VILLAGE OF VERNON HILLS
ORDINANCE NO. 2017-128

AN ORDINANCE AUTHORIZING APPROVAL OF EXPENDITURES TO ADVANCE BUSINESS NETWORKS FOR THE PURCHASE OF EQUIPMENT TO EXPAND THE VILLAGE'S STORAGE NETWORK IN AN AMOUNT NOT TO EXCEED $42,170

WHEREAS, the Village of Vernon Hills, County of Lake, State of Illinois *("the Village")* is a duly organized and existing municipality and unit of local government created under the provisions of the laws of the State of Illinois, and is operating under the provisions of the Illinois Municipal Code; and

WHEREAS, the Village has identified a need to expand its Storage Area Network ("SAN") to accommodate the growing information technology storage needs related to municipal operations; and

WHEREAS, the Village issued a Request for Bid Proposals to expand the SAN on October 20, 2017; and

WHEREAS, Advanced Business Networks provided the only qualifying proposal for this project at a price not to exceed $42,170; and

WHEREAS, the FY 2017 budget includes $40,000 in the Capital Fund Account (0209005-540050) and the remaining $2,170 may be transferred from General Fund Account (0101005-520220); and

WHEREAS, expenditures over $20,000 require Board of Trustees approval.

NOW THEREFORE BE IT ORDAINED BY THE PRESIDENT AND BOARD OF TRUSTEES OF THE VILLAGE OF VERNON HILLS, LAKE COUNTY, ILLINOIS, AS FOLLOWS:

SECTION 1: EXECUTION OF PURCHASE: The Village Manager is hereby authorized to execute all required documents to purchase equipment to expand the Village's Storage Area Network from Advanced Business Networks at a price not to exceed $42,170.

SECTION 2: AUTHORIZATION & RELEASE OF PAYMENT: The Finance Director is hereby authorized to make payment to Advanced Business Networks in an amount not to exceed $42,170 per the attached bid in Exhibit A, prior to the payment appearing on the invoice approval list.

SECTION 3: AUTHORIZATION FOR BUDGET TRANSFER: The Finance Director is hereby authorized to transfer $2,170 from General Fund account 0101005-520220 into Capital Fund account 0209005-540050 to accommodate this expenditure.

SECTION 4: EFFECTIVE DATE: This Ordinance shall be in full force and effect from its passage and approval.

SECTION 5: ORDINANCE NUMBER: This Ordinance shall be known as Ordinance Number 2017-128.
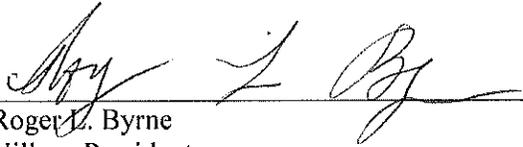
Dated the 28th of November 2017

(SIGNATURE PAGE FOLLOWS)

Adopted by roll call votes as follows:

AYES: 6 – Hebda, Koch, Marquardt, Oppenheim, Schultz, Takaoka
NAYS: 0 - None
ABSENT AND NOT VOTING: 0 - None

Roger Z. Byrne
Village President

PASSED: 11/28/17
APPROVED: 11/28/17
ATTEST: 11/28/17

John M. Kalmar
Village Clerk

ORDINANCE 2017-128
EXHIBIT A: BID TO EXPAND THE VILLAGE OF VERNON HILLS STORAGE AREA NETWORK

ADVANCED BUSINESS NETWORKS INC

Item	Description	Qty	Unit Price	Extended Price	Months
SYSTEM	UNITY 300				
D3SP-S6X1200-10K	UNITY SYSPACK 6X1.2TB 10K SAS 25X2.5	1	$4,838.30	$4,838.30	
D31D24AF25	UNITY 300 2U DPE 25X2.5 DRIVE FLD RCK	1	$7,102.65	$7,102.65	
D31DEMCCK25KIT	UNITY 25 DRIVE DPE FLD INSTALL KIT	1	$0.00	$0.00	
D3FC-2S12FX-400	UNITY 400GB FAST CACHE 25X2.5 DRIVE	3	$1,537.16	$4,611.49	
D3-2S10-1200	UNITY 1.2TB 10K SAS 25X2.5 DRIVE	10	$806.39	$8,063.87	
D3SFP16F	UNITY 4X16GB SFP FC CONNECTION	1	$0.00	$0.00	
D3-VS07-2000	UNITY 2TB NLSAS 15X3.5 DRIVE	9	$536.39	$4,827.49	
D3123F	UNITY 3U 15X3.5 DRIVE DAE FLD RCK	1	$1,562.36	$1,562.36	
M-PSM-HWE-004	PROSUPPORT W/MISSION CRITICAL-HARDWARE	1	$11,162.60	$11,162.60	36
	Hardware Sub-total			$31,006.15	
	Hardware Wty and Maint Sub-total			$11,162.60	

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Item	Description	Qty	Unit Price	Extended Price	Months
458-001-847	UNITY 300 BASE SOFTWARE=IC	1	$0.00	$0.00	
M-PSM-SWE-004	PROSUPPORT W/MISSION CRITICAL-SOFTWARE	1	$0.00	$0.00	36
	Software Sub-total			$0.00	
	Software Wty and Maint Sub-total			$0.00	
	Configuration Sub-total			$0.00	
	Hardware Sub-total			$31,006.15	
	Software Sub-total			$0.00	
	Prepaid HW Maintenance Sub-total			$11,162.60	
	Prepaid SW Maintenance Sub-total			$0.00	

Configuration Total $42,168.75

Item	Description	Qty	Unit Price	Extended Price	Months
SYSTEM	VPLEX VS2				
458-000-066	VPLEX MIGRATION PRODUCT	1	$0.00	$0.00	
456-107-848	VPLEX 180 DAY MIGRATION LIC=IC	1	$0.00	$0.00	
M-PSM-SW-VP-015	PROSUPPORT W/MISSION CRITICAL-SOFTWARE	1	$0.00	$0.00	36
	Software Sub-total			$0.00	
	Software Wty and Maint Sub-total			$0.00	
	Configuration Sub-total				
	Software Sub-total			$0.00	
	Prepaid SW Maintenance Sub-total			$0.00	
	Configuration Total			$0.00	

Item	Description	Qty	Unit Price	Extended Price	Months
SYSTEM	RECOVERPOINT				
458-001-440	RECOVERPOINT FOR VM STARTER PACKS	1	$0.00	$0.00	
456-107-803	RP4VM ESSENTIAL SW FOR UNITY=IB	1	$0.00	$0.00	
M-PSM-SW-D3-001	PROSUPPORT W/MISSION CRITICAL-SOFTWARE	1	$0.00	$0.00	12
458-001-374	RP BASIC FOR UNITY 300/300F/350F =IC	1	$0.00	$0.00	
M-PSM-SWE-004	PROSUPPORT W/MISSION CRITICAL-SOFTWARE	1	$0.00	$0.00	12
	Software Sub-total			$0.00	
	Software Wty and Maint Sub-total			$0.00	
	Configuration Sub-total			$0.00	
	Software Sub-total			$0.00	
	Prepaid SW Maintenance Sub-total			$0.00	
	Configuration Total			$0.00	

| Item	Description	Qty	Unit Price	Extended Price	Months
SYSTEM	APPSYNC				
458-001-425	APPSYNC BASIC FOR UNITY 300 =IC	1	$0.00	$0.00	
456-109-802	APPSYNC BASIC FOR UNITY 300 =IC	1	$0.00	$0.00	
M-PSM-SWE-004	PROSUPPORT W/MISSION CRITICAL-SOFTWARE	1	$0.00	$0.00	36
	Software Sub-total			$0.00	
	Software Wty and Maint Sub-total			$0.00	
	Configuration Sub-total				
	Software Sub-total			$0.00	
	Prepaid SW Maintenance Sub-total			$0.00	
	Configuration Total			$0.00	

Item	Description	Qty	Unit Price	Extended Price	Months

Proposal Summary

Hardware Summary	$31,006.15
Software Summary	$0.00
Prepaid HW Maintenance Summary	$11,162.60
Prepaid SW Maintenance Summary	$0.00
Total Products and Services (USD)	**$42,168.75**

![Midrange Sizer logo] **Midrange Sizer**

DELL EMC

Cabinet 1
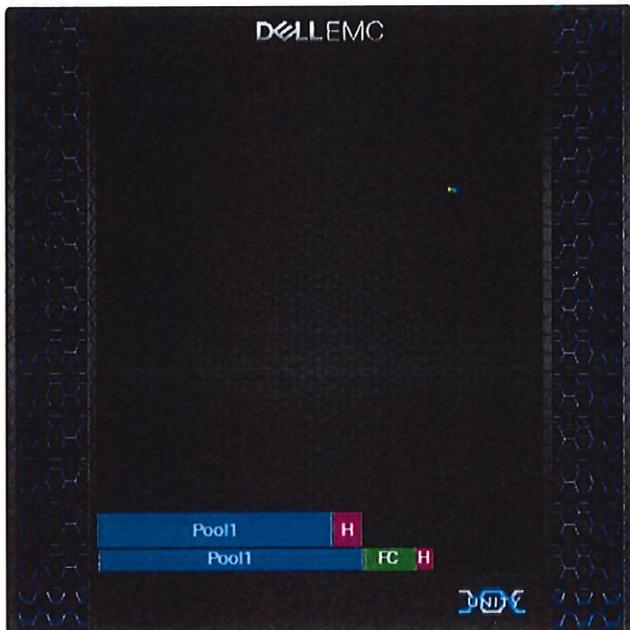
General Information

Model Number	Unity 300	Usable Capacity	23.21 TB
Raw Capacity	33.83 TB	Total Drive Count	28
Unit Count	5 U	Workload	80% Read - 20% Write
IOPS	1766	Capacity Utilization	NA
Block Size	8K		

System Tier Information

Flash	Count	HS	SAS	Count	HS	NL-SAS	Count	HS
			1.2TB 10K	15	1	2TB 7.2K	8	1
Total	0			16			9	
Usable Capacity	0 TB			12.47 TB			10.74 TB	

Fast Cache	
Drive Type	400GB FLASH
Count	2
Hot Spare Count	1
Form Factor	2.5
Total	3

Usable Capacity

L-SAS : 46.3%   SAS : 53.7%

Midrange Sizer

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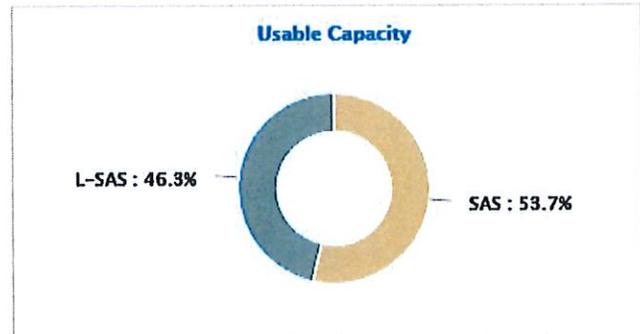
Pool Configuration

Pool1

Tier	Form Factor	Drive Type	RAID Type	Drive Count	Usable Capacity	IOPS
SAS	2.5	1.2TB 10K	RAID 5 (4+1)	15	12.47 TB	1406
NL-SAS	3.5	2TB 7.2K	RAID 6 (6+2)	8	10.74 TB	360
Total				**23**	**23.21 TB**	**1766**

I/O Configuration

Onboard CNA	16Gb FC SFP

Software Suites

Unity Hybrid Base Software	• Unisphere Suite • File, Block, VVols • Snapshots • Encryption • Anti-virus • Native Replication • FAST Cache & FAST VP

Additional Information

System Drive Tier	Performance		Date Created	11 Oct 2017
System Drives Used For Data	Yes		Midrange Sizer Version	4.3
Percentage of Flash	0 %		Total Hot Spares	3

Legal Disclaimer

Dell EMC provides Midrange Sizer as a tool to help estimate, size and analyze storage capacity and IOPS requirements for a Unity array. Midrange Sizer is provided solely for estimating storage sizing. Results are based on ordering requirements and best practices of product capabilities and limitations. Midrange Sizer uses a set of sizing assumptions along with provided inputs which may cause results to vary greatly due to many specific factors such as the environment setup/infrastructure, use-case and workload.

Midrange Sizer's output is not a guarantee that a storage array will meet all actual data storage sizing requirements or any expected savings.

Please carefully read all of the terms of this disclaimer. By viewing and utilizing Midrange Sizer, you acknowledge that you have read, understand and agree to this disclaimer.

* TB/GB label represents capacity in base-2 i.e. 1TB = 1024*1024*1024*1024 bytes
* True effective capacity and usable capacity are reported which is calculated after all hot spare space is accounted for.