

## Addendum 1

RFP NUMBER:	TE1129 – Video Surveillance Storage Equipment
ADDENDUM NUMBER:	1
ADDENDUM ISSUED:	08/08/2022

## I. QUESTIONS & ANSWERS

The following questions are as they were presented to Park Hill School District. The answers to said questions have been answered as completely and accurately as possible.

**Q1:** Do you want Fiberoptic cables and transceivers on the storage array? Or do you prefer using Twinax/DAC cables to connect storage array to your storage area network switches?

**A1:** Please include appropriate transceivers for your hardware. We will account for our switch transceivers and fiber optic network cabling.

- Q2: What length of cables are needed between storage array and storage area network switches?
- **A2:** We will provide fiber optic cabling.
- **Q3:** What will be the VMS Software writing to the storage target?
- A3: This is still to be determined, but will be storage agnostic.
- **Q4:** Is this a new VMS installation or existing? If existing, what was the previous storage device; Make/Model?
- A4: This will be a new VMS installation. We will be replacing our current one.
- Q5: How many Recording servers are writing to the storage and are these physical or virtual?
- A5: Currently approximately 22 virtual servers, but future expansion is expected.
- **Q6**: What is the expected count, make, model and resolution of the cameras supported?
- A6: Count, make, and model are currently "TBD". Resolution will be either 1080p or 4K.



- Q7: What is the established retention policy of video for the district?
- A7: This will be 30 days minimum.
- Q8: Who is your Video Surveillance Software (VSS) vendor?
- **A8:** We do not have a current VSS vendor.
- Q9: Are the NVR's physical or virtualized?
- A9: Our current VMS contains all virtual servers.
- **Q10:** How many cameras are being utilized?
- **A10**: Currently 762, but estimating future growth of up to 900 total.
- **Q11:** What is the camera resolution and bit rate?
- A11: Mixture of 1080p and 4K with variable bit rates.
- Q12: What is the expected retention period?
- A12: 30 days minimum.

**Q13:** Does PHSD expect the 2PB to be the final capacity or is additional growth expected?

**A13**: Capability for additional growth would be preferred.

**Q14:** Is the iSCSI requirement outlined in this RFP being driven by TCP/IP network connectivity or is it being driven by your VSS provider? For ease of deployment, scale and better price performance, would PHSD be open to other TCP/IP based connections? (i.e. NFS/SMB/etc...)

A14: We are requiring iSCSI to stick to our current topology.



**Q15:** Is the 2 PB requirement of usable storage actually PiB? Or is it really PB (base 10), although TiB (base 2) was used in other places in the requirements?

A15: It's PetaByte when talking about storage capacity, where the other was referenced due to throughput.

**Q16:** In order to meet the throughput requirements (2.75 GB/s, etc.), some solution options may require multiple devices (like two arrays) to meet this requirement. Is proposing a two-array solution to the requirements acceptable to the School District?

A16: No, we require one system to manage.

**Q17:** In order to determine proper sizing (especially on the throughput requirement), it is necessary to know such items as average read & write block sizes, as well as the % reads and writes (read/write ration). It is assumed of course that video streaming is predominantly write oriented, but any simultaneous read-back will affect streaming performance, so this ration is still important. Can the School District provide estimates of these values to help with accurate sizing?

A17: Not at this time.



## V. ACKNOWLEDGEMENT

Each bidder shall acknowledge receipt of this Addendum No. 1 of Bid No. *TE1129: Video Surveillance Storage Equipment* by his/her signature affixed hereto and shall attach this Addendum to the original bid submitted. Failure to sign and submit this addendum may render your bid Non-Responsive.

Certification by Bidder:	
Signature:	Date:
Title:	Company: