecting the bid that is deemed in the District's best interest.

Instructions to Bidders

- 1. The Bid Documents shall include this set of instructions and bid specifications, properly executed Familial Disclosure and Affidavit of Bidder forms, and any Addenda that may arise through the bid process.
- Addenda shall be posted on the District's website at http://www.troy.k12.mi.us/purchasing/items_out_for_bid.htm. Bidders are responsible for confirming that their response complies with all Bid Documents.
- 3. Respondents to the RFP shall be considered formal Bidders, and are bound by and agree to all terms and conditions described herein.
- 4. A sealed response to this documentation that is submitted in a timely fashion by the deadline provided in the Advertisement for Bids shall be considered a Bid.
- 5. The Base Bid shall be the total dollar amount for which the Bidder agrees to complete all of the work described herein, inclusive of shipping, permits, fees, and other charges. This total may be modified solely through change orders initiated by the District, using pricing provided as Alternates or Unit Pricing on the bid form.
- 6. Bidders shall include unit prices for all components identified on the bid form. Unit price values are used in the evaluation of a bid submission. Any unit price, add or deduct, that is determined to be unusual or obviously far above or below expected market costs may be rejected without affecting the base bid or other unit prices. Numerous irregularities in unit pricing that do not coincide with the base bid may be cause for complete disqualification.
- 7. Unit prices shall be firm and honored for the entire duration of the project, as described in the bid documents.
- 8. Bidders shall not propose substitutes or alternative makes or models for any product, unless specifically permitted in the bid specifications.
- 9. Troy School District is Tax Exempt, and no federal, state, or local taxes shall be included.
- 10. Bidders shall prepare their response using the Bid Form located within the Bid Documents. ALL BLANKS MUST BE COMPLETED by typewriter or by hand in ink any items that do not affect the base bid shall be marked "NO CHANGE" do not leave blanks. The Bid Forms shall not be provided electronically in a modifiable format.
- 11. Amounts shall be entered in words and in figures. In the case of a discrepancy, the amount stated in words shall be the determinant.
- 12. Questions regarding this bid shall be accepted in writing until 3:00 pm March 23, 2011. Submit all questions via e-mail to bids@troy.k12.mi.us Subject "Server Question" or via fax to 248-823-5050 ATTN: Server Questions. <u>Any attempt to communicate directly with District staff in any other fashion regarding this bid may be cause for disqualification of that Bidder.</u>

13. Submit the original bid and **three copies** (clearly identify which is the original) to the District address defined in the Advertisement for Bids on or before the deadline provided. The outside of the bid submission package shall clearly indicate the following:

SERVER VIRTUALIZATION BID RESPONSE – SEALED BID ENCLOSED TSD BID #9706 Bidder's Name Date and Time of Bid Opening

- 14. The Bidder is solely responsible for timely delivery and receipt of the bid. Late bids will not be accepted, for any reason.
- 15. Bid responses must be sealed and physically received in the bid office before the deadline. NO E-MAIL OR FAXED BID RESPONSES WILL BE ACCEPTED.
- 16. Unauthorized terms, conditions, limitations, or provisions may be cause to reject the Bid.
- 17. Bids may not be modified, canceled, or withdrawn for sixty (60) calendar days after Bid Opening.
- 18. Any bid submitted before the deadline may be withdrawn or modified in writing, either personally or by written request to the bid office described in the Advertisement for Bids, prior to the Bid Opening.
- 19. All costs of preparing and submitting a bid response shall be covered by the Bidder.
- 20. The District reserves the right to reject any or all Bids, either in whole or in part, to reject a bid not fully compliant with the bid documents or to reject a bid which is in any way incomplete or irregular and to waive informality or irregularity in bid responses and in bidding.
- 21. The District reserves the right to consider Alternates that may be proposed, in any combination or order and to determine the low bidder based on base bid plus selected Alternates, if any.
- 22. The District reserves the right to award a bid that the District, in its sole discretion, determines to be in its best interest. Low bid may not be the sole determining factor in selecting the bid that is deemed in the District's best interest.

The Bid Schedule is as follows:

Questions & Answers/addendum posted Bids Due Bids Opened	March 25, 2011, 2:00 pm March 30, 2011, 3:00 pm March 30, 2011, 3:01 pm
Post Bid Interviews	April 6, 2011, TBA
Bid Award	Tentative April 19, 2011, 7:00 pm Board of Education meeting

By submitting a response, Bidders confirm that they understand and comply with all terms, conditions, and specifications outlined in the Bid Documentation.

<u>Bonds</u>

Each bid response shall include a bid bond, certified check, cashier's check or money order payable to Troy School District for not less than five percent (5%) of the Base Bid to guarantee the proposal. Bid Bonds shall be issued by a company licensed to provide such services in the State of Michigan.

The selected bidder shall provide Performance, Labor and Materials payment bonds covering the full 100% of the contract amount. All Bonds shall be issued by a company licensed to provide such services in the State of Michigan. The selected bidder shall provide said bonds within five business days of award of the work. Failure to agree to the scope of work after award, or to furnish all required bonds shall result in forfeiture of Bid Bond to Troy School District as liquidated damages, not as a penalty.

<u>Overview</u>

The Troy School District ("the District") is a 12,000 student public K-12 school district in Oakland County, MI, comprised of 20 instructional buildings (twelve elementary, four middle, two comprehensive high, one alternative/community high, and one International Baccalaureate high school) and four administrative and support facilities. Each building has high speed Internet connectivity via a district fiber optic network, and every classroom has at least one dedicated instructional computer. Overall student:computer ratio in the district is approximately 2.6:1.

The District currently provides two or more physical servers running Microsoft Windows 2003 Standard Edition for application hosting/print services in most of its buildings, along with a centralized server blade enclosure with 19 servers and several stand alone application servers at its Services Building. Central servers include web (MS IIS), domain controllers, system management including Trend Micro anti-virus and other application servers but also include a Microsoft SQL 2000 Enterprise server and a Microsoft Exchange 2003 server cluster (two hosts). Both systems will be included in the virtualization plan; the Exchange Cluster will be upgraded to Exchange 2010 Standard Edition in the base bid, and the SQL Server will be upgraded from MS SQL 2008, R2, Standard Edition (we no longer need Enterprise, please note the lower versions in any licensing credit considerations).

Server Virtualization TSD Bid # 9706 Page 4 of 8 March 15, 2011 Most servers at the Services Building are Microsoft Windows 2003 Standard Edition servers, with four Server 2003 Enterprise and three Server 2008 Standard servers also to be found. The district provides data storage on a mirrored NAS running Windows 2003 Standard Edition, R2 on servers in two locations – but these two servers **will not be virtualized due to performance concerns**.

The district intends to virtualize 66 of its servers using VMware vSphere Enterprise Plus and Microsoft Data Center licensing platforms. The servers will run on robust rack server hardware centralized in the Services Building. A VMware Server Consolidation Assessment has been completed and the findings of that project are the basis of this RFP.

Network infrastructure in the Data Center includes two Cisco 6509 switches with 720 Supervisor modules and sufficient Gigabit Ethernet ports available. Central server storage will be provided on an existing HP EVA 5000 NAS with available Fibre Channel and SATA drives, along with local storage on the new server hardware.

The existing backup solution is HP Data Director with D2D primary, tape archive, and will be repurposed.

IMPORTANT NOTE: This project is the first phase of the District's overall virtualization plan that will ultimately include a significant desktop virtualization project. TAKE NOTE THAT THESE ARE SEPARATE PROJECTS that may be awarded to different integrators, pending future bid documents to be released later.

Length & scope of project

Based on a planned April Board of Education approval and providing time for ordering, the District intends to begin staging and building of the virtual server environment and some low impact servers converted from standalone hardware to virtual servers in May and June 2011. Email upgrades and conversion of disruptive, service interrupting servers will be scheduled for after-hours and weekend schedules, with final conversions not to be completed until after June 20, 2011 – the last day of school. **NOTE** that many staff work year-round and all service outages must be scheduled at least 24 hours in advance – Bidders shall not assume that summer months provide unlimited ability to disrupt services. However, the target completion date of the entire server virtualization project is June 30, 2011.

Mandatory requirements of this bid include holding the pricing provided for hardware and integration labor rates provided in this bid response for 12 months from the date of first purchase order by the district. Also, all pricing must be valid and extended to any Oakland County School District who may choose to participate within the first three months of the project at the provided pricing.

Assessment results

The Server Virtualization Assessment Report of the current environment yielded the following results:

CPU

Peak CPU Utilization 5.18% Average CPU Utilization 3.76% **Memory** Total Available (GB) 160 Total Peak Usage (GB) 76 Percentage Used 47.02% Systems over 90% Memory Usage 1 **Storage** Total Logical Space (GB) 24,361 Used Space (GB) 12,333 Percentage Used 51% Total Partitions over 90% Used 20

Most of the storage listed above is on the SAN, not planned for virtualization. Storage required by candidate servers is approximately 12T logical, 4 T used.

Desired configuration

Base bid Server hardware

A total of three (3) rack mounted servers manufactured by Cisco, Dell, or Hewlett Packard, (NO ALTERNATES ACCEPTED) with the following minimum specifications:

- Two Intel Xeon 2.93GHz, 6 core processors with 12 MB L3 cache supporting Intel Turbo Boost and HT technologies & 1333/1066/800MHz DDR3 RAM
- 96 GB 1333MHz DDR3 RDIMM (specify configuration, 16 GB RDIMMs are NOT preferred)
- Maximum available 146GB 15k SAS drives, RAID 5
- High performance RAID controller, 512MB cache
- Four high performance Gigabit Ethernet NICs (specify chipset), support for iSCSI and FCoE

<u>NOTE</u>: Troy School District has been provided one Dell PowerEdge R710 server matching the above minimum specifications at no cost. Therefore, respondents providing a Dell-based configuration may only quote two additional servers. This information is provided as full disclosure to all potential bidders.

Base bid Software licenses

- VMware vSphere 4 Enterprise Plus and vCenter Server Standard with sufficient licenses to properly cover the above hardware, with three years of subscription/support. The District is eligible to purchase from REMC and Merit Licensing contracts.
- Microsoft Enterprise or Datacenter server operating system licensing, sufficient to support server OS, upgrade to Exchange 2010, and SQL Server 2008 licensing <u>including updated CALs if necessary</u>. Note that Troy School District currently owns and can document server and device CALs for the existing environment and expects credit for trading in existing licenses and CALs, if necessary. Troy School District is not currently on a School License Agreement and all existing licensing and CALs were purchased as standalone items. The District is eligible to purchase from volume

Server Virtualization TSD Bid # 9706 Page 6 of 8 March 15, 2011 contracts through REMC or Oakland Schools' School License Agreements. Bidders are to provide options, one-time and annual licensing, and recommendations for optimal licensing agreements at lowest total overall cost. **NOTE TO MICROSOFT LICENSING:** The current economic landscape for the public sector in Michigan does not support onerous annual subscription agreements, and mandatory subscription based agreements at high cost simply cannot be considered.

Base bid Services (all services to be performed with District staff present for knowledge transfer)

- Staging, installation, configuration, patching, and updating of server hardware, OS, & VMware environments
- Constructing VMs for each of 66 servers to be virtualized
- Migrating from standalone to virtual server for each instance
- Virtual environment optimization including vMotion & vCenter configuration and optimization
- Network & backup configuration changes to ensure connectivity and data protection
- On-site after server migration go-lives to ensure full functionality/remedy issues

Base bid extended warranty

- Three year 24x7x4 on-site support for server hardware
- Three year annual support and subscription for all VMware software licenses

Mandatory Alternates

- MA-1: Upgrade SQL Server from 2000 Enterprise to 2008, R2 Standard
- MA-2: Solarwinds Orion Network Performance Monitor 500 elements software license
- MA-3: Add on to Orion NPM for 250 (for a total of 750) elements software license
- MA-4: Orion NPM 2000 elements software license
- MA-5: Orion NPM unlimited elements software license
- MA-6: Add one year (four years total) 24x7x4 on-site support for server hardware
- MA-7: Add two years (five years total) 24x7x4 on-site support for server hardware
- MA-8: Add two years (five years total) support and subscription for VMware software
- MA-9: Deduct two years (one year total) support and subscription for VMware software

Bidder qualifications

All integration services shall be provided by fully qualified personnel employed by a technology services organization that has done business in Michigan for no less than five years, at least three of those years continuously delivering server, server operating system, virtualization, and networking integration services of projects at least equal in scope to that described herein. Bidders must document their current and active VMware Enterprise Partner level or greater certification status with year first certified. The proposed lead technical resource name and qualifications must be included in the bid response and shall include at least VMware Certified Professional (VCP) certification and documented hands-on experience supporting Microsoft Windows 2008 servers, with MCSE certification strongly preferred. This same resource shall serve as the primary contact for Troy School District through the duration of the project.

Bid Submission requirements

Bidders are instructed to prepare one original and three (3) copies of the bid documents in the following format:

- Cover Letter summary of the bid response and declaration of Bidder's complete understanding of the project. Highlight value-adds to distinguish this Bidder from all others
- 2) Company profile Details about the bidding company, including size, years in business, years providing server virtualization services, organization chart with names & titles, and contact escalation procedures, list of currently active virtualization projects including size & scope, and reference contacts including size and scope of project for not less than five customers within the previous 12 months, at least three of which are Michigan K-12 projects. If any contractors or sub contractors are planned, provide same information on each additional organization and clearly describe the roles and responsibilities of each provider on this project.
- 3) Bid Proposal Completed bid forms, affidavits, declarations & bid bond
- Equipment list itemized Bill of Materials for the project, including quantities, manufacturer, item number, item description, unit cost and extended cost for the full scope of the project
- 5) Voluntary Alternates Detailed description including text description of rationale and proposed benefit to the District, Bill of Materials and price change

Bid	Form	

TSD BID #9706 SERVER VIRTUALIZATION	
NAME OF BIDDER:	
ADDRESS:	
TELEPHONE:	
Pursuant to and compliant with your Advertisement for B undersigned propose to furnish the equipment and mater purpose of supplying the Troy School District with server integration labor, and agree to the payment terms outline	rials described therein for the hardware, software licensing and
BASE BID – Furnish and Install server hardware, so implementation services as described	oftware licenses, and provide
	Dollars \$
Note: The amount shall be shown in both words and figu amount in words shall be determinant.	res. In case of discrepancy, the
SEPARATE PRICES	
Server hardware and required warranty	\$
Software licenses and required warranty	\$
Integration/installation labor	\$

VOLUNTARY ALTERNATES – Bidders may propose alternatives to certain solutions if permitted in the bid documents. Attach additional alternates, if any, on a separate sheet of paper. The amounts provided below are inclusive of all costs, expenses, fees, shipping, overhead & profit, and other charges.

Alternate 1:	
Add/Deduct	
	Dollars \$
Alternate 2:	
Add/Deduct	
	Dollars \$
Alternate 3:	
Add/Deduct	
	Dollars \$

UNIT PRICES – Total quantities may be increased or reduced based on the following schedule of unit prices. The amounts provided below are inclusive of all costs, expenses, fees, shipping, overhead & profit, and other charges.

Unit Price	Description	Add	Deduct
UP-1	Cost to furnish and install one (1) rack mount server		
UP-2	Cost to furnish one (1) rack mount server		
UP-3	Cost to furnish one (1) rack mount server Three year 24x7x4 maintenance		
UP-4	Cost of integration labor to virtualize one existing server		
UP-5	Cost to furnish one (1) vSphere Enterprise Plus 1 processor (max 12 core) license		
UP-6	Cost to furnish one (1) vSphere Enterprise Plus 1 processor (max 12 core) 3 year Subscription and Support		
UP-7	Cost to furnish one (1) vCenter Server Standard license		
UP-8	Cost to furnish one (1) vCenter Server Standard 3 year Subscription & Support		
UP-9	Cost to furnish one (1) Microsoft Enterprise licensing solution		
UP-10	Cost to furnish one (1) Microsoft Enterprise Three year subscription and support		
UP-11	Cost to furnish one (1) Microsoft Datacenter Licensing solution		
UP-12	Cost to furnish one (1) Microsoft Datacenter Three year subscription and support		

MANDATORY ALTERNATES – The District reserves the right to increase or decrease the Base Bid price using the following schedule of prices. The amounts provided below are inclusive of all costs, expenses, fees, shipping, overhead & profit, and other charges.

Unit Price	Description	Add	Deduct
MA-1	Upgrade SQL Server from 2000 Enterprise To 2008, R2 standard		
MA-2	Solarwinds Orion Network Performance Monitor 500 elements (3 yr subscription)		
MA-3	Solarwinds Orion Network Performance Monitor add 250 (total of 750) elements (3 yr subscription)		
MA-4	Solarwinds Orion Network Performance Monitor 2000 elements (3 yr subscription)		
MA-5	Solarwinds Orion Network Performance Monitor unlimited license (3 yr subscription)		
MA-6	Add one year (4 years total) 24x7x4 On-site support for server hardware		
MA-7	Add two years (5 years total) 24x7x4 On-site support for server hardware		
MA-8	Add two years (5 years total) support and subscription for VMware software		
MA-9	Deduct two years (1 year total) support and subscription for VMware software		
MA-10	Add two years (5 years total) support and Subscription for Microsoft software		

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DATA STR	ATEGY LLC			
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	31,520.68			
	57,250.00			
	\$ 107,955.07			
ESX Host C	onfiguration			
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vSphere 4.	1 Enterprise Plu	us Licenses		ļ
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Microsoft I	Licenses			ļ
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Troy School District Server Virtualization					
Bid 9706					
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Avalon Technologies: No Re	esponse	Logicalis: No	Response	Red Level Networks: No Response	
CDW-G: No Bid		Mainline Info	Systems: No Response	SARCOM: No Response	
Daytona Storage: No Response		MCPc, Inc.: N	lo Response	Technology Integration Group: No Response	
Dell: No Response		Merit Networ	k: No Response	Vmware: No Response	
Inacomp: No Response		Netarx: No R	esponse		