



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 1
Change Effective Date: 02/02/2016

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors- Hewlett Packard Company

Contract Period: Beginning January 01, 2015 and Ending January 04, 2017

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

- **Workstation 1 : The HP Z230 has is being replaced by the HP Z240**

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Appendix C- Workstation 1 Requirements			Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			Workstation 1 with Monitor	HP Z240 Tower Workstation	\$ 1,493.00	\$ 393.56	\$ 1,574.24
Chassis	Form Factor	Desktop-MiniTower	Minitower				
	Maximum Size	15.7x6.7x17.4	15.7 x 6.7 x 17.4 in				
Processor	Processor Brand	Intel	Intel				
	Minimum Processor Class	Core i7	Core i7				
	Minimum Base Processor Speed	3.4 GHz	3.4 GHz - Intel Core i7-6700 3.4 GHz (up to 3.9 GHz) 8MB 84W Intel HD Graphics 6700 4C HT CPU				
Memory and Storage	Minimum Memory Size	16GB	16GB (2x8GB) DDR3-1600 nECC Unbuffered RAM				
	Minimum Hard Drive Capacity	500GB	500GB 7200 RPM SATA				
	Optical Drive Type	DVD+/-RW	Slim SuperMulti DVDRW SATA				
	Minimum Optical Drive Speed	16X	16X				
Input Devices	Keyboard	USB Multimedia	HP USB Keyboard				
	Mouse	Full sized, laser USB 5 button min, including two buttons on side.	HP Part # A892952 - Minitr Part # 4FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical				
I/O	Minimum total USB Ports	8 (2 Front Mount)	Front - 2 USB 3.0, 1 USB 2.0, 1 USB 2.0 Charging Data Port; Rear - 2 USB 3.0, 4 USB 2.0; and Internal - 1 USB 3.0 and 3 USB 2.0 ports available as 2 separate 2x10 (3.0 x1, 2.0 x1) and 2x5 (2.0 x2) headers; supports 1 HP Internal USB Port Kits plus one USB 3.0 Media Card Reader.				
	Minimum USB 3.0 Ports	4 (2 Front Mount)	Four (4)				
	VGA Port	none	none				
	DVI Port	1	One (1) with NVIDIA Quadro K2000 2GB Graphics card				
	DP Port	2	Two (2) with NVIDIA Quadro K2000 2GB Graphics card				
	RJ-45 Port	1	One (1) RJ-45 to integrated GBE				
	Audio In/Out Ports	1/1	1 Audio Line-in, and 1 Audio Line-out				
	Mic	1	One (1) Microphone				
	LAN	1 GB NIC	One (1) GB NIC				
	Speakers	Internal	Internal				
	Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 7 Professional Edition 64bit OS			
Video/Graphics Card		2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added 2DP-DVI and 1DVI-VGA adapters				
Chipset		Intel® 8 Series (C226)	Intel® PCH C226 (Intel® C226 chipset)				
Management		Intel vPro Technology Enabled	The HP Z230 workstations support Intel vPro technology when purchased with a vPro technology capable CPU. Intel® Xeon® processor E3-1200v3 family or 4th Generation Intel Core i5/i7 processors with Intel VT and Intel TXT technology				
Certification		Independent Software Vendor certified (ISV)	Yes				
Sound Card		Integrated	Integrated				
Documentation		Diagnostics and Drivers DVD	Windows 7 Professional 64-bit OS DVD + Driver DVD				
EPEAT Silver		Meet or exceed	Yes - EPEAT Gold registered in the U.S.				
Energy Star		Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration				
Warranty		Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)				
Service	On-site service, 12 business-hour fix	HP Care Pack: 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available), 4 Yrs [use Disk Retention Care Pack]					
Display	Flat Panel Display	External	Yes				
	Minimum Size	23 inch	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor				
	Minimum Resolution	1920 x 1080	1920 x 1080				
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)				
	VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2				
DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2					

Options Workstation 1		Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Processor		Intel Core i7-4790 3.6 GHz (up to 4.0 GHz) 8MB 84W Intel HD Graphics 4600 4C HT CPU (GSL77AV)		277	72.85	291.38
Memory		16GB (2x8GB) DDR3-1600 nECC Unbuffered RAM (DSG55AV)		224	58.91	235.63
Hard Drive						
Operating System						
External Keyboard						
External Mouse						
External Monitor	1920 x1080	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, Tilt: -5 to +30°; Swivel 360°; Pivot rotation 90°; 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)		189	48.04	192.18
Bluetooth						
Speakers						
Serial Port		HP Serial Port Adapter Kit (DSH83AV)		5	1.31	5.26
System Recovery Media		Windows 7 Professional 64-bit OS DVD + Driver DVD (ESX75AV) - included in base configuration		4	1.05	4.21

Monitors without Workstation Purchase						
Monitor	Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel	23"	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 189.00	\$ 48.04	\$ 192.18	
	24"	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 264.00	\$ 65.84	\$ 263.35	
	27"	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 486.00	\$ 123.54	\$ 494.16	
	30"	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 997.00	\$ 253.44	\$ 1,013.75	

Note: also added HP Elite Displays (23", 24", 27") below:

Flat Panel	23"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D; 1 DisplayPort 1.2	\$ 165.00	\$ 41.91	\$ 167.77
	24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2411 24-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 212.00	\$ 53.89	\$ 215.56
	27"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 244.00	\$ 62.02	\$ 248.10

Appendix C- Workstation 2 Requirements		Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
		Workstation 2 with Monitor	HP Z Book 15 G2 Mobile Workstation (15.6")	\$ 1,856.00	\$ 489.24	\$ 1,956.96
Chassis	Form Factor	Desktop-MiniTower	Notebook (Mobile Workstation - 15.6 inch LED, 1920x1080)			
	Maximum Size	15.7x6.7x17.4	1.2 in (at front)/1.4 in (at rear) x 15.0 in x 10.1 in			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
	Minimum Base Processor Speed	3.4 GHz	4th Generation Intel® Core™ i7-4810MQ (2.8 GHz, 1600MHz, 6 MB L3 cache, 4 cores, 47W) - Up to 3.80 GHz with Intel Turbo Boost Technology			
Memory and Storage	Minimum Memory Size	16GB	16GB 1600MHz DDR3L 4DM			
	Minimum Hard Drive Capacity	500GB	500GB 7200RPM			
	Optical Drive Type	DVD+-RW	DVD+-RW SuperMulti DL			
	Minimum Optical Drive Speed	16X	16X			
Input Devices	Keyboard	USB Multimedia	Dual Point with numeric keypad US			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side	DIB HP 3-button USB Laser Mouse			
I/O	Minimum total USB Ports	8 (2 Front Mount)	2 USB 3.0, 1 USB 3.0 Charging Port, 1 USB 2.0			
	Minimum USB 3.0 Ports	4 (2 Front Mount)	2 USB 3.0, 1 USB 3.0 Charging Port			
	VGA Port	none	1 VGA			
	DVI Port	1	DVI video signal available through DVI port in optional HP Docking Station (sold separately), as well as through DisplayPort to DVI-D; DisplayPort to DVI-D (dual link); and DisplayPort to HDMI adapters (sold separately)			
	DP Port	2	1 DisplayPort v1.2			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio-out (headphone) jack/Audio in (microphone) jack			
	Mic	1	Integrated microphone (dual-microphone array when equipped with optional webcam)			
	LAN	1 GB NIC	Integrated Intel® I217-LM Gigabit** Network			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 7 Professional 64 US			
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K2100M Graphics with 2 GB dedicated GDDR5 video memory, or, NVIDIA Quadro K1100M Graphics with 2 GB dedicated GDDR5 video memory available (adapters are sold separately but are not included)			
	Chipset	Intel® 8 Series (C226)	Mobile Intel® QM87			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	Win7 Driver DVD			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR ®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Service	On-site service, 12 business-hour fix	HP Care Pack: UG841E - HP 4y NBD Onsite/Defective Media Retention NB SVC (for HP ZBook 3-3-3 mobile workstation notebooks)				
Display	Flat Panel Display	External	Yes			
	Minim Size	23 inch	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor			
	Minimum Resolution	1920 x 1080	1920 x 1080			
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)			
	VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2			
DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2				

Options Workstation 2		Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost
Processor					
Memory					
Hard Drive					
Operating System					
External Keyboard					
External Mouse					
External Monitor					
1920 x1080					
Bluetooth					
Speakers					
Serial Port					
System Recovery Media					

Monitors without Workstation Purchase						
Monitor		Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel	23"	1920 x 1080 DVI and VGA interface	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 189.00	\$ 48.04	\$ 192.18
	24"	1920 x 1080 DVI and VGA interface	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 259.00	\$ 65.84	\$ 263.35
	27"	1920 x 1080 DVI and VGA interface	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 486.00	\$ 123.54	\$ 494.16
	30"	2560 x 1600 DVI and VGA interface	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 997.00	\$ 253.44	\$ 1,013.75

Note: also added HP Elite Displays (23",24",27") below:

Flat Panel	23"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D; 1 DisplayPort 1.2	\$ 165.00	\$ 41.94	\$ 167.77
	24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2411 24-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 212.00	\$ 53.89	\$ 215.56
	27"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 244.00	\$ 62.02	\$ 248.10

Services			
	Purchase Cost	Annual Lease Cost	Total Lease Cost
Installation	76.00	20.39	81.56
Image Deployment	11.00	2.95	11.80
Asset Tagging	5.00	1.34	5.37
10 GB Data Transfer	33.00	8.85	35.41
Preparation for shipment	19.00	5.10	20.39
Relocation in same building	48.00	12.88	51.51
Relocation within 25 miles	61.00	16.37	65.46
Relocation outside 25 miles	66.00	17.71	70.83
Transport to DGS Warehouse	21.00	5.63	22.54
Image Development	2,968.00	796.26	3,185.02
Bundle - Install, Image Deploy, Tag	79.00	21.19	84.78
On-premise Disk Wipe	56.00	15.02	60.09
Off-premise Disk Wipe	13.00	3.49	13.95



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 2
Change Effective Date : 12/20/2016

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors- Hewlett Packard Company

Contract Period: Beginning January 05, 2017 and Ending January 04, 2018

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

The Commonwealth is exercising its option to renew the Workstation Computing Devices & Monitors contract between the Commonwealth of Pennsylvania and HP INC. Section I-15 Term of Contract states:

“The contracts resulting from this IFB will commence on the effective date, as defined in **Appendix A –Terms and Conditions**, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms.”

The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2018.

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

December 16, 2016

SUBJECT: Renewal of Contract # 4400014042
Contract Title: Workstation Computing Devices & Monitors
Term of Renewal: January 05, 2017 to January 04, 2018
Renewal Security Required: Yes No

Dear Mr. Lesko:

The Commonwealth is exercising its option to renew the Personal Computing Devices, Monitors and Services contract between the Commonwealth of Pennsylvania and HP INC.

Section I-15 Term of Contract states:

"The contracts resulting from this IFB will commence on the effective date, as defined in **Appendix A – Terms and Conditions**, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms."

The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2018.

The Commonwealth is requesting your acknowledgement of the contract renewal. Please confirm your acknowledgement by completing the bottom section of this letter and emailing a copy to me by close of business December 22, 2016.

Thank you for your prompt response. If you have any questions, please contact me at 717-346-3827 or riaime@pa.gov.


Commodity Specialist

I acknowledge the renewal of the above referenced contract for the above stated Term of Renewal, that all terms and conditions in the contract shall remain in full force.

Yes No

Signature 

Title Contract Administrator



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 3
Change Effective Date : 05/08/2017

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors- HP Inc

Contract Period: Beginning January 05, 2017 and Ending January 04, 2018

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

Workstation 2

- The HP ZBook 15U has been replaced with the HP ZBook 14 G2

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements			Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			Workstation 1 with Monitor	HP Z240 Tower Workstation	\$ 1,435.00	\$ 374.41	\$ 1,497.54
Chassis	Form Factor	Desktop-MiniTower	Minitower				
	Maximum Size	15.7x6.7x17.4	15.7 x 6.7 x 17.4 in				
	Processor Brand	Intel	Intel				
Processor	Minimum Processor Class	Core i7	Core i7				
	Minimum Base Processor Speed	3.4 GHz	3.4 GHz - Intel Core i7-6700 3.4 GHz (up to 3.9 GHz) 8MB 84W Intel HD Graphics 4600 4C HT CPU				
Memory and Storage	Minimum Memory Size	16GB	16GB (4x4GB) DDR3-1600 nECC Unbuffered RAM				
	Minimum Hard Drive Capacity	500GB	500GB 7200 RPM SATA				
	Optical Drive Type	DVD+/-RW	Slim SuperMulti DVDRW SATA				
	Minimum Optical Drive Speed	16X	16X				
Input Devices	Keyboard	USB Multimedia	HP USB Keyboard				
	Mouse	Full sized, laser USB 5 button min, including two buttons on side.	HP Part # A892952 - Minitr Part # 4FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical				
I/O	Minimum total USB Ports	8 (2 Front Mount)	Front - 2 USB 3.0, 1 USB 2.0, 1 USB 2.0 Charging Data Port; Rear - 2 USB 3.0, 4 USB 2.0; and Internal - 1 USB 3.0 and 3 USB 2.0 ports available as 2 separate 2x1 (3.0 x1, 2.0 x1) and 2x5 (2.0 x2) headers; supports 1 HP Internal USB Port Kits plus one USB 3.0 Media Card Reader.				
	Minimum USB 3.0 Ports	4 (2 Front Mount)	Four (4)				
	VGA Port	none	none				
	DVI Port	1	One (1) with NVIDIA Quadro K2000 2GB Graphics				
	DP Port	2	Two (2) with NVIDIA Quadro K2000 2GB Graphics				
	RJ-45 Port	1	One (1) RJ-45 to integrated GBE				
	Audio In/Out Ports	1/1	1 Audio Line-in, and 1 Audio Line-out				
	Mic	1	One (1) Microphone				
	LAN	1 GB NIC	One (1) GB NIC				
	Speakers	Internal	Internal				
Other	Operating System	Windows 10 Professional 64-bit	Microsoft Windows 10 Professional Edition 64bit OS				
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added 2DP-DVI and 1DVI-VGA adapters				
	Chipset	Intel® 8 Series (C226)	Intel® PCH C226 (Intel® C226 chipset)				
	Management	Intel vPro Technology Enabled	The HP Z240 workstations support Intel vPro technology when purchased with a vPro technology capable CPU. Intel® Xeon® processor E3-1200v3 family or 4th Generation Intel Core i5/i7 processors with Intel VT and Intel TXT technology				
	Certification	Independent Software Vendor certified (ISV)	Yes				
	Sound Card	Integrated	Integrated				
	Documentation	Diagnostics and Drivers DVD	Windows 10 Professional 64-bit OS DVD + Driver DVD				
	EPEAT Silver	Meet or exceed	Yes - EPEAT Gold registered in the U.S.				
	Energy Star	Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration				
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)				
Service	On-site service, 12 business-hour fix	HP Care Pack: 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available), 4 Yrs [use Disk Retention Care Pack]					
Display	Flat Panel Display	External	Yes				
	Minim Size	23 inch	HP EliteDisplay E2311 23-inch IPS LED Backlit Monitor				
	Minimum Resolution	1920 x 1080	1920 x 1080				
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)				
	VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2				
DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2					

Options Workstation 1		Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost
Memory		32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM (D5G55AV)	224.00	58.44	233.76
	Hard Drive				
	Operating System				
External Keyboard					
External Mouse					
External Monitor	1920 x 1080	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, Tilt: -5 to +30°; Swivel 360°; Pivot rotation 90°; 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	189.00	48.01	192.04
Bluetooth					
Speakers					
Serial Port		HP Serial Port Adapter Kit (DSH83AV)	5.00	1.31	5.24
System Recovery Media		Windows 7 Professional 64-bit OS DVD + Driver DVD (ESX75AV) - included in base configuration	4.00	1.05	4.20

Monitors without Workstation Purchase						
Monitor	Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel	23"	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 189.00	\$ 48.01	\$ 192.04	
	24"	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 259.00	\$ 65.79	\$ 263.16	
	27"	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 486.00	\$ 123.44	\$ 493.76	
	30"	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 997.00	\$ 253.24	\$ 1,012.96	

Note: also added HP Elite Displays (23", 24", 27") below.

Flat Panel	24"	HP EliteDisplay E2411 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 212.00	\$ 53.85	\$ 215.40	
	27"	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 244.00	\$ 61.98	\$ 247.92	

Appendix C- Workstation 2 Requirements		Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
		Mobile Workstation 2 with Integrated Display	HP ZBook 14 G2 Mobile Workstation (14.0")	\$ 1,409.00	\$ 375.09	\$ 1,500.36
Chassis	Form Factor	Notebook	Notebook (Mobile Workstation - 14.0 inch LED, 1920x1080)			
	Maximum Size	15.7x6.7x1.4	.83 in x 13.35 in x 9.33 in.			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
	Minimum Base Processor Speed	3.4 GHz	Intel® Core™ i7-5600U (2.6 GHz, 4 MB cache, 2 cores) - Up to 3.40 GHz with Intel Turbo Boost Technology			
Memory and Storage	Minimum Memory Size	16GB	16GB 1600MHz DDR3L 4DM			
	Minimum Hard Drive Capacity	500GB	500GB 7200RPM			
	Optical Drive Type	DVD+-RW	External DVD/RW (Sold Separately)			
	Minimum Optical Drive Speed	16X	16X			
Input Devices	Keyboard	USB Multimedia	Dual Point with numeric keypad US			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.	DIB HP 3-button Comfort Grip wireless Mouse			
I/O	Minimum total USB Ports	3	3 USB 3.0, 1 USB 3.0 Charging Port, 1 USB 2.0			
	Minimum USB 3.0 Ports	4	3 USB 3.0, 1 USB 3.0 Charging Port			
	VGA Port	none	1 VGA			
	DVI Port	1	DVI video signal available through DVI port in optional HP Docking Station (sold separately), as well as through DisplayPort to DVI-D; DisplayPort to DVI-D (dual link); and DisplayPort to HDMI adapters (sold separately)			
	DP Port	2	1 DisplayPort v1.2			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio-out (headphone) jack/Audio in (microphone) jack			
	Mic	1	Integrated microphone (dual-microphone array when equipped with optional webcam)			
	LAN	1 GB NIC	Integrated Intel® I218-LM Gigabit** Network			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	AMD FirePro W4150M Graphics with 1 GB dedicated GDDR5 video memory.			
	Chipset	Intel® 8 Series (C22)	Mobile Intel® QM87			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	Win10 Driver DVD			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR ®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Service	On-site service, 12 business-hour fix	HP Care Pack: UG841E - HP 4y NBD Onsite/Defective Media Retention NB SVC (for HP ZBook 3-3-3 mobile workstation notebooks)				
Display	Flat Panel Display	External	Yes			
	Minim Size	23 inch	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor			
	Minimum Resolution	1920 x 1080	1920 x 1080			
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)			
	VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2			
	DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2			

Options Workstation 2	Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost
	128GB SATA-3 SSD 14	90.00	23.96	95.84
	256GB SATA-3 SSD 14	180.00	47.92	191.68
	512GB SATA-3 SSD 14	360.00	95.84	383.36
	Intel® Core™ i5-5200U (2.2 GHz, 3 MB cache, - Up to 2.7 GHz with Intel Turbo Boost Technology)	452.00	120.33	481.32
	8GB 1600MHz DDR3L 4DM	112.00	29.82	119.28
	HP C006XL Notebook Battery	150.00	39.93	159.72
	HP USB Keyboard	15.00	3.99	15.96
	HP Comfort Grip Wireless Mouse	15.00	3.99	15.96
	14 LED FHD UWVA AG f With CAM 14 1900x1080	123.00		
	14 LED FHD UWVA /CAM Touch Screen 14 1900x1080	197.00		
	HP USB External DVDRW Drive	55.44	14.76	59.04
	HP Essential Top Load Case	15.00	3.99	15.96
	HP UltraSlim Docking Station	117.04	31.16	124.64
	Fingerprint Reader 14	13.00	3.46	13.84
	HP hs3110 HSPA+ w/GPS	55.00	14.64	58.56
	HP NA-1-S3 LTE/EVDO/HSPA+ w/GPS	110.00	29.28	117.12
	No SVC Provider AMER 14	1.00	0.27	1.08

Monitors without Workstation Purchase						
Monitor	Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel	23"	1920 x 1080 DVI and VGA interface	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 189.00	\$ 48.01	\$ 192.04
	24"	1920 x 1080 DVI and VGA interface	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 259.00	\$ 65.79	\$ 263.16
	27"	1920 x 1080 DVI and VGA interface	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 486.00	\$ 123.44	\$ 493.76
	30"	2560 x 1600 DVI and VGA interface	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 997.00	\$ 253.24	\$ 1,012.96

Note: also added HP Elite Displays (23",24",27") below:

24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2411 24-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 212.00	\$ 53.85	\$ 215.40
27"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 244.00	\$ 61.98	\$ 247.92

Services			
	Purchase Cost	Annual Lease Cost	Total Lease Cost
Installation	76.00	20.46	81.84
Image Deployment	11.00	2.96	11.84
Asset Tagging	5.00	1.35	5.40
10 GB Data Transfer	33.00	8.88	35.52
Preparation for shipment	19.00	5.12	20.48
Relocation in same building	48.00	12.92	51.68
Relocation within 25 miles	61.00	16.42	65.68
Relocation outside 25 miles	66.00	17.77	71.08
Transport to DGS Warehouse	21.00	5.65	22.60
Image Development	2,968.00	798.96	3,195.84
Bundle - Install, Image Deploy, Tag	79.00	21.27	85.08
On-premise Disk Wipe	56.00	15.08	60.32
Off-premise Disk Wipe	13.00	3.50	14.00



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 4
Change Effective Date : 01/02/2018

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2015 and Ending January 04, 2019

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

The Commonwealth is exercising its option to renew the Workstation Computing Devices & Monitors contract between the Commonwealth of Pennsylvania and HP INC. Section I-15 Term of Contract states:

“The contracts resulting from this IFB will commence on the effective date, as defined in **Appendix A –Terms and Conditions**, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms.”

The Commonwealth and HP INC have agreed upon a 1 percent decrease in purchase cost for equipment and options for Workstation 1 and Workstation 2.

The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2019.

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements			Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			Workstation 1 with Monitor	HP Z240 Tower Workstation	\$ 1,420.00	\$ 374.15	\$ 1,496.60
Chassis	Form Factor	Desktop-MiniTower	HP Z240 Tower Workstation				
	Maximum Size	15.7x6.7x17.4	15.7 x 6.7 x 17.4 in				
Processor	Processor Brand	Intel	Intel				
	Minimum Processor Class	Core i7	Core i7				
Memory and Storage	Minimum Base Processor Speed	3.4 GHz	3.4 GHz - Intel Core i7-6700 3.4 GHz (up to 3.9 GHz) 8MB 84W Intel HD Graphics 4600 4C HT CPU				
	Minimum Memory Size	16GB	16GB (4x4GB) DDR3-1600 nECC Unbuffered RAM				
	Minimum Hard Drive Capacity	500GB	500GB 7200 RPM SATA				
Input Devices	Optical Drive Type	DVD±RW	Slim SuperMulti DVDRW SATA				
	Minimum Optical Drive Speed	16X	16X				
Keyboard	Keyboard	USB Multimedia	HP USB Keyboard				
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.	HP Part # A892952 - Minitr Part # 4FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical				
I/O	Minimum total USB Ports	8 (2 Front Mount)	Front - 2 USB 3.0, 1 USB 2.0, 1 USB 2.0 Charging Data Port; Rear - 2 USB 3.0, 4 USB 2.0; and Internal - 1 USB 3.0 and 3 USB 2.0 ports available as 2 separate 2x1 (3.0 x1, 2.0 x1) and 2x5 (2.0 x2) headers; supports 1 HP Internal USB Port Kits plus one USB 3.0 Media Card Reader.				
	Minimum USB 3.0 Ports	4 (2 Front Mount)	Four (4)				
	VGA Port	none	none				
	DVI Port	1	One (1) with NVIDIA Quadro K2000 2GB Graphics				
	DP Port	2	Two (2) with NVIDIA Quadro K2000 2GB Graphics				
	RJ-45 Port	1	One (1) RJ-45 to integrated GBE				
	Audio In/Out Ports	1/1	1 Audio Line-in, and 1 Audio Line-out				
	Mic	1	One (1) Microphone				
	LAN	1 GB NIC	One (1) GB NIC				
	Speakers	Internal	Internal				
Other	Operating System	Windows 10 Professional 64-bit	Microsoft Windows 10 Professional Edition 64bit OS				
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added 2DP-DVI and 1DVI-VGA adapters				
	Chipset	Intel® 8 Series (C226)	Intel® PCH C226 (Intel® C226 chipset)				
	Management	Intel vPro Technology Enabled	The HP Z240 workstations support Intel vPro technology when purchased with a vPro technology capable CPU. Intel® Xeon® processor E3-1200v3 family or 4th Generation Intel Core i5/i7 processors with Intel VT and Intel TXT technology				
	Certification	Independent Software Vendor certified (ISV)	Yes				
	Sound Card	Integrated	Integrated				
	Documentation	Diagnostics and Drivers DVD	Windows 10 Professional 64-bit OS DVD + Driver DVD				
	Warranty	Meet or exceed	Yes - EPEAT Gold registered in the U.S.				
Display	Energy Star	Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration				
	Service	On-site service, 12 business-hour fix	HP Care Pack: 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available), 4 Yrs [use Disk Retention Care Pack]				
	Flat Panel Display	External	Yes				
	Minimum Size	23 inch	HP EliteDisplay E2311 23-in IPS LED Backlit Monitor				
	Minimum Resolution	1920 x 1080	1920 x 1080				
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)				
VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2					
DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2					

Options Workstation 1		Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost
Memory		32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM (D5G55AV)	221.00	58.44	233.76
Hard Drive					
Operating System					
External Keyboard					
External Mouse					
External Monitor	1920 x 1080	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, Tilt: -5 to +30°; Swivel 360°; Pivot rotation 90°; 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	187.00	48.01	192.04
Bluetooth					
Speakers					
Serial Port		HP Serial Port Adapter Kit (DSH83AV)	4.00	1.31	5.24
System Recovery Media		Windows 7 Professional 64-bit OS DVD + Driver DVD (ESX75AV) - included in base configuration	3.00	1.05	4.20

Monitors without Workstation Purchase						
Monitor	Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel	23"	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 187.00	\$ 48.01	\$ 192.04	
	24"	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 256.00	\$ 65.79	\$ 263.16	
	27"	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 481.00	\$ 123.44	\$ 493.76	
	30"	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 987.00	\$ 253.24	\$ 1,012.96	

Note: also added HP Elite Displays (23", 24", 27") below:

Flat Panel	24"	HP EliteDisplay E2411 24-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 209.00	\$ 53.85	\$ 215.40	
	27"	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 241.00	\$ 61.98	\$ 247.92	

Appendix C- Workstation 2 Requirements		Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
		Mobile Workstation 2 with Integrated Display	HP ZBook 14 G2 Mobile Workstation (14.0")	\$ 1,394.00	\$ 374.28	\$ 1,497.12
Chassis	Form Factor	Notebook	Notebook (Mobile Workstation - 14.0 inch LED, 1920x1080)			
	Maximum Size	15.7x6.7x17.4	.83 in x 13.35 in x 9.33 in.			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
	Minimum Base Processor Speed	3.4 GHz	Intel® Core™ i7-5600U (2.6 GHz, 4 MB cache, 2 cores) - Up to 3.40 GHz with Intel Turbo Boost Technology			
Memory and Storage	Minimum Memory Size	16GB	16GB 1600MHz DDR3L 4DM			
	Minimum Hard Drive Capacity	500GB	500GB 7200RPM			
	Optical Drive Type	DVD+-RW	External DVD/RW (Sold Separately)			
	Minimum Optical Drive Speed	16X	16X			
Input Devices	Keyboard	USB Multimedia	Dual Point with numeric keypad US			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.	DIB HP 3-button Comfort Grip wireless Mouse			
I/O	Minimum total USB Ports	3	3 USB 3.0, 1 USB 3.0 Charging Port, 1 USB 2.0			
	Minimum USB 3.0 Ports	4	3 USB 3.0, 1 USB 3.0 Charging Port			
	VGA Port	none	1 VGA			
	DVI Port	1	DVI video signal available through DVI port in optional HP Docking Station (sold separately), as well as through DisplayPort to DVI-D; DisplayPort to DVI-D (dual link); and DisplayPort to HDMI adapters (sold separately)			
	DP Port	2	1 DisplayPort v1.2			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio-out (headphone) jack/Audio in (microphone) jack			
	Mic	1	Integrated microphone (dual-microphone array when equipped with optional webcam)			
	LAN	1 GB NIC	Integrated Intel® i218-LM Gigabit** Network			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	AMD FirePro W4150M Graphics with 1 GB dedicated GDDR5 video memory.			
	Chipset	Intel® 8 Series (C226)	Mobile Intel® QM87			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	Win10 Driver DVD			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Service	On-site service, 12 business-hour fix	HP Care Pack: UG841E - HP 4y NBD Onsite/Defective Media Retention NB SVC (for HP ZBook 3-3-3 mobile workstation notebooks)				
Display	Flat Panel Display	External	Yes			
	Minimum Size	23 inch	HP EliteDisplay E2311 23-inch IPS LED Backlit Monitor			
	Minimum Resolution	1920 x 1080	1920 x 1080			
	Tilt Capability	Yes	Yes (Tilt: -5 to +30°; Swivel ±360°; Pivot rotation 90°)			
	VGA Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2			
	DVI Interface	1 minimum	1 VGA; 1 DVI-D; 1 DisplayPort 1.2			

Options Workstation 2	Proposed Model Option	Purchase Cost	Annual Lease Cost	Total Lease Cost
	128GB SATA-3 SSD 14	89.00	23.96	95.84
	256GB SATA-3 SSD 14	178.00	47.92	191.68
	512GB SATA-3 SSD 14	356.00	95.84	383.36
	Intel® Core™ i5-5200U (2.2 GHz, 3 MB cache, - Up to 2.7 GHz with Intel Turbo Boost Technology)	447.00	120.33	481.32
	8GB 1600MHz DDR3L 4DM	110.00	29.82	119.28
	HP C006XL Notebook Battery	148.00	39.93	159.72
	HP USB Keyboard	14.00	3.99	15.96
	HP Comfort Grip Wireless Mouse	14.00	3.99	15.96
	14 LED FHD UWVA AG F With CAM 14 1900x1080	121.00		
	14 LED FHD UWVA /CAM Touch Screen 14 1900x1080	195.00		
	HP USB External DVDRW Drive	54.00	14.76	59.04
	HP Essential Top Load Case	14.00	3.99	15.96
	HP UltraSlim Docking Station	115.00	31.16	124.64
	Fingerprint Reader 14	12.00	3.46	13.84
	HP hs3110 HSPA+ w/GPS	54.00	14.64	58.56
	HP NA-1-S3 LTE/EVDO/HSPA+ w/GPS	108.00	29.28	117.12
	No SVC Provider AMER 14	0.99	0.27	1.08

Monitors without Workstation Purchase						
Monitor		Requirements for	Proposed Model and Capability (Note: these are the HP Z Performance Displays [Z23i, Z24i, Z27i, Z30i] - the HP Elite Displays are also listed below)	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel	23"	1920 x 1080 DVI and VGA interface	HP Z Display Z23i 23-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 187.00	\$ 48.01	\$ 192.04
	24"	1920 x 1080 DVI and VGA interface	HP Z Display Z24i 24-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support)	\$ 256.00	\$ 65.79	\$ 263.16
	27"	1920 x 1080 DVI and VGA interface	HP Z Display Z27i 27-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1440, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 481.00	\$ 123.44	\$ 493.76
	30"	2560 x 1600 DVI and VGA interface	HP Z Display Z30i 30-inch IPS LED Backlit Monitor (ENERGY STAR), 2560 x 1600, 1 VGA; 1 DisplayPort (with HDCP support); 1 DVI-D (with HDCP support); 1 HDMI (with HDCP support)	\$ 987.00	\$ 253.24	\$ 1,012.96

Note: also added HP Elite Displays (23",24",27") below:

	24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2411 24-in IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1200, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort 1.2 (with HDCP support)	\$ 209.00	\$ 53.85	\$ 215.40
	27"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E2711 27-inch IPS LED Backlit Monitor (ENERGY STAR), 1920 x 1080, 1 VGA; 1 DVI-D (with HDCP support); 1 DisplayPort (with HDCP support)	\$ 241.00	\$ 61.98	\$ 247.92

Services			
	Purchase Cost	Annual Lease Cost	Total Lease Cost
Installation	76.00	20.46	81.84
Image Deployment	11.00	2.96	11.84
Asset Tagging	5.00	1.35	5.40
10 GB Data Transfer	33.00	8.88	35.52
Preparation for shipment	19.00	5.12	20.48
Relocation in same building	48.00	12.92	51.68
Relocation within 25 miles	61.00	16.42	65.68
Relocation outside 25 miles	66.00	17.77	71.08
Transport to DGS Warehouse	21.00	5.65	22.60
Image Development	2,968.00	798.96	3,195.84
Bundle - Install, Image Deploy, Tag	79.00	21.27	85.08
On-premise Disk Wipe	56.00	15.08	60.32
Off-premise Disk Wipe	13.00	3.50	14.00

December 27, 2017

SUBJECT: Renewal of Contract # 4400014042
Contract Title: Workstation Computing Devices & Monitors
Term of Renewal: January 05, 2018 to January 04, 2019
Renewal Security Required: Yes No

Dear Ms. Gladmon:

The Commonwealth is exercising its option to renew the Personal Computing Devices, Monitors and Services contract between the Commonwealth of Pennsylvania and HP, INC. Section I-15 Term of Contract states:


"The contracts resulting from this IFB will commence on the effective date, as defined in **Appendix A –Terms and Conditions**, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms."

The Commonwealth and HP INC have agreed upon a 1 percent decrease in purchase cost for equipment and options for Workstation 1 and Workstation 2.

The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2019.

The Commonwealth is requesting your acknowledgement of the contract renewal. Please confirm your acknowledgement by completing the bottom section of this letter and emailing a copy to me by close of business January 02, 2018.

Thank you for your prompt response. If you have any questions, please contact me at 717-346-3827 or rjaime@pa.gov.



Raymond A. Jaime
Commodity Specialist

I acknowledge the renewal of the above referenced contract for the above stated Term of Renewal, that all terms and conditions in the contract shall remain in full force.

Yes No

Signature 

Title Contract Administrator



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 5
Change Effective Date : 08/13/2018

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2015 and Ending January 04, 2019

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

- Workstation 1: The HP Z240 Desktop Workstation has been replaced with the HP Z2 TWR G4 Workstation
- Workstation 2: The HP 14U Laptop Workstation has been replaced with the HP ZBook 15U Mobile Workstation

These changes also include additional options.

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements		Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
		Workstation 1 with Monitor	HP Z2 TWR G4 WKS	\$ 1,432.32	\$ 374.41	\$ 1,497.54
Chassis	Form Factor	Desktop-MiniTower	Tower			
	Maximum Size	15.7x6.7x17.4	14 x 6.7 x 17.1 in			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
	Minimum Base Processor Speed	3.4 GHz	Intel® Core™ i7-8700 3.2 26666 6C CPU			
Memory and Storage	Minimum Memory Size	16GB	16GB (2x8GB) DDR4 2666 DIMM NECC Memory			
	Minimum Hard Drive Capacity	500GB	500GB 2.5in SATA Solid State Drive			
	Optical Drive Type	DVD±RW	9.5mm DVD-Writer 1st ODD			
	Minimum Optical Drive Speed	16X	16X			
Input Devices	Keyboard	USB Multimedia	USB Business Slim Wired Keyboard US			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.	HP Part # A892952 - Mmfr: Part # 4FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical			
I/O		8 (2 Front Mount)	Front: 1 headphone/microphone combo; 2 USB 3.0 (1 charging); 1 USB 3.1 Gen 2 Type-C™ 9 Rear: 1 audio-in; 1 audio-out; 1 DVI-I single link; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0/14 Internal: 1 USB 3.0; 2 USB 2.0 (1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 1 (3.0 x 1, 2.0 x 1) and 2 x 5 (2.0 x 2) header. Supports one HP Internal USB 2.0 Port Kit and one USB 3.0 media card reader.)			
	Minimum total USB Ports		3 front - 6 back			
	Minimum USB 3.0 Ports	4 (2 Front Mount)	none			
	VGA Port	none	none			
	DVI Port	1	1 DVI-I single link			
	DP Port	2	2 DisplayPort™ 1.2			
	RJ-45 Port	1	1 RJ-45			
	Audio In/Out Ports	1/1	Conexant CX20632-31Z, 1.5W internal mono speaker			
	Mic		1 headphone/microphone combo			
	LAN	1 GB NIC	Integrated Intel® I219-LM PCIe® GbE; Intel® I350-T2 dual-port GbE NIC			
Other	Speakers	Internal	Rear: 1 audio-in; 1 audio-out; 1			
	Operating System	Windows 10 Professional 64-bit	Microsoft Windows 10 Professional Edition 64bit OS			
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added 2DP-DVI and 1DVI-VGA adapters			
	Chipset	Intel® 8 Series (C226)	Intel® C246			
	Management	Intel vPro Technology Enabled	yes			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	Drivers can be found on HP.com			
	EPEAT Silver	Meet or exceed	Yes - EPEAT Gold registered in the U.S.			
	Energy Star	Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack) HP Care Pack: 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available), 4 Yrs (use Disk Retention Care Pack), and account management services			
	Service	On-site service, 12 business-hour fix				
Display	Flat Panel Display	External	Yes			
	Minim. Size	23 inch	HP EliteDisplay E233 Monitor and services			
	Minimum Resolution	1920 x 1080	1920 x 1080 Tilt Range -5° to + 23° vertical Swivel Range 45°L to 45°R Display height adjustment: Adjustment Range: 150 mm Pivot Rotation Yes, 90° clockwise and counter-clockwise			
	Tilt Capability	Yes				
	VGA Interface	1 minimum	(1) VGA 1.8 m (5.9 ft) cable included			
	USB		3 USB 3.0 (one upstream, two downstream) : (1) USB B to A cable 1,8 m (5.9 ft)			
	PORTS		(1) DisplayPort™ 1.2 DP cable included : HDMI (1) HDMI 1.4 VGA (1) VGA HDCP support Yes, HDMI and DisplayPort™			

Options Workstation 1		Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Memory		32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM (D5G55AV)	standard upgrade	304.00	58.44	233.76
		1TB 7200 SATA 3.5in WKS	standard upgrade	42.00	11.08	44.32
		1TB 7200 SATA 3.5in 2ndWKS	only available if 1TB (1st hard drive) is selected or 500 GB (1st hard drive) is selected	42.00	11.08	44.32
Operating System		Nvd Qdr 5GB P2000 (4)DP Graphics	must remove Nvidia Quadro P620 first	338.00	89.16	358.64
External Keyboard		HP USB Keyboard	addon option	15.00	3.98	15.84
External Mouse - USB		HP USB Mouse	addon option	10.00	2.84	10.56
External Mouse - Wireless		HP Comfort Grip Wireless Mouse	addon option	18.00	4.75	19.00
Speakers		HP USB Business Speakers v2	addon option	16.00	4.22	16.88
Serial Port		HP Serial Port Adapter	addon option	5.00	1.32	5.28
		Single Port eSATA Adapter	addon option	2.00	0.53	2.12

Monitors without Workstation Purchase						
Monitor		Requirements for		Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel Workstation Displays	23"	1920 x 1080 DVI and VGA interface	HP Z23n Narrow Bezel IPS Display	\$ 189.00	\$ 48.01	\$ 192.04
	24"	1920 x 1080 DVI and VGA interface	Z24i G2	\$ 259.00	\$ 65.79	\$ 263.16
	27"	1920 x 1080 DVI and VGA interface	HP Z27n Narrow Bezel Display	\$ 486.00	\$ 123.44	\$ 493.76
	30"	2560 x 1600 DVI and VGA interface	Z32 4K UHD	\$ 997.00	\$ 253.24	\$ 1,012.96
Flat Panel Elite Displays	24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E233 Monitor	\$ 212.00	\$ 53.85	\$ 215.40
	27"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E271i LED MNT	\$ 224.00	\$ 61.98	\$ 247.92

Appendix C- Workstation 2 Requirements		Requirements for	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
		Mobile Workstation 2 with Integrated Display				
Chassis	Form Factor	Notebook	HP ZBook 15u Mobile Workstation	\$ 1,409.00	\$ 375.09	\$ 1,500.36
	Maximum Size	15.7x6.7x17.4	Notebook Mobile Workstation - 15.6"			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
	Minimum Base Processor Speed	3.4 GHz	IDS D5C I7-8650U 15u G5 Base NB PC			
Memory and Storage	Minimum Memory Size	16GB	16GB 1600MHz DDR3L 4DM			
	Minimum Hard Drive Capacity	500GB	512 GB PCIe NVMe Three Layer Cell Solid State Drive			
	Optical Drive Type	DVD+/-RW	External DVD/RW (Sold Separately)			
	Minimum Optical Drive Speed	16X	16X			
Input Devices	Keyboard	USB Multimedia	HP Collaboration Keyboard, spill-resistant, backlit and function key control			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.	DIB HP 3-button Comfort Grip wireless Mouse			
I/O	Minimum total USB Ports	3	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	Minimum USB 3.0 Ports	4	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	VGA Port	none	none			
	DVI Port	1	none			
	DP Port	2	none			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio combo jack			
	Mic	1	Internal microphones			
	LAN	1 GB NIC	Intel® I219-LM Gigabit* Network Connection (vPro configurations)			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	AMD Radeon Pro™ WX3100 (2 GB dedicated GDDR5)			
	Chipset	Intel® 8 Series (C226)	Intel® Kaby Lake – R Chipset integrated with 8th Generation processor			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	DVD can be found on hp.com			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Service	On-site service. 12 business-hour fix	HP Care Pack U: HP UE336E NBD Onsite/Defective Media Retention NB SVC. (for HP Zbook 3-3-3 mobile workstation notebooks) and account management services				
Display	Flat Panel Display	External	sold separately			
	Minim Size	23 inch	no			
	Minimum Resolution	1920 x 1080	no			
	Tilt Capability	Yes	no			
	VGA Interface	1 minimum	no			
DVI Interface	1 minimum	no				

Options Workstation 2	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
	32GB (2x16GB) DDR4 2400	Must swap out 16GB	\$ 320.00	\$ 84.41	\$ 337.64
	256GB PCIe NVMe TLC SSD	Must swap out 512 GB	\$ 111.00	\$ 48.80	\$ 195.20
	HP USB Keyboard	addon option	\$ 15.00	\$ 3.99	\$ 15.96
	HP Comfort Grip Wireless Mouse	addon option	\$ 18.00	\$ 3.99	\$ 15.96
	15.6 FHD AG LED WWAN	needed if WWAN is added- swap out original display	\$ 56.00	\$ 14.77	\$ 59.08
	15.6 inch FHD AG LED UWVA for Webcam	needed if webcam is added - swap out original display	\$ 5.00	\$ 1.32	\$ 6.28
	15.6 FHD AG LED UWVA 220 #WWAN #HDC slim	needed if webcam is added and a highend display is needed - swap out original display	\$ 56.00	\$ 14.77	\$ 59.08
	Integrated HD 720p TM Webcam	needed if webcam is needed	\$ 5.00	\$ 1.32	\$ 5.28
	HP USB External DVDRW Drive	HP USB External DVDRW Drive	\$ 50.00	\$ 14.76	\$ 59.04
	HP Essential Top Load Case	addon option	\$ 15.00	\$ 3.99	\$ 15.96
	HP UltraSlim Docking Station	addon option	\$ 86.00	\$ 31.16	\$ 124.64
	fingerprint reader	addon option- swap out no finger print reader	\$ 6.00	\$ 3.46	\$ 13.84
	Intel 7360 LTE-A	swap out no WWAN and add Intel 7360 LTE-A AND no service provider			
	No SVC Provider AMER 14	needed if adding WWAN	\$ 1.00	\$ 0.27	\$ 1.08

Monitors without Workstation Purchase						
Monitor	Requirements for		Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel Workstation Displays	23"	1920 x 1080 DVI and VGA interface	HP Z23n Narrow Bezel IPS Display	\$ 189.00	\$ 48.01	\$ 192.04
	24"	1920 x 1080 DVI and VGA interface	Z24i G2	\$ 259.00	\$ 65.79	\$ 263.16
	27"	1920 x 1080 DVI and VGA interface	HP Z27n Narrow Bezel Display	\$ 486.00	\$ 123.44	\$ 493.78
	30"	2560 x 1600 DVI and VGA interface	Z32 4K UHD	\$ 997.00	\$ 253.24	\$ 1,012.96
Flat Panel Elite Displays	24"	1920 x 1080 DVI and VGA interface	HP EliteDisplay E233 Monitor	\$ 165.00	\$ 53.85	\$ 215.40
	27"	1920 x 1080	HP EliteDisplay E271i LED MNT	\$ 244.00	\$ 61.98	\$ 247.92

Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Riverside Technologies Inc	4235410	4FX05AA	RTI-F1CWOPba-217	RTI - Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235411	4FX06AA	RTI-F1CWOPba2-03	RTI - Asset Tags	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235412	4FX07AA	RTI-F1CWOPba-041	RTI - Bios Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235413	4FX08AA	RTI-F1PAONba-218	RTI - Onsite Warehouse Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235414	4FX09AA	RTI-F1PAONba-318	RTI - Onsite Asset Tagging per device	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235415	4FX10AA	RTI-F1PAONba-118	RTI - Onsite BIOS Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235416	4FX11AA	RTI-F1PAONbb-118	RTI - Onsite Initiation & Loading Image	\$93.60	\$104.00	\$104.00
Riverside Technologies Inc	4235417	4FX12AA	RTI-F1PAONbc-118	RTI - Onsite Application & Correlation	\$51.30	\$59.00	\$59.00
Riverside Technologies Inc	4235418	4FX13AA	RTI-F1PAPNbd-118	RTI - Onsite BIOS Stamping	\$51.30	\$59.00	\$59.00
ADEPT							
Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Adept Consulting Services, Inc.	4235384	4FG82AA	AC-P2018001	ADPT - Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235385	4FG83AA	AC-P2018004	ADPT -Offsite Delivery & Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235386	4FG84AA	AC-P2018005	ADPT - Data Transfer	\$40.00	\$44.00	\$44.00
Adept Consulting Services, Inc.	4235387	4FG85AA	AC-P2018006	ADPT - Preparation for Shipment	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235388	4FG86AA	AC-P2018007	ADPT - Hard Drive Removal	\$4.00	\$4.40	\$4.40
Adept Consulting Services, Inc.	4235389	4FG87AA	AC-P2018008	ADPT - On-Premise Disk Wipe	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235390	4FG88AA	AC-P2018009	ADPT - Off-Premise Disk Wipe	\$19.00	\$20.90	\$20.90
Adept Consulting Services, Inc.	4235391	4FG89AA	AC-P2018010	ADPT - Relocation within 25 Miles	\$60.00	\$66.00	\$66.00
Adept Consulting Services, Inc.	4235392	4FG90AA	AC-P2018011	ADPT - Relocation Outside 25 Miles	\$67.00	\$73.70	\$73.70
Adept Consulting Services, Inc.	4235393	4FG91AA	AC-P2018012	ADPT - Return to DGS Surplus Warehouse	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235394	4FG98AA	AC-O2018020	ADPT - PA Onsite -ISP Onsite Dlvr & Inst	\$91.00	\$100.10	\$100.10
Adept Consulting Services, Inc.	4235395	4FG99AA	AC-O2018021	ADPT - Managed Logistics	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235396	4FH00AA	AC-O2018022	ADPT - Monitor Install Stand alone	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235397	4FH01AA	AC-O2018023	ADPT - Second Monitor instll with system	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235398	4FH02AA	AC-O2018024	ADPT - Monitor Prep for Ship	\$8.00	\$8.80	\$8.80
Adept Consulting Services, Inc.	4235399	4FH03AA	AC-O2018025	ADPT - Single Monitor Mount Installation	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235400	4FH04AA	AC-O2018026	ADPT - Dual Monitor Mount Installation	\$24.00	\$26.40	\$26.40
Adept Consulting Services, Inc.	4235401	4FH05AA	AC-O2018027	ADPT - On-Site Asset Tagging	\$5.00	\$5.50	\$5.50
Adept Consulting Services, Inc.	4235402	4FH06AA	AC-O2018028	ADPT - On-Site Image Deployment	\$25.00	\$27.50	\$27.50
Adept Consulting Services, Inc.	4235403	4FH07AA	AC-O2018029	ADPT - Automated Onsite User Data Migrat	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235404	4FH09AA	AC-O2018030	ADPT - Off-Site HDD Removal	\$7.00	\$7.70	\$7.70
Adept Consulting Services, Inc.	4235405	4FH10AA	AC-O2018031	ADPT - Return to DGS-Surplus (Expedited)	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235406	4FH11AA	AC-O2018032	ADPT - Hourly Technical Assistance	\$65.00	\$71.50	\$71.50



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 6
Change Effective Date : 12/12/2018

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2019 and Ending January 04, 2020

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

The Commonwealth is exercising its option to renew the Workstation Devices & Monitors contract between the Commonwealth of Pennsylvania and Pomeroy It Solutions Sales Company. Section I-15 Term of Contract states:

“The contracts resulting from this IFB will commence on the effective date, as defined in **Appendix A –Terms and Conditions**, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms.”

The Commonwealth and Pomeroy IT Solutions Sales Company Inc have agreed upon a 10 percent reduction in cost for equipment and services for Workstation 1 and Workstation 2.

The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2020. This is the last of the renewal options available for this contract.

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.



November 30, 2018

SUBJECT: Renewal of Contract # 4400014042
Contract Title: Workstation Computing Devices & Monitors
Term of Renewal: January 05, 2019 to January 04, 2020
Renewal Security Required: [] Yes [X] No

Dear Mr. Lesko:

The Commonwealth is exercising its option to renew the Workstation Computing Devices & Monitors contract between the Commonwealth of Pennsylvania and Pomeroy IT Solutions Sales Company. Section I-15 Term states:

The contracts resulting from this IFB will commence on the effective date, as defined in Appendix A -Terms and Conditions, and will end in two (2) years, with three (3) one (1) year renewal options. The Commonwealth, in its sole discretion, may renew the contracts. Renewals may be for single or multiple year terms.

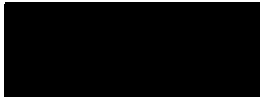
The Commonwealth is renewing the contract for one (1) year. The new termination date of the contract will be January 04, 2020. This will be the last of the three (3) renewals offered under this contract.

As of July 1, 2017, the Department of General Services rescinded the July 1, 2011, delegation of IT Procurement to the Office of Administration, resulting in the assignment of this contract to the Department of General Services. Future correspondence related to this contract should be addressed to me at the address set out below:

Raymond Jaime
Department of General Services, Bureau of Procurement
555 Walnut Street, 6th Floor, Forum Place
Harrisburg, PA 17101

The Commonwealth is requesting your acknowledgement of the contract renewal. Please confirm your acknowledgement by completing the bottom section of this letter and emailing a copy to me by close of business December 07, 2018.

Thank you for your prompt response. If you have any questions, please contact me at 717-346-3827 or rjaime@pa.gov.



Raymond A. Jaime
Commodity Specialist

I acknowledge the renewal of the above referenced contract for the above stated Term of Renewal, that all terms and conditions in the contract shall remain in full force.

Yes [X] No []

Signature

Title Contract Administrator



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 7
Change Effective Date : 05/02/2019

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2019 and Ending January 04, 2020

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

- Workstation 1: Hard drive swap from 500 GB SSD to the 512GB SSD at price parity in the base configuration.
- Workstation 2: Additional upgraded options, services and accessories

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements		Requirements for workstation 1	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			HP Z2 TWR G4 WKS	\$ 1,432.20	\$ 374.41	\$ 1,497.54
Chassis	Form Factor	Desktop-MiniTower	Tower			
	Maximum Size	15.7x6.7x17.4	14 x 6.7 x 17.1 in			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class	Core i7	Core i7			
Memory and Storage	Minimum Base Processor Speed	3.4 GHz	Intel® Core™ i7-8700 3.2 2666 6C CPU			
	Minimum Memory Size	16GB	16GB (2x8GB) DDR4 2666 DIMM NECC Memory			
Input Devices	Minimum Hard Drive Capacity	500GB or better	512GB 2.5in SATA Solid State Drive			
	Optical Drive Type	DVD+-RW	9.5mm DVD-Writer 1st ODD			
IO	Keyboard	USB Multimedia	USB Business Slim Wired Keyboard US			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side	HP Part # 882222 - Wired Part # 8FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical			
Other	Minimum total USB Ports	8 (2 Front Mount)	Front: 1 headphone/microphone combo; 2 USB 3.0 (1 charging); 1 USB 3.1 Gen 2 Type-C™ 9 Rear: 1 audio-in; 1 audio-out; 1 DVI single link; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0/4 Internal: 1 USB 3.0; 2 USB 2.0 (1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 1 (3.0 x 1, 2.0 x 1) and 2 x 5 (2.0 x 2) header. Supports one HP Internal USB			
	Minimum USB 3.0 Ports	4 (2 Front Mount)	3 front - 6 back			
	VGA Port	none	none			
	DVI Port	1	1 DVI single link			
	DP Port	2	2 DisplayPort™ 1.2			
	RJ-45 Port	1	1 RJ-45			
	Audio In/Out Ports	1/1	Context CX20632-31Z, 1.5W internal mono speaker			
	Mic	1	1 headphone/microphone combo Integrated Intel® ICH9M PCH audio controller; Intel® I350-12 dual-port GBE NIC			
	LAN	1 GB NIC				
	Speakers	Internal	Rear: 1 audio-in; 1 audio-out; 1			
Display	Operating System	Windows 10 Professional 64-bit	Microsoft Windows 10 Professional Edition 64bit OS			
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added ZDP-DVI and 1DVI-VGA adapters			
	Chipset	Intel® 8 Series (C226)	Intel® C246			
	Management	Intel vPro Technology Enabled	yes			
	Certification	Independent Software Vendor certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	Drivers can be found on HP.com			
	EPEAT Silver	Meet or exceed	Yes - EPEAT Gold registered in the U.S.			
	Energy Star	Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Options Workstation 1	Service	On-site service, 12 business-hour fix	HP Care Pack-UI G56E 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available); 4 Yes (use Disk Retention Care Pack), and account management services.			
	Flat Panel Display	External	Yes			
	Minim Size	23 inch	HP EliteDisplay E233 Monitor and services U0J12E			
	Minimum Resolution	1920 x 1080	1920 x 1080			
	Tilt Capability	Yes	Swivel Range 45°L to 45°R Display height			
	VGA Interface	1 minimum	(1) VGA 1.8 m (5.9 ft) cable included			
	USB		3 USB 3.0 (one upstream, two downstream) : (1) USB B to A cable 1.8 m (5.9 ft)			
	PORTS		(1) DisplayPort™ 1.2 DP cable included - HDMI (1) HDMI 1.4 VGA (1) VGA HDCP support Yes, HDMI and DisplayPort™			
	Option Type	Proposed Model Option	Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost
	Base Operating System	Base Proposal	Win 10 Pro 64	Priced in base configuration		
Processor	Upgrade	Intel Xeon E-2176G 6C	\$ 111.00	\$ 29.37	\$ 117.46	
Processor	Upgrade	Intel Core i7- 8700K 6C 95W	\$ 84.00	\$ 22.22	\$ 88.89	
Base Operating System	Base Proposal	Win 10 Pro 64	Priced in base configuration			
Operating System	Upgrade	Win 10 Pro 64 WKST Plus	\$ 99.00	\$ 26.19	\$ 104.76	
Base Operating System Load	Base Proposal	Operating System Load to SATA	Priced in base configuration			
Operating System Load	Upgrade	Operating System Load to M.2	Option depends on harddrive type selected no additional cost	n/a	n/a	
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2666 NECC	Priced in base configuration			
Memory	Upgrade	32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM	must remove 16GB memory and replace with 32GB \$ 112.00	\$ 29.63	\$ 118.52	
Memory	Upgrade	32GB (2x16GB) DDR4 2666 NECC	must remove 16GB memory and replace with 32GB \$ 138.00	\$ 36.51	\$ 146.03	
Memory	Upgrade	64GB (4x16GB) DDR4 2666 NECC	must remove 32GB memory and replace with 64GB \$ 768.00	\$ 203.17	\$ 812.70	
Memory	Upgrade	64GB (4x16GB) DDR4 2666 DIMM ECC UNB	must remove 32GB memory and replace with 64GB \$ 958.00	\$ 253.44	\$ 1,013.76	
Base Harddrive	Base Proposal	512GB 2.5 SATA SSD TC	Priced in base configuration			
Harddrive	Upgrade	Z Turbo Drive 512GB 2280 TLC SSD	must remove existing harddrive, only one harddrive allowed \$ 130.00	\$ 34.39	\$ 137.57	
Harddrive	Upgrade	1TB 7200 SATA 3.5in WKS	must remove existing harddrive, only one harddrive allowed no additional cost	n/a	n/a	
Harddrive	Upgrade	1TB 7200 SATA 3.5in 2ndWKS	2nd HDD only available if 1TB (1st hard drive) is selected* no additional cost	n/a	n/a	
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC SSD	must remove existing harddrive, only one harddrive allowed \$ 165.00	\$ 43.65	\$ 174.60	
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC 2nd SSD	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected* \$ 165.00	\$ 43.65	\$ 174.60	
Harddrive	Upgrade	1TB 2.5in SATA SSD	must remove existing harddrive, only one harddrive allowed \$ 165.00	\$ 43.65	\$ 174.60	
Harddrive	Upgrade	2TB 7200 SATA 3.5in 2nd	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected* \$ 30.00	\$ 7.94	\$ 31.75	
Base Graphics Card	Base Proposal	Nvd Qdr 2GB P620 (4) mDP Graphics	Priced in base configuration			
Graphics Card	Upgrade	Nvd Qdr 6GB P2000 (4) DP Graphics	must remove existing Graphics Card, only one card allowed \$ 106.00	\$ 28.04	\$ 112.17	
Graphics Card	Upgrade	Nvd Qdr 8GB P4000 (4) DP Graphics	must remove existing Graphics Card, only one card allowed \$ 524.00	\$ 138.62	\$ 554.50	
Graphics Card	Upgrade	Nvd Qdr 16GB P5000 (4) DP+DVI Graphics	must remove existing Graphics Card, only one card allowed \$ 1,389.00	\$ 367.46	\$ 1,469.84	
MISC						
MISC	Upgrade	HP Serial Port Adapter	optional upgrade \$ 5.00	\$ 1.32	\$ 5.29	
MISC	Upgrade	Single Port eSATA Adapter	optional upgrade \$ 2.00	\$ 0.53	\$ 2.12	
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.97	\$ 15.87
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.65	\$ 10.58
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.76	\$ 19.06
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface \$ 185.00	\$ 47.89	\$ 191.56	
	24"	Z24 G2	1920 x 1080 DVI and VGA interface \$ 231.00	\$ 59.80	\$ 239.20	
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface \$ 481.00	\$ 124.52	\$ 498.07	
Flat Panel Elite Displays	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface \$ 938.00	\$ 242.82	\$ 971.28	
	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface \$ 160.00	\$ 41.42	\$ 165.68	
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Display Services Options	27"	HP EliteDisplay E2711 LED MNT	1920 x 1080 DVI and VGA interface \$ 224.00	\$ 57.99	\$ 231.95	
	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For all displays excluding the z23 \$ 5.00	\$ 1.37	\$ 5.47	

HP Service Options

	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	for Z23 display only	\$ 59.00	\$ 16.14	\$ 64.56
Desktop Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Desktop Services Options	5year	HP 5y Nextbusday Onsite WS Only HW Supp	used as an upgrade in place of the 4th year	\$ 60.00	\$ 16.41	\$ 65.65
Foot Notes				Rules and Exceptions		
Row 53, 56,60 and 62, Column D	Upgrade	2nd Hard drive	2nd HDD only available if 1TB (1st hard drive) is selected*	Please work with the HP to confirm if the 2ND Hard drive is possible for your configuration as there may be additional factors that prohibit this for happening		

Appendix C- Workstation 2 Requirements		Requirements for workstation 1	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			HP ZBook 15u Mobile Workstation	\$ 1,499.00	\$ 374.37	\$ 1,497.48
Chassis	Form Factor	Notebook	Notebook Mobile Workstation - 15.6"			
	Maximum Size	15.7x6.7x17.4	14.6 x 9.91 x 0.72 in			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class Minimum Base Processor Speed	Core i7 3.4 GHz	IDS D5C I7-8650U 15u G5 Base NB PC			
Memory and Storage	Minimum Memory Size Minimum Hard Drive Capacity	16GB 500GB or better	16GB 1600MHz DDR3L 4DM 512 GB PCIe NVMe Three Layer Cell Solid State Drive			
	Optical Drive Type Minimum Optical Drive Speed	DVD+-RW 16X	External DVD/RW (Sold Separately) 16X			
Input Devices	Keyboard	USB Multimedia Full sized, laser USB 5 button min. including two buttons on erks	HP Collaboration Keyboard, spill-resistant, backlit and function key control DIB HP 3-button Comfort Grip wireless Mouse			
	Mouse					
I/O	Minimum total USB Ports	3	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	Minimum USB 3.0 Ports	4	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	VGA Port	none	none			
	DVI Port	1	none			
	DP Port	2	none			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio combo jack			
	Mic	1	Internal microphones			
	LAN	1 GB NIC	Intel® I219-LM Gigabit Network Connection (vPro configurations)			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (ZDP and 1DVI-I) (ZDP-DVI and 1DVI-VGA adapter)	AMD Radeon Pro™ WX3100 (2 GB dedicated GDDR5)			
	Chipset	Intel® 8 Series (C226)	Intel® Kabylake – R Chipset integrated with 8th Generation processor			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor, certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	DVD can be found on hp.com			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR ®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Display	Service	On-site service, 12 business-hour fix	HP Care Pack U-HP UBOEBC NBD Onsite/Defective Media Retention NB SVC (for HP ZBook 3-3-3 mobile workstation notebooks) and account management services			
	Flat Panel Display	External	sold separately			
	Minim Size	23 inch	no			
	Minimum Resolution	1920 x 1080	no			
	Tilt Capability	Yes	no			
Options Workstation 2	DVI Interface	1 minimum	no			
				\$		\$ 1,497.48
Option Type		Proposed Model Option	Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost
Base Processor	Base Proposal	HP IDS D5C I7-8650U 15u G5 BNBPC	Base Proposal	Priced in base configuration	N/A	N/A
Processor	Upgrade	HP IDS D5C P2000 4GB I7-8750H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 848.20	\$ 225.37	\$ 901.48
Processor	Upgrade	HP IDS D5C P1000 4GB I7-8650H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 996.70	\$ 240.91	\$ 902.48
Processor	Upgrade	HP IDS D5C P2000 4GB I7-8650H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 1,031.70	\$ 274.12	\$ 903.48
Processor	Upgrade	HP IDS D5C P2000 4GB I8-8950H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 1,306.70	\$ 347.19	\$ 904.48
Base Operating System	Base Proposal	Win 10 Pro 64	Base Proposal	Priced in base configuration	N/A	N/A
Operating System	Upgrade	Win 10 Pro 64	15 G5 only	\$ 29.00	\$ 7.71	\$ 30.84
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2400	Base Proposal	Priced in base configuration	N/A	N/A
Memory	Upgrade	32GB (2x16GB) DDR4 2400	Must swap out 16GB	\$ 150.00	\$ 39.86	\$ 159.44
Memory	Upgrade	32GB (2x16GB) DDR4 2666	15 G5 only - Must Swap out 16GB	\$ 310.00	\$ 82.37	\$ 329.48
Memory	Upgrade	64GB (2x32GB) DDR4 2666	15 G5 only - Must Swap out 32GB	\$ 530.00	\$ 140.82	\$ 563.28
Base Display	Base Proposal	15.6 FHD AG LED UWVA 220 slim	Base Proposal	Priced in base configuration	N/A	N/A
Display	Upgrade	15.6 FHD AG LED WWAN	needed if WWAN is added- swap out original display	\$ 11.00	\$ 2.92	\$ 11.68
Display	Upgrade	15.6 inch FHD AG LED UWVA for Webcam	needed if webcam is added - swap out original display	\$ 3.00	\$ 0.80	\$ 3.20
Display	Upgrade	15.6 FHD AG LED UWVA 220 WWAN rHDC slim	needed if webcam is added and a highend display is needed - swap out original display	\$ 11.00	\$ 2.92	\$ 11.68
Display	Upgrade	15.6 FHD AG LED UWVA wHDC slim	15 G5 only- for webcam	\$ 76.00	\$ 20.19	\$ 80.76
Display	Upgrade	LCD 15.6 UHDLEDUWVA400WHDCslimTSAL Sensor	15 G5 only- for webcam	\$ 273.00	\$ 72.54	\$ 290.16
Base Webcam	Base Proposal	No Webcam	Base Proposal	Priced in base configuration	N/A	N/A
Webcam	Upgrade	Integrated HD 720p TM Webcam	needed if webcam is needed	\$ 4.00	\$ 1.06	\$ 4.24
Webcam	Upgrade	Integrated HD 720p DM Webcam	15 G5 only - needed if webcam is needed	\$ 4.00	\$ 1.06	\$ 4.24
Base Fingerprint Sensor	Base Proposal	MISC No Fingerprint Sensor	Base Proposal	Priced in base configuration	N/A	N/A
Fingerprint Sensor	Upgrade	Fingerprint reader	addon option- swap out no fingerprint reader	\$ 5.50	\$ 1.46	\$ 5.84
Fingerprint Sensor	Upgrade	SEC Fingerprint Sensor	15 G5 - must select if configuring the 15 G5	\$ 7.50	\$ 1.99	\$ 7.96
Fingerprint Sensor	Upgrade	No Fingerprint Sensor	15 G5 - must select if configuring the 15 G5	\$ 0.30	\$ 0.08	\$ 0.32
Base WWAN Option	Base Proposal	No WWAN	Base Proposal	Priced in base configuration	N/A	N/A
WLAN/WWAN	Upgrade	Intel 7360 LTE-A	swap out no Cellular/WWAN and add Intel 7360 LTE-A AND no service provider	\$ 6.50	\$ 1.73	\$ 6.93
WLAN/WWAN	Upgrade	No SVC Provider AMER 14	must select if LTE is selected	\$ 1.00	\$ 0.27	\$ 1.08
WLAN/WWAN	Upgrade	MISC No SVC Provdr AMER	15 G5 only -must select if LTE is selected	no additional cost	n/a	n/a
WLAN/WWAN	Upgrade	Intel 9560 ac 2x2 n/p +BT 5 WW	15 G5 only -must select if Wireless/WLAN is needed in 15 G5	\$ 5.50	\$ 1.46	\$ 5.84
WLAN/WWAN	Upgrade	No WWAN	15 G5 only - must select if NO Wireless/WLAN is needed	no additional cost	n/a	n/a
WLAN/WWAN	Upgrade	Intel XMM 7360 LTE-Advanced (Cat 9)	15 G5 only - swap out no Cellular/WWAN and add Intel 7360 LTE-A AND no service provider	\$ 74.50	\$ 19.79	\$ 79.16
Base Harddrive Option	Base Proposal	512GB PCIe NVMe TLC SSD	Base Proposal	Priced in base configuration	N/A	N/A
Harddrive	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	Must swap out 512 GB	\$ 15.00	\$ 3.99	\$ 15.96
Harddrive	Upgrade	512GB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive,only one harddrive allowed	\$ 116.00	\$ 30.82	\$ 123.28
Harddrive	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	15 G5 only - must remove existing harddrive,only one harddrive allowed*	\$ 46.00	\$ 12.22	\$ 48.89
Harddrive	Upgrade	1TB 7200RPM	15 G5 only - must remove existing harddrive,only one harddrive allowed*	\$ 54.14	\$ 14.38	\$ 57.54
Harddrive	Upgrade	1TB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive,only one harddrive allowed	\$ 170.00	\$ 45.17	\$ 180.68
Harddrive	Upgrade	1TB SATA Three Layer Cell Solid State Drive	15 G5 only - must remove existing harddrive,only one harddrive allowed	\$ 90.00	\$ 23.91	\$ 95.65
Harddrive	Upgrade	2TB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive,only one harddrive allowed	\$ 510.00	\$ 135.51	\$ 549.03
Base Warranty	Base Proposal	3/3/3 Warranty	Base Proposal	Priced in base configuration	N/A	N/A
Warranty	Upgrade	3/3/3 Warranty	15 G5 only - selection dependent on processor chosen**	\$ 41.00	\$ 11.22	\$ 44.88
Warranty	Upgrade	1/1/0 Warranty US	15 G5 only - selection dependent on processor chosen**	no additional cost	n/a	n/a
Base vPro Option	Base Proposal	AMT Enabled	Base Proposal	Priced in base configuration	N/A	N/A
vPro Option	Upgrade	No vPro AMT supported	15 G5 only - must select if no vPro/AMT is requested	\$ 0.50	\$ 0.13	\$ 0.52
Base Label	Base Proposal	Core i7 vPro G8 Label	Base Proposal	Priced in base configuration	N/A	N/A
Label	Upgrade	Core i7 G8 Label	15 G5 only -must select if no vPro and G8 processor is selected	\$ 0.02	\$ 0.01	\$ 0.04
Base Keyboard	Base Proposal	Dual Point spill-resistant Collaboration US	Base Proposal	Priced in base configuration	N/A	N/A
Keyboard	Upgrade	Dual Point Backlit spill-resistant Collaboration US	15 G5 only - must select if configuring the 15 G5	\$ 12.00	\$ 3.19	\$ 12.76
Base Fingerprint Sensor	Base Proposal	MISC No Fingerprint Sensor	Base Proposal	Priced in base configuration	N/A	N/A
Fingerprint Sensor	Upgrade	SEC Fingerprint Sensor	15 G5 only - must select if configuring the 15 G5	\$ 7.50	\$ 1.99	\$ 3.96
Base Battery	Base Proposal	3 Cell 56 Whr Long Life	Base Proposal	Priced in base configuration	N/A	N/A
Battery	Upgrade	4 Cell 90 Whr Long Life	15 G5 - must select if configuring the 15 G5	\$ 39.00	\$ 10.36	\$ 41.44

Base Adapter	Base Proposal	65 Watt Smart nPFC RA IFCrG AC Adapter	Base Proposal	Priced in base configuration	N/A	N/A
Adapter	Upgrade	150 Watt Smart Slim AC Adapter	15 G5	\$ 23.00	\$ 6.11	\$ 24.44
MISC						
MISC - 15G5 only	Upgrade	MISC HDD Carrier Cage	15 G5 - must select if configuring the 15 G5***	\$ 0.50	\$ 0.13	\$ 0.52
MISC - 15G5 only	Upgrade	HP Sure Recover Permanent Disable IOPT	15 G5 - must select if configuring the 15 G5***	\$ 0.74	\$ 0.20	\$ 0.80
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.98
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.66	\$ 10.64
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.78	\$ 19.12
Optional USB External DVDRW Drive	addon option	HP USB External DVDRW Drive	Purchase as needed	\$ 50.00	\$ 13.29	\$ 53.16
Optional Case	addon option	HP Essential Top Load Case	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.98
Optional TB Dock	addon option	HP Thunderbolt Dock 230W G2 w/ Combo Cable US	Purchase as needed	\$ 240.00	\$ 63.77	\$ 255.08
DIB (Drop in Box) Option	Additional DIB	DIB No Adobe Software	must chose if TB DockG2 w/ Combo Cable is added****	\$ 0.50	\$ 0.14	\$ 0.55
DIB (Drop in Box) Option	Additional DIB	DIB HP Thunderbolt Dock 230W G2 w/ Combo Cable US	must chose if TB DockG2 w/ Combo Cable is required for multi 4k screen display****	\$ 156.00	\$ 42.67	\$ 154.28
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface	\$ 185.00	\$ 47.89	\$ 191.58
	24"	Z24i G2	1920 x 1080 DVI and VGA interface	\$ 231.00	\$ 59.80	\$ 239.20
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface	\$ 481.00	\$ 124.52	\$ 498.07
	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface	\$ 938.00	\$ 242.82	\$ 971.28
Flat Panel Elite Displays	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface	\$ 160.00	\$ 41.42	\$ 165.68
	27"	HP EliteDisplay E2711 LED MNT	1920 x 1080 DVI and VGA interface	\$ 224.00	\$ 57.99	\$ 231.95
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Display Services Options	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For all displays excluding the Z23	\$ 5.00	\$ 1.37	\$ 5.48
	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	for Z23 display only	\$ 59.00	\$ 16.14	\$ 64.56
Notebook Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Notebook Services Options	5year	HP 5y NextBusDay Onsite WS Only HW Supp	used as an upgrade in place of the 4th year	\$ 60.00	\$ 16.41	\$ 64.56
Notebook Services Options	5year	HP 5y NextBusDay Onsite NB Only HW Supp	used as an upgrade in place of the 4th year	\$ 150.00	\$ 41.03	\$ 64.56
Notebook Services Options	5year	HP 5y NextBusDay Onsite/DMR NB Only SVC	used as an upgrade in place of the 4th year	\$ 300.00	\$ 82.07	\$ 64.56
Foot Notes				Rules and Exceptions		
Row 73, Column D*	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	15 G5 only - - must replace existing harddrive,only one harddrive allowed*	The 256GB and 1TB can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 74, Column D*	Upgrade	1TB 7200RPM	16 G5 only - - must replace existing harddrive,only one harddrive allowed*			
Row 79, Column D**	Upgrade	3/3/0 Warranty	15 G5**	3/3/0 can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 80, Column D**	Upgrade	1/1/0 Warranty US	15 G5**	1/1/0 can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 97, Column D***	Upgrade	MISC HDD Carrier Cage	15 G5***	if dual hard drive is possible MISC Sure Recover Permanente must be added to configuration		
Row 98, Column D***	Upgrade	HP Sure Recover Permanent Disable IOPT	15 G5***	if dual hard drive is possible MISC Carrier Cage must be added to configuration		
Row 104, Column D****	Additional DIB	DIB No Adobe Software	15 G5 only - must choose if requesting a 15 G5****	The base DIB HP 3-button Comfort Grip wireless Mouse does not need to be removed in order to add these options. Can be added in addition to.		
Row 105, Column D****	Additional DIB	DIB HP TB Dock G2 w/Combo Cable	15 G5 only -must chose if TB DockG2 w/ Combo Cable is required for multi 4k screen display****			

Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Riverside Technologies Inc	4235410	4FX05AA	RTI-F1CWOPba-217	RTI - Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235411	4FX06AA	RTI-F1CWOPba2-03	RTI - Asset Tags	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235412	4FX07AA	RTI-F1CWOPba-041	RTI - Bios Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235413	4FX08AA	RTI-F1PAONba-218	RTI - Onsite Warehouse Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235414	4FX09AA	RTI-F1PAONba-318	RTI - Onsite Asset Tagging per device	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235415	4FX10AA	RTI-F1PAONba-118	RTI - Onsite BIOS Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235416	4FX11AA	RTI-F1PAONbb-118	RTI - Onsite Initiation & Loading Image	\$93.60	\$104.00	\$104.00
Riverside Technologies Inc	4235417	4FX12AA	RTI-F1PAONbc-118	RTI - Onsite Application & Correlation	\$51.30	\$59.00	\$59.00
Riverside Technologies Inc	4235418	4FX13AA	RTI-F1PAPNbd-118	RTI - Onsite BIOS Stamping	\$51.30	\$59.00	\$59.00
ADEPT							
Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Adept Consulting Services, Inc.	4235384	4FG82AA	AC-P2018001	ADPT - Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235385	4FG83AA	AC-P2018004	ADPT -Offsite Delivery & Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235386	4FG84AA	AC-P2018005	ADPT - Data Transfer	\$40.00	\$44.00	\$44.00
Adept Consulting Services, Inc.	4235387	4FG85AA	AC-P2018006	ADPT - Preparation for Shipment	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235388	4FG86AA	AC-P2018007	ADPT - Hard Drive Removal	\$4.00	\$4.40	\$4.40
Adept Consulting Services, Inc.	4235389	4FG87AA	AC-P2018008	ADPT - On-Premise Disk Wipe	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235390	4FG88AA	AC-P2018009	ADPT - Off-Premise Disk Wipe	\$19.00	\$20.90	\$20.90
Adept Consulting Services, Inc.	4235391	4FG89AA	AC-P2018010	ADPT - Relocation within 25 Miles	\$60.00	\$66.00	\$66.00
Adept Consulting Services, Inc.	4235392	4FG90AA	AC-P2018011	ADPT - Relocation Outside 25 Miles	\$67.00	\$73.70	\$73.70
Adept Consulting Services, Inc.	4235393	4FG91AA	AC-P2018012	ADPT - Return to DGS Surplus Warehouse	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235394	4FG98AA	AC-O2018020	ADPT - PA Onsite -ISP Onsite Dlvr & Inst	\$91.00	\$100.10	\$100.10
Adept Consulting Services, Inc.	4235395	4FG99AA	AC-O2018021	ADPT - Managed Logistics	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235396	4FH00AA	AC-O2018022	ADPT - Monitor Install Stand alone	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235397	4FH01AA	AC-O2018023	ADPT - Second Monitor instll with system	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235398	4FH02AA	AC-O2018024	ADPT - Monitor Prep for Ship	\$8.00	\$8.80	\$8.80
Adept Consulting Services, Inc.	4235399	4FH03AA	AC-O2018025	ADPT - Single Monitor Mount Installation	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235400	4FH04AA	AC-O2018026	ADPT - Dual Monitor Mount Installation	\$24.00	\$26.40	\$26.40
Adept Consulting Services, Inc.	4235401	4FH05AA	AC-O2018027	ADPT - On-Site Asset Tagging	\$5.00	\$5.50	\$5.50
Adept Consulting Services, Inc.	4235402	4FH06AA	AC-O2018028	ADPT - On-Site Image Deployment	\$25.00	\$27.50	\$27.50
Adept Consulting Services, Inc.	4235403	4FH07AA	AC-O2018029	ADPT - Automated Onsite User Data Migrat	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235404	4FH09AA	AC-O2018030	ADPT - Off-Site HDD Removal	\$7.00	\$7.70	\$7.70
Adept Consulting Services, Inc.	4235405	4FH10AA	AC-O2018031	ADPT - Return to DGS-Surplus (Expedited)	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235406	4FH11AA	AC-O2018032	ADPT - Hourly Technical Assistance	\$65.00	\$71.50	\$71.50



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 8
Change Effective Date : 06/26/2019

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2019 and Ending January 04, 2020

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

- Workstation 1 and 2: Addition of a 42.5-inch Z43 4K UHD Display with an Optional 5th year warranty

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements		Requirements for workstation 1		Proposed Model and Capability		Purchase Cost	Annual Lease Cost	Total Lease Cost	
				HP Z2 TWR G4 WKS		\$ 1,432.20	\$ 374.41	\$ 1,497.54	
Chassis	Form Factor	Desktop-MiniTower	Tower						
	Maximum Size	15.7x6.7x17.4	14 x 6.7 x 17.1 in						
Processor	Processor Brand	Intel	Intel						
	Minimum Processor Class	Core i7	Core i7						
Memory and Storage	Minimum Base Processor Speed	3.4 GHz	Intel® Core™ i7-8700 3.2 2666 6C CPU						
	Minimum Memory Size	16GB	16GB (2x8GB) DDR4 2666 DIMM NECC Memory						
Input Devices	Minimum Hard Drive Capacity	500GB or better	512GB 2.5in SATA Solid State Drive						
	Optical Drive Type	DVD+-RW	9.5mm DVD-Writer 1st ODD						
IO	Keyboard	USB Multimedia	USB Business Slim Wired Keyboard US						
	Mouse	Full sized, laser USB 5 button min. including two buttons on side	HP Part # 882222 - Wired Part # 8FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical						
Other	Minimum total USB Ports	8 (2 Front Mount)	Front: 1 headphone/microphone combo; 2 USB 3.0 (1 charging); 1 USB 3.1 Gen 2 Type-C™ 9 Rear: 1 audio-in; 1 audio-out; 1 DVI single link; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0/4 Internal: 1 USB 3.0; 2 USB 2.0 (1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 1 (3.0 x 1, 2.0 x 1) and 2 x 5 (2.0 x 2) header. Supports one HP Internal USB						
	Minimum USB 3.0 Ports	4 (2 Front Mount)	3 front - 6 back						
	VGA Port	none	none						
	DVI Port	1	1 DVI single link						
	DP Port	2	2 DisplayPort™ 1.2						
	RJ-45 Port	1	1 RJ-45						
	Audio In/Out Ports	1/1	Context CX20632-31Z, 1.5W internal mono speaker						
	Mic	1	1 headphone/microphone combo Integrated Intel® ICH10M PCH audio controller; Intel® I350-12 dual-port GBE NIC						
	LAN	1 GB NIC							
	Speakers	Internal	Rear: 1 audio-in; 1 audio-out; 1						
Display	Operating System	Windows 10 Professional 64-bit	Microsoft Windows 10 Professional Edition 64bit OS						
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)	NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added ZL-DVI and 1DVI-VGA adapters						
	Chipset	Intel® 8 Series (C226)	Intel® C246						
	Management	Intel vPro Technology Enabled	yes						
	Certification	Independent Software Vendor certified (ISV)	Yes						
	Sound Card	Integrated	Integrated						
	Documentation	Diagnostics and Drivers DVD	Drivers can be found on HP.com						
	EPEAT Silver	Meet or exceed	Yes - EPEAT Gold registered in the U.S.						
	Energy Star	Meet or exceed	Yes - HP ENERGY STAR Qualified Configuration						
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)						
Options Workstation 1	Service	On-site service, 12 business-hour fix	HP Care Pack-UI G56E 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available); 4 Yes (use Disk Retention Care Pack), and account management services.						
	Flat Panel Display	External	Yes						
	Minim Size	23 inch	HP EliteDisplay E233 Monitor and services U0J12E						
	Minimum Resolution	1920 x 1080	1920 x 1080						
	Tilt Capability	Yes	Swivel Range 45°L to 45°R Display height						
	VGA Interface	1 minimum	(1) VGA 1.8 m (5.9 ft) cable included						
	USB		3 USB 3.0 (one upstream, two downstream) : (1) USB B to A cable 1.8 m (5.9 ft)						
	PORTS		(1) DisplayPort™ 1.2 DP cable included - HDMI (1) HDMI 1.4 VGA (1) VGA HDCP support Yes, HDMI and DisplayPort™						
	Option Type	Proposed Model Option	Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost			
	Base Operating System	Base Proposal	Win 10 Pro 64	Priced in base configuration					
Processor	Upgrade	Intel Xeon E-2176G 6C	optional upgrade	\$ 111.00	\$ 29.37	\$ 117.46			
Processor	Upgrade	Intel Core i7- 8700K 6C 95W	optional upgrade	\$ 84.00	\$ 22.22	\$ 88.89			
Base Operating System	Base Proposal	Win 10 Pro 64	Priced in base configuration						
Operating System	Upgrade	Win 10 Pro 64 WKST Plus	Option depends on processor selected	\$ 99.00	\$ 26.19	\$ 104.76			
Base Operating System Load	Base Proposal	Operating System Load to SATA	Priced in base configuration						
Operating System Load	Upgrade	Operating System Load to M.2	Option depends on harddrive type selected	no additional cost	n/a	n/a			
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2666 NECC	Priced in base configuration						
Memory	Upgrade	32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM	must remove 16GB memory and replace with 32GB	\$ 112.00	\$ 29.63	\$ 118.52			
Memory	Upgrade	32GB (2x16GB) DDR4 2666 NECC	must remove 16GB memory and replace with 32GB	\$ 138.00	\$ 36.51	\$ 146.03			
Memory	Upgrade	64GB (4x16GB) DDR4 2666 NECC	must remove 32GB memory and replace with 64GB	\$ 768.00	\$ 203.17	\$ 812.70			
Memory	Upgrade	64GB (4x16GB) DDR4 2666 DIMM ECC UNB	must remove 32GB memory and replace with 64GB	\$ 958.00	\$ 253.44	\$ 1,013.76			
Base Harddrive	Base Proposal	512GB 2.5 SATA SSD TC	Priced in base configuration						
Harddrive	Upgrade	Z Turbo Drive 512GB 2280 TLC SSD	must remove existing harddrive,only one harddrive allowed	\$ 130.00	\$ 34.39	\$ 137.57			
Harddrive	Upgrade	1TB 7200 SATA 3.5in WKS	must remove existing harddrive,only one harddrive allowed	no additional cost	n/a	n/a			
Harddrive	Upgrade	1TB 7200 SATA 3.5in 2ndWKS	2nd HDD only available if 1TB (1st hard drive) is selected*	no additional cost	n/a	n/a			
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC SSD	must remove existing harddrive,only one harddrive allowed	\$ 165.00	\$ 43.65	\$ 174.60			
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC 2nd SSD	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected*	\$ 165.00	\$ 43.65	\$ 174.60			
Harddrive	Upgrade	1TB 2.5in SATA SSD	must remove existing harddrive,only one harddrive allowed	\$ 165.00	\$ 43.65	\$ 174.60			
Harddrive	Upgrade	2TB 7200 SATA 3.5in 2nd	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected*	\$ 30.00	\$ 7.94	\$ 31.75			
Base Graphics Card	Base Proposal	Nvd Qdr 2GB P620 (4) mDP Graphics	Priced in base configuration						
Graphics Card	Upgrade	Nvd Qdr 6GB P2000 (4) DP Graphics	must remove existing Graphics Card,only one card allowed	\$ 106.00	\$ 28.04	\$ 112.17			
Graphics Card	Upgrade	Nvd Qdr 8GB P4000 (4) DP Graphics	must remove existing Graphics Card,only one card allowed	\$ 524.00	\$ 138.62	\$ 554.50			
Graphics Card	Upgrade	Nvd Qdr 16GB P5000 (4) DP+DVI Graphics	must remove existing Graphics Card,only one card allowed	\$ 1,389.00	\$ 367.46	\$ 1,469.84			
MISC									
MISC	Upgrade	HP Serial Port Adapter	optional upgrade	\$ 5.00	\$ 1.32	\$ 5.29			
MISC	Upgrade	Single Port eSATA Adapter	optional upgrade	\$ 2.00	\$ 0.53	\$ 2.12			
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost			
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.97	\$ 15.87			
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.65	\$ 10.58			
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.76	\$ 19.06			
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost			
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface	\$ 185.00	\$ 47.89	\$ 191.56			
	24"	Z24 G2	1920 x 1080 DVI and VGA interface	\$ 231.00	\$ 59.80	\$ 239.20			
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface	\$ 481.00	\$ 124.52	\$ 498.07			
	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface	\$ 938.00	\$ 242.82	\$ 971.28			
Flat Panel Elite Displays	42.5"	Z43 UHD 4K Display	3840 x 2160 DP and HDMI interface	\$ 725.00	\$ 187.68	\$ 750.72			
	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface	\$ 160.00	\$ 41.42	\$ 165.68			
	27"	HP EliteDisplay E271i LED MNT	1920 x 1080 DVI and VGA interface	\$ 224.00	\$ 57.99	\$ 231.95			
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost			

Display Services Options	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For all displays excluding the z23	\$ 5.00	\$ 1.37	\$ 5.47
	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For Z23 and Z43 display only	\$ 59.00	\$ 16.14	\$ 64.56
	5year	HP 5y Nbd Adv Exchg X-Large Monitor SVC	For Z43 display only	\$ 75.00	\$ 20.52	\$ 82.07
Desktop Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Desktop Services Options	5year	HP 5y Nextbusday Onsite WS Only HW Supp	used as an upgrade in place of the 4th year	\$ 60.00	\$ 16.41	\$ 65.65
Foot Notes				Rules and Exceptions		
Row 53, 58,60 and 62, Column D	Upgrade	2nd Hard drive	2nd HDD only available if 1TB (1st hard drive) is selected*	Please work with the HP to confirm if the 2ND Hard drive is possible for your configuration as there may be additional factors that prohibit this for happening		

Appendix C- Workstation 2 Requirements		Requirements for workstation 1	Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
			HP ZBook 15u Mobile Workstation	\$ 1,499.00	\$ 374.37	\$ 1,497.48
Chassis	Form Factor	Notebook	Notebook Mobile Workstation - 15.6"			
	Maximum Size	15.7x6.7x17.4	14.6 x 9.91 x 0.72 in			
Processor	Processor Brand	Intel	Intel			
	Minimum Processor Class Minimum Base Processor Speed	Core i7 3.4 GHz	IDS D5C I7-8650U 15u G5 Base NB PC			
Memory and Storage	Minimum Memory Size Minimum Hard Drive Capacity	16GB 500GB or better	16GB 1600MHz DDR3L 4DM 512 GB PCIe NVMe Three Layer Cell Solid State Drive			
	Optical Drive Type Minimum Optical Drive Speed	DVD+-RW 16X	External DVD/RW (Sold Separately) 16X			
Input Devices	Keyboard	USB Multimedia Full sized, laser USB 5 button min. including two buttons on erks	HP Collaboration Keyboard, spill-resistant, backlit and function key control DIB HP 3-button Comfort Grip wireless Mouse			
	Mouse					
I/O	Minimum total USB Ports	3	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	Minimum USB 3.0 Ports	4	1 USB Type-C™ (Thunderbolt™ 3, USB 3.1)			
	VGA Port	none	none			
	DVI Port	1	none			
	DP Port	2	none			
	RJ-45 Port	1	1 RJ-45 (Ethernet)			
	Audio In/Out Ports	1/1	Audio combo jack			
	Mic	1	Internal microphones			
	LAN	1 GB NIC	Intel® I219-LM Gigabit Network Connection (vPro configurations)			
	Speakers	Internal	Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit	Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (ZDP and 1DVI-I) (ZDP-DVI and 1DVI-VGA adapter)	AMD Radeon Pro™ WX3100 (2 GB dedicated GDDR5)			
	Chipset	Intel® 8 Series (C226)	Intel® Kabylake – R Chipset integrated with 8th Generation processor			
	Management	Intel vPro Technology Enabled	Intel Core i7 with vPro technology			
	Certification	Independent Software Vendor, certified (ISV)	Yes			
	Sound Card	Integrated	Integrated			
	Documentation	Diagnostics and Drivers DVD	DVD can be found on hp.com			
	EPEAT Silver	Meet or exceed	Yes - EPEAT®			
	Energy Star	Meet or exceed	Yes - US ENERGY STAR ®			
	Warranty	Four (4) year	Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Display	Service	On-site service, 12 business-hour fix	HP Care Pack U-HP UBOEBC NBD Onsite/Defective Media Retention NB SVC (for HP ZBook 3-3-3 mobile workstation notebooks) and account management services			
	Flat Panel Display	External	sold separately			
	Minim Size	23 inch	no			
	Minimum Resolution	1920 x 1080	no			
	Tilt Capability	Yes	no			
Options Workstation 2	VGA Interface	1 minimum	no			
	DVI Interface	1 minimum	no			
Option Type		Proposed Model Option	Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost
Base Processor	Base Proposal	HP IDS D5C I7-8650U 15u G5 BNBPC	Base Proposal	Priced in base configuration	N/A	N/A
Processor	Upgrade	HP IDS D5C P2000 4GB I7-8750H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 848.20	\$ 225.37	\$ 901.48
Processor	Upgrade	HP IDS D5C P1000 4GB I7-8650H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 996.70	\$ 240.91	\$ 902.48
Processor	Upgrade	HP IDS D5C P2000 4GB I7-8650H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 1,031.70	\$ 274.12	\$ 903.48
Processor	Upgrade	HP IDS D5C P2000 4GB I8-8950H 15G5BNBPC	15 G5 with 4GB GFX Card	\$ 1,306.70	\$ 347.19	\$ 904.48
Base Operating System	Base Proposal	Win 10 Pro 64	Base Proposal	Priced in base configuration	N/A	N/A
Operating System	Upgrade	Win 10 Pro 64	15 G5 only	\$ 29.00	\$ 7.71	\$ 30.84
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2400	Base Proposal	Priced in base configuration	N/A	N/A
Memory	Upgrade	32GB (2x16GB) DDR4 2400	Must swap out 16GB	\$ 150.00	\$ 39.86	\$ 159.44
Memory	Upgrade	32GB (2x16GB) DDR4 2666	15 G5 only - Must Swap out 16GB	\$ 310.00	\$ 82.37	\$ 329.48
Memory	Upgrade	64GB (2x32GB) DDR4 2666	15 G5 only - Must Swap out 32GB	\$ 530.00	\$ 140.82	\$ 563.28
Base Display	Base Proposal	15.6 FHD AG LED UWVA 220 slim	Base Proposal	Priced in base configuration	N/A	N/A
Display	Upgrade	15.6 FHD AG LED WWAN	needed if WWAN is added- swap out original display	\$ 11.00	\$ 2.92	\$ 11.68
Display	Upgrade	15.6 inch FHD AG LED UWVA for Webcam	needed if webcam is added - swap out original display	\$ 3.00	\$ 0.80	\$ 3.20
Display	Upgrade	15.6 FHD AG LED UWVA 220 WWAN rHDC slim	needed if webcam is added and a highend display is needed - swap out original display	\$ 11.00	\$ 2.92	\$ 11.68
Display	Upgrade	15.6 FHD AG LED UWVA wHDC slim	15 G5 only- for webcam	\$ 76.00	\$ 20.19	\$ 80.76
Display	Upgrade	LCD 15.6 UHDL DUWVA400WHD CalmTSA Sensor	15 G5 only- for webcam	\$ 273.00	\$ 72.54	\$ 290.16
Base Webcam	Base Proposal	No Webcam	Base Proposal	Priced in base configuration	N/A	N/A
Webcam	Upgrade	Integrated HD 720p TM Webcam	needed if webcam is needed	\$ 4.00	\$ 1.06	\$ 4.24
Webcam	Upgrade	Integrated HD 720p DM Webcam	15 G5 only - needed if webcam is needed	\$ 4.00	\$ 1.06	\$ 4.24
Base Fingerprint Sensor	Base Proposal	MISC No Fingerprint Sensor	Base Proposal	Priced in base configuration	N/A	N/A
Fingerprint Sensor	Upgrade	Fingerprint reader	addon option- swap out no fingerprint reader	\$ 5.50	\$ 1.46	\$ 5.84
Fingerprint Sensor	Upgrade	SEC Fingerprint Sensor	15 G5 - must select if configuring the 15 G5	\$ 7.50	\$ 1.99	\$ 7.96
Fingerprint Sensor	Upgrade	No Fingerprint Sensor	15 G5 - must select if configuring the 15 G5	\$ 0.30	\$ 0.08	\$ 0.32
Base WWAN Option	Base Proposal	No WWAN	Base Proposal	Priced in base configuration	N/A	N/A
WWAN/WWAN	Upgrade	Intel 7360 LTE-A	swap out no Cellular/WWAN and add Intel 7360 LTE-A AND no service provider	\$ 6.50	\$ 1.73	\$ 6.93
WWAN/WWAN	Upgrade	No SVC Provider AMER 14	must select if LTE is selected	\$ 1.00	\$ 0.27	\$ 1.08
WWAN/WWAN	Upgrade	MISC No SVC Prvdr AMER	15 G5 only - must select if LTE is selected	no additional cost	n/a	n/a
WWAN/WWAN	Upgrade	Intel 9560 ac 2x2 n/p +BT 5 WW	15 G5 only - must select if Wireless/WWAN is needed in 15 G5	\$ 5.50	\$ 1.46	\$ 5.84
WWAN/WWAN	Upgrade	No WWAN	15 G5 only - must select if NO Wireless/WWAN is needed	no additional cost	n/a	n/a
WWAN/WWAN	Upgrade	Intel XMM 7360 LTE-Advanced (Cat 9)	15 G5 only - swap out no Cellular/WWAN and add Intel 7360 LTE-A AND no service provider	\$ 74.50	\$ 19.79	\$ 79.16
Base Harddrive Option	Base Proposal	512GB PCIe NVMe TLC SSD	Base Proposal	Priced in base configuration	N/A	N/A
Harddrive	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	Must swap out 512 GB	\$ 15.00	\$ 3.99	\$ 15.96
Harddrive	Upgrade	512GB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 116.00	\$ 30.82	\$ 123.28
Harddrive	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 46.00	\$ 12.22	\$ 48.89
Harddrive	Upgrade	1TB 7200RPM	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 54.14	\$ 14.38	\$ 57.54
Harddrive	Upgrade	1TB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 170.00	\$ 45.17	\$ 180.68
Harddrive	Upgrade	1TB SATA Three Layer Cell Solid State Drive	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 90.00	\$ 23.91	\$ 95.65
Harddrive	Upgrade	2TB PCIe NVMe TLC SSD	15 G5 only - must remove existing harddrive only one harddrive allowed	\$ 510.00	\$ 135.51	\$ 549.03
Base Warranty	Base Proposal	3/3/0 Warranty	Base Proposal	Priced in base configuration	N/A	N/A
Warranty	Upgrade	3/3/0 Warranty	15 G5 only - selection dependent on processor chosen**	\$ 41.00	\$ 11.22	\$ 44.88
Warranty	Upgrade	1/1/0 Warranty US	15 G5 only - selection dependent on processor chosen**	no additional cost	n/a	n/a
Base vPro Option	Base Proposal	AMT Enabled	Base Proposal	Priced in base configuration	N/A	N/A
vPro Option	Upgrade	No vPro AMT supported	15 G5 only - must select if no vPro/AMT is requested	\$ 0.50	\$ 0.13	\$ 0.52
Base Label	Base Proposal	Core i7 vPro G8 Label	Base Proposal	Priced in base configuration	N/A	N/A
Label	Upgrade	Core i7 G8 Label	15 G5 only - must select if no vPro and G8 processor is selected	\$ 0.02	\$ 0.01	\$ 0.04
Base Keyboard	Base Proposal	Dual Point spill-resistant Collaboration US	Base Proposal	Priced in base configuration	N/A	N/A
Keyboard	Upgrade	Dual Point Backlit spill-resistant Collaboration US	15 G5 only - must select if configuring the 15 G5	\$ 12.00	\$ 3.19	\$ 12.76
Base Fingerprint Sensor	Base Proposal	MISC No Fingerprint Sensor	Base Proposal	Priced in base configuration	N/A	N/A
Fingerprint Sensor	Upgrade	SEC Fingerprint Sensor	15 G5 only - must select if configuring the 15 G5	\$ 7.50	\$ 1.99	\$ 3.96
Base Battery	Base Proposal	3 Cell 56 Whr Long Life	Base Proposal	Priced in base configuration	N/A	N/A
Battery	Upgrade	4 Cell 90 Whr Long Life	15 G5 - must select if configuring the 15 G5	\$ 39.00	\$ 10.36	\$ 41.44

Base Adapter	Base Proposal	65 Watt Smart nPFC RA IFCrG AC Adapter	Base Proposal	Priced in base configuration	N/A	N/A
Adapter	Upgrade	150 Watt Smart Slim AC Adapter	15 G5	\$ 23.00	\$ 6.11	\$ 24.44
MISC						
MISC - 15G5 only	Upgrade	MISC HDD Carrier Cage	15 G5 - must select if configuring the 15 G5***	\$ 0.50	\$ 0.13	\$ 0.52
MISC - 15G5 only	Upgrade	HP Sure Recover Permanent Disable IOPT	15 G5 - must select if configuring the 15 G5***	\$ 0.74	\$ 0.20	\$ 0.80
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.98
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.66	\$ 10.64
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.78	\$ 19.12
Optional USB External DVDRW Drive	addon option	HP USB External DVDRW Drive	Purchase as needed	\$ 50.00	\$ 13.29	\$ 53.16
Optional Case	addon option	HP Essential Top Load Case	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.98
Optional TB Dock	addon option	HP Thunderbolt Dock 230W G2 w/ Combo Cable US	Purchase as needed	\$ 240.00	\$ 63.77	\$ 255.08
DIB (Drop in Box) Option	Additional DIB	DIB No Adobe Software	must chose if TB DockG2 w/ Combo Cable is added****	\$ 0.50	\$ 0.14	\$ 0.55
DIB (Drop in Box) Option	Additional DIB	DIB HP Thunderbolt Dock 230W G2 w/ Combo Cable US	must chose if TB DockG2 w/ Combo Cable is required for multi 4k screen display****	\$ 156.00	\$ 42.67	\$ 154.28
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface	\$ 185.00	\$ 47.89	\$ 191.58
	24"	Z24i G2	1920 x 1080 DVI and VGA interface	\$ 231.00	\$ 59.80	\$ 239.20
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface	\$ 481.00	\$ 124.52	\$ 498.07
	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface	\$ 938.00	\$ 242.82	\$ 971.28
	42.5"	Z43 UHD 4K Display	3840 x 2160 DP and HDMI interface	\$ 725.00	\$ 187.68	\$ 750.72
Flat Panel Elite Displays	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface	\$ 160.00	\$ 41.42	\$ 165.68
	27"	HP EliteDisplay E2711 LED MNT	1920 x 1080 DVI and VGA interface	\$ 224.00	\$ 57.99	\$ 231.98
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Display Services Options	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For all displays excluding the Z23	\$ 5.00	\$ 1.37	\$ 5.47
	4year	HP 4y Nbd Adv Exchange Large Monitor SVC	For Z23 and Z43 display only	\$ 59.00	\$ 16.14	\$ 64.56
	5year	HP 5y Nbd Adv Exchg X-Large Monitor SVC	For Z43 display only	\$ 75.00	\$ 20.53	\$ 82.07
Notebook Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Notebook Services Options	5year	HP 5y NextBusDay Onsite WS Only HW Supp	used as an upgrade in place of the 4th year	\$ 60.00	\$ 16.41	\$ 64.56
Notebook Services Options	5year	HP 5y NextBusDay Onsite NB Only HW Supp	used as an upgrade in place of the 4th year	\$ 150.00	\$ 41.03	\$ 64.56
Notebook Services Options	5year	HP 5y NextBusDay Onsite/DMR NB Only SVC	used as an upgrade in place of the 4th year	\$ 300.00	\$ 82.07	\$ 64.56
Rules and Exceptions						
Row 73, Column D*	Upgrade	256GB PCIe NVMe Three Layer Cell Solid State Drive	15 G5 only - - must replace existing harddrive only one harddrive allowed*	The 256GB and 1TB can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 74, Column D*	Upgrade	1TB 7200RPM	16 G5 only - - must replace existino harddrive only one harddrive allowed*			
Row 79, Column D**	Upgrade	3/3/0 Warranty	15 G5**	3/3/0 can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 80, Column D**	Upgrade	1/1/0 Warranty US	15 G5**	1/1/0 can be configured if the the configuration allows for it. Please work with your HP rep for validation as there may be additional factors that prohibit this for happening.		
Row 97, Column D***	Upgrade	MISC HDD Carrier Cage	15 G5***	if dual hard drive is possible MISC Sure Recover Permanente must be added to configuration		
Row 98, Column D***	Upgrade	HP Sure Recover Permanent Disable IOPT	15 G5***	if dual hard drive is possible MISC Carrier Cage must be added to configuration		
Row 104, Column D****	Additional DIB	DIB No Adobe Software	15 G5 only - must choose if requesting a 15 G5****			
Row 105, Column D****	Additional DIB	DIB HP TB Dock G2 w/Combo Cable	15 G5 only -must chose if TB DockG2 w/ Combo Cable is required for multi 4k screen display****	The base DIB HP 3-button Comfort Grip wireless Mouse does not need to be removed in order to add these options. Can be added in addition to.		

Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Riverside Technologies Inc	4235410	4FX05AA	RTI-F1CWOPba-217	RTI - Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235411	4FX06AA	RTI-F1CWOPba2-03	RTI - Asset Tags	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235412	4FX07AA	RTI-F1CWOPba-041	RTI - Bios Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235413	4FX08AA	RTI-F1PAONba-218	RTI - Onsite Warehouse Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235414	4FX09AA	RTI-F1PAONba-318	RTI - Onsite Asset Tagging per device	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235415	4FX10AA	RTI-F1PAONba-118	RTI - Onsite BIOS Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235416	4FX11AA	RTI-F1PAONbb-118	RTI - Onsite Initiation & Loading Image	\$93.60	\$104.00	\$104.00
Riverside Technologies Inc	4235417	4FX12AA	RTI-F1PAONbc-118	RTI - Onsite Application & Correlation	\$51.30	\$59.00	\$59.00
Riverside Technologies Inc	4235418	4FX13AA	RTI-F1PAPNbd-118	RTI - Onsite BIOS Stamping	\$51.30	\$59.00	\$59.00
ADEPT							
Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Adept Consulting Services, Inc.	4235384	4FG82AA	AC-P2018001	ADPT - Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235385	4FG83AA	AC-P2018004	ADPT -Offsite Delivery & Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235386	4FG84AA	AC-P2018005	ADPT - Data Transfer	\$40.00	\$44.00	\$44.00
Adept Consulting Services, Inc.	4235387	4FG85AA	AC-P2018006	ADPT - Preparation for Shipment	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235388	4FG86AA	AC-P2018007	ADPT - Hard Drive Removal	\$4.00	\$4.40	\$4.40
Adept Consulting Services, Inc.	4235389	4FG87AA	AC-P2018008	ADPT - On-Premise Disk Wipe	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235390	4FG88AA	AC-P2018009	ADPT - Off-Premise Disk Wipe	\$19.00	\$20.90	\$20.90
Adept Consulting Services, Inc.	4235391	4FG89AA	AC-P2018010	ADPT - Relocation within 25 Miles	\$60.00	\$66.00	\$66.00
Adept Consulting Services, Inc.	4235392	4FG90AA	AC-P2018011	ADPT - Relocation Outside 25 Miles	\$67.00	\$73.70	\$73.70
Adept Consulting Services, Inc.	4235393	4FG91AA	AC-P2018012	ADPT - Return to DGS Surplus Warehouse	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235394	4FG98AA	AC-O2018020	ADPT - PA Onsite -ISP Onsite Dlvr & Inst	\$91.00	\$100.10	\$100.10
Adept Consulting Services, Inc.	4235395	4FG99AA	AC-O2018021	ADPT - Managed Logistics	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235396	4FH00AA	AC-O2018022	ADPT - Monitor Install Stand alone	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235397	4FH01AA	AC-O2018023	ADPT - Second Monitor instll with system	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235398	4FH02AA	AC-O2018024	ADPT - Monitor Prep for Ship	\$8.00	\$8.80	\$8.80
Adept Consulting Services, Inc.	4235399	4FH03AA	AC-O2018025	ADPT - Single Monitor Mount Installation	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235400	4FH04AA	AC-O2018026	ADPT - Dual Monitor Mount Installation	\$24.00	\$26.40	\$26.40
Adept Consulting Services, Inc.	4235401	4FH05AA	AC-O2018027	ADPT - On-Site Asset Tagging	\$5.00	\$5.50	\$5.50
Adept Consulting Services, Inc.	4235402	4FH06AA	AC-O2018028	ADPT - On-Site Image Deployment	\$25.00	\$27.50	\$27.50
Adept Consulting Services, Inc.	4235403	4FH07AA	AC-O2018029	ADPT - Automated Onsite User Data Migrat	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235404	4FH09AA	AC-O2018030	ADPT - Off-Site HDD Removal	\$7.00	\$7.70	\$7.70
Adept Consulting Services, Inc.	4235405	4FH10AA	AC-O2018031	ADPT - Return to DGS-Surplus (Expedited)	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235406	4FH11AA	AC-O2018032	ADPT - Hourly Technical Assistance	\$65.00	\$71.50	\$71.50



Parent Contract Number: N/A
SAP/SRM Contract Number: 4400014042
Change Number: 9
Change Effective Date : 08/10/2020

Using Agency: All Using Agencies

Contract Title: Workstation Computing Devices & Monitors

Contract Period: Beginning January 05, 2019 and Ending April 04, 2021

Commodity Specialist: Raymond A. Jaime Telephone: 717-346-3827 Email: rjaime@pa.gov

CHANGE SUMMARY:

Please reference the attached updated price list which includes the following change.

- Workstation 2: Replaced ZBook 15U G5 with ZBook Firefly G7
 - Changed description of device from ZBook 15U G5 to ZBook Firefly G7
 - The overall cost is now \$1401.00 from \$1409.00
 - The lease cost is now \$372.25 from \$374.37
 - Replaced all upgrade options

ALL OTHER TERMS AND CONDITIONS OF THIS AGREEMENT NOT CHANGED BY THIS CHANGE NOTICE REMAIN AS ORIGINALLY WRITTEN.

Fill in the sheet with Workstations for which a Bid is being submitted. All green and yellow cells must have entries for the Bid to be acceptable.

For Base Models:

- 1 Models must meet all the minimum requirements specified in this section.
- 2 Fill in all yellow capability cells. If the model meets the value in the requirement column, place an "X." If the model exceeds the value in the requirements column, enter the actual value.
- 3 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for the model proposed .
- 4 Do not fill in any shaded cells.

For Options:

- 1 If the model can be upgraded to the optional capability, enter the option in the Proposed Model Option column (yellow) ,enter the purchase price, annual lease price, and total lease price for the option in the green cost cells.
- 2 If the model already includes the capability in the base model price, enter "Included" in the green cost cells.
- 3 If the model cannot be upgraded to the optional capability, enter "Not available" in the green cost cells.
- 4 Do not fill in any shaded cells.

For Services:

- 1 Fill in all green cost cells with the purchase price , annual lease price, and total lease price for each service listed..

Appendix C- Workstation 1 Requirements		Requirements for workstation 1		Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost	
					HP Z2 TWR G4 WKS	\$ 1,432.20	\$ 374.41	\$ 1,497.54
Chassis	Form Factor	Desktop-MiniTower		Tower				
	Maximum Size	15.7x6.7x17.4		14 x 6.7 x 17.1 in				
Processor	Processor Brand	Intel		Intel				
	Minimum Processor Class	Core i7		Core i7				
	Minimum Base Processor Speed	3.4 GHz		Intel® Core™ i7-8700 3.2 2666 6C CPU				
Memory and Storage	Minimum Memory Size	16GB		16GB (2x8GB) DDR4 2666 DIMM NECC Memory				
	Minimum Hard Drive Capacity	500GB or better		512GB 2.5in SATA Solid State Drive				
	Optical Drive Type	DVD±RW		9.5mm DVD-Writer 1st ODD				
	Minimum Optical Drive Speed	16X		16X				
Input Devices	Keyboard	USB Multimedia		USB Business Slim Wired Keyboard US				
	Mouse	Full sized, laser USB 5 button min, including two buttons on side		HP Part # A892952 - Mntfr Part # 4FD-00025 - MICROSOFT HARDWARE Microsoft Comfort Mouse 4500 - BlueTrack - Cable - USB - 1000 dpi - Tilt Wheel - 5 Button(s) - Symmetrical				
IO	Minimum total USB Ports	8 (2 Front Mount)		Front: 1 headphone/microphone combo; 2 USB 3.0 (1 charging); 1 USB 3.1 Gen 2 Type-C™ 9 Rear: 1 audio-in; 1 audio-out; 1 DVI-I single link; 1 RJ-45; 2 DisplayPort™ 1.2; 2 USB 2.0; 4 USB 3.0/4 Internal: 1 USB 3.0; 2 USB 2.0 (1 USB 3.0 and 2 USB 2.0 ports available as 2 separate 2 x 10 (3.0 x 1, 2.0 x 1) and 2 x 5 (2.0 x 2) header. Supports one HP Internal USB 2.0 Port Kit and one USB 3.0 media card reader.)				
	Minimum USB 3.0 Ports	4 (2 Front Mount)		3 front - 6 back				
	VGA Port	none		none				
	DVI Port	1		1 DVI-I single link				
	DP Port	2		2 DisplayPort™ 1.2				
	RJ-45 Port	1		1 RJ-45				
	Audio In/Out Ports	1/1		Conexant CX20632-31Z, 1.5W internal mono speaker				
	Mic	1		1 headphone/microphone combo				
	LAN	1 GB NIC		Integrated Intel® I219-LM PCIe® GbE; Intel® I350-T2 dual-port GbE NIC				
	Speakers	Internal		Rear: 1 audio-in; 1 audio-out; 1				
Other	Operating System	Windows 10 Professional 64-bit		Microsoft Windows 10 Professional Edition 64bit OS				
	Video/Graphics Card	2 GB NVIDIA Quadro K2000 (2DP and 1DVI-I) (2DP-DVI and 1DVI-VGA adapter)		NVIDIA Quadro K620 2GB DL-DVI(I)+DP+DP 1st No cables included Graphics - added 2DP-DVI and 1DVI-VGA adapters				
	Chipset	Intel® 8 Series (C226)		Intel® C246				
	Management	Intel vPro Technology Enabled		yes				
	Certification	Independent Software Vendor certified (ISV)		Yes				
	Sound Card	Integrated		Integrated				
	Documentation	Diagnostics and Drivers DVD		Drivers can be found on HP.com				
	EPEAT Silver	Meet or exceed		Yes - EPEAT Gold registered in the U.S.				
	Energy Star	Meet or exceed		Yes - HP ENERGY STAR Qualified Configuration				
	Warranty	Four (4) year		Yes (standard 3/3/3 Warranty + 4 year Care Pack)				
Display	Service	On-site service, 12 business-hour fix		HP Care Pack-U1G56E 9x5 4-Hour Response On-Site Coverage (with or without Disk Retention available), 4 Yrs (use Disk Retention Care Pack), and account management services				
	Flat Panel Display	External		Yes				
	Minim Size	23 inch		HP EliteDisplay E233 Monitor and services U0J12E				
	Minimum Resolution	1920 x 1080		1920 x 1080				
	Tilt Capability	Yes		Tilt Range -5° to +23° vertical Swivel Range 45°L to 45°R Display height adjustment: Adjustment Range: 150 mm Pivot Rotation Yes, 90° clockwise and counter-clockwise				
	VGA Interface	1 minimum		(1) VGA 1.8 m (5.9 ft) cable included				
	USB			3 USB 3.0 (one upstream, two downstream) : (1) USB B to A cable 1.8 m (5.9 ft)				
	PORTS			(1) DisplayPort™ 1.2 DP cable included ; HDMI (1) HDMI 1.4 VGA (1) VGA HDCP support Yes, HDMI and DisplayPort™				
Options Workstation 1	Option Type	Proposed Model Option		Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost	
Base Operating System	Base Proposal	Win 10 Pro 64		Base Proposal	Priced in base configuration			
Processor	Upgrade	Intel Xeon E-2176G 6C		optional upgrade	\$ 111.00	\$ 29.37	\$ 117.46	
Processor	Upgrade	Intel Core i7- 8700k 6C 95W		optional upgrade	\$ 84.00	\$ 22.22	\$ 88.89	
Base Operating System	Base Proposal	Win 10 Pro 64		Base Proposal	Priced in base configuration			
Operating System	Upgrade	Win 10 Pro 64 WKST Plus		Option depends on processor selected	\$ 99.00	\$ 26.19	\$ 104.76	
Base Operating System Load	Base Proposal	Operating System Load to SATA		Base Proposal	Priced in base configuration			

Operating System Load	Upgrade	Operating System Load to M.2	Option depends on harddrive type selected	no additional cost	n/a	n/a
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2666 NECC	Base Proposal	Priced in base configuration		
Memory	Upgrade	32GB (2x16GB) nECC DDR4-2133 nECC Unbuffered RAM	must remove 16GB memory and replace with 32GB	\$ 112.00	\$ 29.63	\$ 118.52
Memory	Upgrade	32GB (2x16GB) DDR4 2666 NECC	must remove 16GB memory and replace with 32GB	\$ 138.00	\$ 36.51	\$ 146.03
Memory	Upgrade	64GB (4x16GB) DDR4 2666 NECC	must remove 32GB memory and replace with 64GB	\$ 768.00	\$ 203.17	\$ 812.70
Memory	Upgrade	64GB (4x16GB) DDR4 2666 DIMM ECC UNB	must remove 32GB memory and replace with 64GB	\$ 958.00	\$ 253.44	\$ 1,013.76
Base Harddrive	Base Proposal	512GB 2.5 SATA SSD TC	Base Proposal	Priced in base configuration		
Harddrive	Upgrade	Z Turbo Drive 512GB 2280 TLC SSD	must remove existing harddrive,only one harddrive allowed	\$ 130.00	\$ 34.39	\$ 137.57
Harddrive	Upgrade	1TB 7200 SATA 3.5in WKS	must remove existing harddrive,only one harddrive allowed	no additional cost	n/a	n/a
Harddrive	Upgrade	1TB 7200 SATA 3.5in 2ndWKS	2nd HDD only available if 1TB (1st hard drive) is selected*	no additional cost	n/a	n/a
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC SSD	must remove existing harddrive,only one harddrive allowed	\$ 165.00	\$ 43.65	\$ 174.60
Harddrive	Upgrade	Z Turbo Drive 1TB 2280 TLC 2nd SSD	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected*	\$ 165.00	\$ 43.65	\$ 174.60
Harddrive	Upgrade	1TB 2.5in SATA SSD	must remove existing harddrive,only one harddrive allowed	\$ 165.00	\$ 43.65	\$ 174.60
Harddrive	Upgrade	2TB 7200 SATA 3.5in 2nd	2nd HDD only available if 1TB Z Turbo (1st hard drive) is selected*	\$ 30.00	\$ 7.94	\$ 31.75
Base Graphics Card	Base Proposal	Nvd Qdr 2GB P620 (4)DP Graphics	Base Proposal	Priced in base configuration		
Graphics Card	Upgrade	Nvd Qdr 5GB P2000 (4)DP Graphics	must remove existing Graphics Card,only one card allowed	\$ 106.00	\$ 28.04	\$ 112.17
Graphics Card	Upgrade	Nvd Qdr 8GB P4000 (4)DP Graphics	must remove existing Graphics Card,only one card allowed	\$ 524.00	\$ 138.62	\$ 554.50
Graphics Card	Upgrade	Nvd Qdr 16GB P5000 (4)DP+DVID Graphics	must remove existing Graphics Card,only one card allowed	\$ 1,389.00	\$ 367.46	\$ 1,469.94
MISC						
MISC	Upgrade	HP Serial Port Adapter	optional upgrade	\$ 5.00	\$ 1.32	\$ 5.29
MISC	Upgrade	Single Port eSATA Adapter	optional upgrade	\$ 2.00	\$ 0.53	\$ 2.12
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.97	\$ 15.87
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.65	\$ 10.58
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.76	\$ 19.05
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface	\$ 185.00	\$ 47.89	\$ 191.58
	24"	Z24i G2	1920 x 1080 DVI and VGA interface	\$ 231.00	\$ 59.80	\$ 239.20
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface	\$ 481.00	\$ 124.52	\$ 498.07
	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface	\$ 938.00	\$ 242.82	\$ 971.28
	42.5"	Z43 UHD 4K Display	3840 x 2160 DP and HDMI interface	\$ 725.00	\$ 187.68	\$ 750.72
Flat Panel Elite Displays	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface	\$ 160.00	\$ 41.42	\$ 165.68
	27"	HP EliteDisplay E2711i LED MNT	1920 x 1080 DVI and VGA interface	\$ 224.00	\$ 57.99	\$ 231.95
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Display Services Options	4year	HP 4yr Nbd Adv Exchange Large Monitor SVC	For all displays excluding the z23	\$ 5.00	\$ 1.37	\$ 5.47
	4year	HP 4yr Nbd Adv Exchange Large Monitor SVC	For Z23 and Z43 display only	\$ 59.00	\$ 16.14	\$ 64.56
	5year	HP 5yr Nbd Adv Exchg X-Large Monitor SVC	For Z43 display only	\$ 75.00	\$ 20.52	\$ 82.07
Desktop Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost
Desktop Services Options	5year	HP 5yr Nextbusday Onsite WS Only HW Supp	used as an upgrade in place of the 4th year	\$ 60.00	\$ 16.41	\$ 65.65
Foot Notes				Rules and Exceptions		
Row 53, 58,60 and 62, Column D	Upgrade	2nd Hard drive	2nd HDD only available if 1TB (1st hard drive) is selected*	Please work with the HP to confirm if the 2ND Hard drive is possible for your configuration as there may be additional factors that prohibit this for happening		

Appendix C- Workstation 2 Requirements		Requirements for workstation 1		Proposed Model and Capability	Purchase Cost	Annual Lease Cost	Total Lease Cost
				Zbook Firefly 15 G7	\$ 1,401.00	\$ 372.25	\$ 1,497.48
Chassis	Form Factor	Notebook		Notebook Mobile Workstation - 15.6"			
	Maximum Size	15.7x6.7x1.7 d		14.15 x 9.19 x 0.78 in; 35.95 x 23.36 x 1.92 cm			
	Processor Brand	Intel		Intel			
Processor	Minimum Processor Class	Core i7		Core i7			
	Minimum Base Processor Speed	3.4 GHz		HP IDS D5C I7-10610U 15 G7 8NBPC			
	Minimum Memory Size	16GB		16GB (2x8GB) DDR4 2666			
Memory and Storage	Minimum Hard Drive Capacity	500GB or better		512GB PCIe NVMe TLC SSD			
	Optical Drive Type	DVD+-RW		External DVD/IRW (Sold Separately)			
	Minimum Optical Drive Speed	16X		External DVD/IRW (Sold Separately)			
Input Devices	Keyboard	USB Multimedia		Dual Point SR Premium Keyboard			
	Mouse	Full sized, laser USB 5 button min. including two buttons on side.		HP Comfort Grip Wireless Mouse			
I/O	Minimum total USB Ports	3		Left - 1 USB 3.1 Gen 1; 1 USB 3.1 Gen 1 (charatno)			
	Minimum USB 3.0 Ports	4		Right- 2 USB Type-C™ (Thunderbolt™ 3)			
	VGA Port	none		none			
	DVI Port	1		none			
	DP Port	2		none			
	RJ-45 Port	1		yes			
	Audio In/Out Ports	1/1		Audio by Bang & Olufsen, dual stereo speakers, HP World Facing Microphone dual array digital microphone, functions keys for volume up and down, combo microphone/headsetphone			
	Mic	1		jack, HD audio			
	LAN	1 GB NIC		Intel® Wi-Fi 6 AX201 (2x2) and Bluetooth® 5 combo, vPro			
	Speakers	Internal		Integrated stereo speakers			
Other	Operating System	Windows 7 Professional SP1, 64-bit		Microsoft Windows 10 Professional 64 US			
	Video/Graphics Card	1 GB NVIDIA Quadro K2000 (2DP and 1DVI-I (2DP-DVI and 1DVI-VGA adapter)		NVIDIA® Quadro® P520 (4 GB GDDR5 dedicated)			
	Chipset	Intel® 8 Series (C226)		Intel® Kaby Lake - R Chipset integrated with 8th Generation processor			
	Management	Intel vPro Technology Enabled		Core i7 vPro v23 G10 Label			
	Certification	Independent Software Vendor certified (ISV)		Yes			
	Sound Card	Integrated		Integrated			
	Documentation	Diagnostics and Drivers DVD		DVD can be found on hp.com			
	EPEAT Silver	Meet or exceed		Yes - EPEAT®			
	Energy Star	Meet or exceed		Yes - US ENERGY STAR®			
	Warranty	Four (4) year		Yes (standard 3/3/3 Warranty + 4 year Care Pack)			
Service	On-site service, 12 business-hour fix		HP 4y NextBusDay Onsite/DMR NB Only SVC				
Display	Flat Panel Display	External		sold separately			
	Minim Size	23 inch		no			
	Minimum Resolution	1920 x 1080		no			
	Tilt Capability	Yes		no			
	VGA Interface	1 minimum		no			
DVI Interface	1 minimum		no				
Options Workstation 2	Option Type	Proposed Model Option	Rules	Purchase Upgrade Cost from Base Proposal	Annual Lease Cost	Total Lease Cost	
Base Memory	Base Proposal	16GB (2x8GB) DDR4 2666	Base Proposal	Priced in base configuration	N/A	N/A	
32 GB upgrade	Upgrade	32GB (2x16GB) DDR4 2666	replace 16GB	\$ 220.00			
Base Display	Base Proposal	15.6 inch FHD (1920x1080) Anti-Glare LED UWVA 250 bent	Base Proposal	Priced in base configuration	N/A	N/A	
Add Webcam Only	Upgrade	15.6 inch FHD (1920x1080) Anti-Glare LED UWVA 250 for HD Webcam bent	remove current display	\$ 3.00			
Add Webcam and WWAN	Upgrade	15.6 inch FHD (1920x1080) Anti-Glare LED UWVA 250 for WWAN for HD Webcam bent	remove current display	\$ 11.00			
Add WWAN Only	Upgrade	15.6 inch FHD (1920x1080) Anti-Glare LED UWVA 250 for WWAN bent	remove current display	\$ 11.00			
Base Webcam	Base Proposal	No Webcam	Base Proposal	Priced in base configuration	N/A	N/A	
Add Webcam	Upgrade	Integrated HD 720p DualAnMic Webcam	replace current webcam options	\$ 3.50			
Base Fingerprint Sensor	Base Proposal	MISC No Fingerprint Sensor	Base Proposal	Priced in base configuration	N/A	N/A	
Add Fingerprint Sensor	Upgrade	Fingerprint Sensor	replace current fingerprint option	\$ 5.50			
Base WWAN Option	Base Proposal	No WWAN	Base Proposal	Priced in base configuration	N/A	N/A	
To add WWAN	Upgrade	Intel Wi-Fi 6 AX201 ax 2x2 MU-MIMO vPro + Bluetooth 5 WW with 2 Antennas	replace current wwan option	\$ 6.50			
Provider Option when adding WWAN	Upgrade	No Service Provider AMER	add service provider	\$ 0.50			
Base Harddrive Option	Base Proposal	512GB PCIe NVMe TLC SSD	Base Proposal	Priced in base configuration	N/A	N/A	
256 SSD	Upgrade	256GB PCIe NVMe Value Solid State Drive	replace current hard drive	\$ 1.00			
1TB SSD	Upgrade	1TB PCIe NVMe Three Layer Cell Solid State Drive	replace current hard drive	\$ 100.00			
Notebook Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Notebook Services Options	5 year	HP 5y NextBusDay Onsite/DMR NB Only SVC	used as an upgrade in place of the 4th year	\$ 151.00	\$ 41.31	\$ 64.56	
Workstation Accessory Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Optional USB Keyboard	addon option	HP USB Keyboard	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.96	
Optional USB Mouse	addon option	HP USB Mouse	Purchase as needed	\$ 10.00	\$ 2.66	\$ 10.64	
Optional Wireless Mouse	addon option	HP Comfort Grip Wireless Mouse	Purchase as needed	\$ 18.00	\$ 4.78	\$ 19.12	
Optional USB External DVDRW Drive	addon option	HP USB External DVDRW Drive	Purchase as needed	\$ 50.00	\$ 13.29	\$ 53.16	
Optional Case	addon option	HP Essential Top Load Case	Purchase as needed	\$ 15.00	\$ 3.99	\$ 15.96	
Optional TB Dock	addon option	HP Thunderbolt Dock 230W G2 w/ Combo Cable US	Purchase as needed	\$ 240.00	\$ 63.77	\$ 255.08	
Display without workstation purchase	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Flat Panel Workstation Displays	23"	HP Z23n Narrow Bezel IPS Display	1920 x 1080 DVI and VGA interface	\$ 185.00	\$ 47.89	\$ 191.56	
	24"	Z24 G2	1920 x 1080 DVI and VGA interface	\$ 231.00	\$ 59.80	\$ 239.20	
	27"	HP Z27n Narrow Bezel Display	1920 x 1080 DVI and VGA interface	\$ 481.00	\$ 124.52	\$ 498.07	
	30"	Z32 4K UHD	2560 x 1600 DVI and VGA interface	\$ 938.00	\$ 242.82	\$ 971.28	
	42.5"	Z43 UHD 4K Display	3840 x 2160 DP and HDMI interface	\$ 725.00	\$ 187.68	\$ 750.72	
Flat Panel Elite Displays	24"	HP EliteDisplay E233 Monitor	1920 x 1080 DVI and VGA interface	\$ 160.00	\$ 41.42	\$ 165.68	
	27"	HP EliteDisplay E2711 LED MNT	1920 x 1080 DVI and VGA interface	\$ 224.00	\$ 57.99	\$ 231.95	
Display Services Options	Option Type	Proposed Model Option	Rules	Purchase Cost	Annual Lease Cost	Total Lease Cost	
Display Services Options	4 year	HP 4y Nbd Adv Exchange Large Monitor SVC	For all displays excluding the z23	\$ 6.00	\$ 1.37	\$ 5.47	
	4 year	HP 4y Nbd Adv Exchange Large Monitor SVC	For Z23 and Z43 display only	\$ 59.00	\$ 16.14	\$ 64.56	
	5 year	HP 5y Nbd Adv Exchg X-Large Monitor SVC	For Z43 display only	\$ 75.00	\$ 20.52	\$ 82.07	

Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Riverside Technologies Inc	4235410	4FX05AA	RTI-F1CWOPba-217	RTI - Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235411	4FX06AA	RTI-F1CWOPba2-03	RTI - Asset Tags	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235412	4FX07AA	RTI-F1CWOPba-041	RTI - Bios Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235413	4FX08AA	RTI-F1PAONba-218	RTI - Onsite Warehouse Imaging	\$13.50	\$15.00	\$15.00
Riverside Technologies Inc	4235414	4FX09AA	RTI-F1PAONba-318	RTI - Onsite Asset Tagging per device	\$4.50	\$5.00	\$5.00
Riverside Technologies Inc	4235415	4FX10AA	RTI-F1PAONba-118	RTI - Onsite BIOS Stamping	\$5.40	\$6.00	\$6.00
Riverside Technologies Inc	4235416	4FX11AA	RTI-F1PAONbb-118	RTI - Onsite Initiation & Loading Image	\$93.60	\$104.00	\$104.00
Riverside Technologies Inc	4235417	4FX12AA	RTI-F1PAONbc-118	RTI - Onsite Application & Correlation	\$51.30	\$59.00	\$59.00
Riverside Technologies Inc	4235418	4FX13AA	RTI-F1PAPNbd-118	RTI - Onsite BIOS Stamping	\$51.30	\$59.00	\$59.00
ADEPT							
Vendor	Vista SKU	HP/Mfg. Part No	Vendor PN	Part Description	Cost \$	Base Price \$	BIG DEAL PRICE
Adept Consulting Services, Inc.	4235384	4FG82AA	AC-P2018001	ADPT - Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235385	4FG83AA	AC-P2018004	ADPT -Offsite Delivery & Installation	\$79.00	\$86.90	\$86.90
Adept Consulting Services, Inc.	4235386	4FG84AA	AC-P2018005	ADPT - Data Transfer	\$40.00	\$44.00	\$44.00
Adept Consulting Services, Inc.	4235387	4FG85AA	AC-P2018006	ADPT - Preparation for Shipment	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235388	4FG86AA	AC-P2018007	ADPT - Hard Drive Removal	\$4.00	\$4.40	\$4.40
Adept Consulting Services, Inc.	4235389	4FG87AA	AC-P2018008	ADPT - On-Premise Disk Wipe	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235390	4FG88AA	AC-P2018009	ADPT - Off-Premise Disk Wipe	\$19.00	\$20.90	\$20.90
Adept Consulting Services, Inc.	4235391	4FG89AA	AC-P2018010	ADPT - Relocation within 25 Miles	\$60.00	\$66.00	\$66.00
Adept Consulting Services, Inc.	4235392	4FG90AA	AC-P2018011	ADPT - Relocation Outside 25 Miles	\$67.00	\$73.70	\$73.70
Adept Consulting Services, Inc.	4235393	4FG91AA	AC-P2018012	ADPT - Return to DGS Surplus Warehouse	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235394	4FG98AA	AC-O2018020	ADPT - PA Onsite -ISP Onsite Dlvr & Inst	\$91.00	\$100.10	\$100.10
Adept Consulting Services, Inc.	4235395	4FG99AA	AC-O2018021	ADPT - Managed Logistics	\$28.00	\$30.80	\$30.80
Adept Consulting Services, Inc.	4235396	4FH00AA	AC-O2018022	ADPT - Monitor Install Stand alone	\$34.00	\$37.40	\$37.40
Adept Consulting Services, Inc.	4235397	4FH01AA	AC-O2018023	ADPT - Second Monitor instll with system	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235398	4FH02AA	AC-O2018024	ADPT - Monitor Prep for Ship	\$8.00	\$8.80	\$8.80
Adept Consulting Services, Inc.	4235399	4FH03AA	AC-O2018025	ADPT - Single Monitor Mount Installation	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235400	4FH04AA	AC-O2018026	ADPT - Dual Monitor Mount Installation	\$24.00	\$26.40	\$26.40
Adept Consulting Services, Inc.	4235401	4FH05AA	AC-O2018027	ADPT - On-Site Asset Tagging	\$5.00	\$5.50	\$5.50
Adept Consulting Services, Inc.	4235402	4FH06AA	AC-O2018028	ADPT - On-Site Image Deployment	\$25.00	\$27.50	\$27.50
Adept Consulting Services, Inc.	4235403	4FH07AA	AC-O2018029	ADPT - Automated Onsite User Data Migrat	\$14.00	\$15.40	\$15.40
Adept Consulting Services, Inc.	4235404	4FH09AA	AC-O2018030	ADPT - Off-Site HDD Removal	\$7.00	\$7.70	\$7.70
Adept Consulting Services, Inc.	4235405	4FH10AA	AC-O2018031	ADPT - Return to DGS-Surplus (Expedited)	\$18.00	\$19.80	\$19.80
Adept Consulting Services, Inc.	4235406	4FH11AA	AC-O2018032	ADPT - Hourly Technical Assistance	\$65.00	\$71.50	\$71.50